THE RELATIONSHIPS AND EFFECTS OF EMPLOYEE INVOLVEMENT, EMPLOYEE EMPOWERMENT, AND EMPLOYEE SATISFACTION BY JOB-TYPE IN A LARGE MANUFACTURING ENVIRONMENT

by

Joel N. Light

A Dissertation Proposal Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Capella University

August 2004

THE RELATIONSHIPS AND EFFECTS OF EMPLOYEE INVOLVEMENT, EMPLOYEE EMPOWERMENT, AND EMPLOYEE SATISFACTION BY JOB-TYPE IN A LARGE MANUFACTURING ENVIRONMENT

by

Joel N. Light

has been approved

August 2004

APPROVED:

JOHN LATHAM, Ph.D., Faculty Mentor and Chair

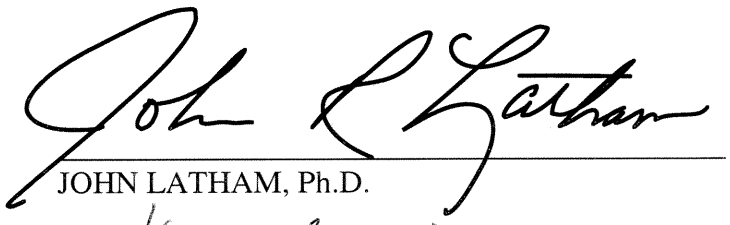
JOHN DeNIGRIS, Ph.D., Committee Member

JOHN WHITLOCK, Ph.D., Committee Member

MARTIN PERLINE, Ph.D., Committee Member

MARCI JOHNSON, Committee Member

ACCEPTED AND SIGNED:



JOHN LATHAM, Ph.D.

Kurt Linberg, Ph.D.
Executive Director, School of Business

Abstract

An employee survey conducted by a Fortune 100 company in 2003 was the basis of the study. A mixed methodology analysis was performed to determine the relationships between involvement, empowerment, and satisfaction with respect to four job-types. Employee involvement was found to be significantly related to employee empowerment and employee empowerment was found to be significantly related to employee satisfaction. Employee satisfaction was determined to be positively related to the intent to remain with the company.

Further, the four job-types of (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) managers were compared to each other to understand the difference in their levels of satisfaction. A significant difference was found in their attitudes concerning employee empowerment and employee satisfaction; however, the results were inconclusive regarding employee involvement. Nonetheless, managers were found to be the most satisfied in all three categories with hourly employees and engineers being the least satisfied.

The four processes of involvement were analyzed to understand their relationship to employee involvement. All processes correlated to involvement, and employees commented in particular about information and rewards. Only three of the four cognitions of empowerment were tested in this study, but all were found to have a significant relationship to employee empowerment. Technical workers were especially concerned about the competence cognition. Hierarchical organizational structure was also viewed to have a negative effect on empowerment.

Dedication

This dissertation is dedicated to Ms. Pamela Light, who encouraged me to continue my education past the master's degree.

Acknowledgements

One does not go through three years of postgraduate work without having several people provide assistance and encouragement along the way. My situation is no different. There are a number of people who have contributed to this journey:

I would first like to acknowledge the assistance of Dr. John Latham. His insight to the process in general and my needs specifically will not be forgotten. I was fortunate to meet Dr. Latham early in my coursework and then meet him in person on a number of occasions. He kept me focused and continued to encourage me to excel. I could not have had a better mentor and friend.

During my coursework I had the opportunity to learn with Dr. John DeNigris. While his comments were typically brief, they were straightforward and to the point. He made me think about the process and consequences of coding qualitative data; I appreciate his input.

Dr. John Whitlock was brought in as a committee member twice as a replacement when two other members had to drop out, first in the comprehensive examination and later on the dissertation committee. It is now hard to imagine the end product without his guidance; actually, he offered his assistance even before he was a member of the team. His contribution to the quantitative aspects of the dissertation made the road far easier. His influence has made this study better.

It was my great fortune to have Dr. Martin Perline on my committee. Dr. Perline served as my master's thesis chairman at Wichita State University and is one of the best instructors I have ever met. It was he who first exposed me to employee satisfaction and quality of work life issues.

Ms. Marci Johnson proved to be an excellent resource, serving as my learner-peer. She was a great asset since she was familiar with the company and had several lucid points to consider during the process.

One of the great people I met during my association with Capella University was Dr. Martha Hollis. In addition to being a fine instructor, Dr. Hollis provided feedback as I was writing my dissertation. Her knowledge of quantitative methods was important to the quality of my study.

I was invited to serve as a learner-peer at Capella University prior to the completion of my dissertation for Dr. Deborah Sagan. The experience was positive and one that helped me prepare for my own comprehensive examination and dissertation process. Further, Dr. Sagan read through my dissertation and provided comments to me.

My good friend Mr. Dan Popp took time out of his schedule to read my dissertation as I progressed through the draft stages. His professional knowledge of the language was important to me, and kept me from making even more errors than probably still exist within the text.

Finally, I want to acknowledge the employees of the company. There were many who contributed directly, including the survey administrator and the vice president who encouraged me to use the survey—who cannot be named, but also the men and women who have manufactured the high quality product during a very difficult, emotional time in the industry.

Table of Contents

List of Tables

List of Figures

CHAPTER 1. INTRODUCTION

Introduction to the Topic

Interaction between management and employees affects many facets within the business environment. Categorizations of these relationships have been identified, with employee involvement, employee empowerment, and employee satisfaction among the more prominent. These categories do not stand alone; certain subsets can be considered antecedents or enablers to other subsets. For this reason, the interactions between these categories are also important. These subjects involve human feelings, emotions, and behaviors; there are not always definitive answers for all iterations.

Employee involvement describes the perception of an employee regarding his identity or importance in the work group (Bandura, 1982; Stryker, 1986). Involvement can be considered a combination of several various initiatives, such as Total Quality Management (Bowen & Lawler, 1992). Employee involvement is often considered process oriented, although it can be a motivational system (Leonard, Beauvais, & Scholl, 1995) or participative management (Scarselletta, 1999). Lawler (1986) argued that employee involvement consists of four separate processes: knowledge, information, power, and rewards.

Within this context, knowledge is a richer concept than training. Learning and growth opportunities are included within knowledge, as are several employee initiatives. Information is a process of sharing through the organization, as in the Kaplan and Norton (1992) balanced scorecard. Rapid vertical flow of information enhances employee involvement. Power is dependent on the manner in which it is delegated. For instance, when processes are properly initiated in the corporate culture, power can be delegated to the appropriate levels of employment

to increase involvement (Conger & Kanungo, 1988). Rewards are most successful when they are tied to employee performance (Lawler, 1986; Vandenberg, 1996).

Employee involvement appears to be a strong enabler of employee empowerment (Bowen & Lawler, 1995; Daily & Bishop, 2003; Spreitzer, 1995). During the analysis, however, there appears to be differences of opinion in the definitions of these two facets, making the relationship more difficult to understand. Some studies use the terms in an interchangeable fashion, which naturally adds to the confusion of the discussion (Collins, 1994; Lawler & Mohrman, 1992). The greatest distinction and most relevant to this study is that employee involvement is considered a process, while employee empowerment is more cognitive and sentient. Further, when the distinction is made, employee involvement is considered an antecedent to employee empowerment (Daily & Bishop, 2003; Spreitzer, 1996).

Employees deemed to be empowered are generally associated with characteristics similar to self-motivation and commitment, feeling a sense of responsibility to perform to high levels of effort and a sense of quality (Howard & Foster, 1999; Thomas & Velthouse, 1990). Empowerment is associated with intrinsic motivation, and while it is included as an aspect of empowerment, it goes beyond self-efficacy (Conger & Kanungo, 1988; Spreitzer, 1995). Two main types of empowerment surface in the literature: structural empowerment and psychological empowerment. Structural empowerment is associated with the delegation of power by managers to employees, where psychological empowerment is based largely on self-determination and intrinsic value (Thomas & Velthouse, 1990). Employee empowerment was segregated into four distinct cognitions by Thomas and Velthouse and was described to be additive in nature (Spreitzer, 1995): competence, meaningfulness, choice, and impact.

Competence is consistent with the thoughts of Bandura (1977) on the concept of empowerment. Quinn and Spreitzer (1997) believed that competence was transformational in employee attitudes. Meaningfulness is believed to be required for employees, and relates to the ability to associate their work with the missions and values of the organization. For this reason, information and reward systems appear particularly important to meaningfulness. Choice is synonymous with other descriptions of this feeling, such as self-determination, control, and locus of causality (Deci, 1975; deCharms, 1968; Thomas & Velthouse, 1990). Autonomy also appears to be a relevant feeling when an employee perceives himself to have choice (Kirkman & Rosen, 2000). Impact is the incremental change an employee observes in his actions in the workplace (Daily & Bishop, 2003). Further, an employee perceives he has a personal influence over changes and decisions made within the workgroup (Corsun & Enz, 1999; Herrenkohl, Judson, & Heffner, 1999).

In addition to the association between employee involvement and employee empowerment previously mentioned, analyses have demonstrated a relationship that continues this association to employee satisfaction (Bowen & Lawler, 1995; Corrigan, 1998; Harmon, Scotti, Behson, Farias, Petzel, Neuman, & Keashly, 2003). The concept of employee satisfaction within the framework of the linear relationship to employee empowerment is a relevant topic to research.

Employee satisfaction is an emotional state resulting from experiences an employee has at work (Locke, 1976). These types of satisfaction levels occur along three threads: (a) emotional responses to the work environment, (b) the relationship between expectations and reality, and (c) satisfaction with compensation (Luthans, 1989). A relationship between

psychological empowerment and employee satisfaction was found in previous research (Cohen, Ledford, & Spreitzer, 1996; Martensen & Gronholdt, 2001; Ren, 2001; Scott, Bishop, & Chen, 2003; Spreitzer & Kizilos, 1997; Thomas & Velthouse, 1990).

Other factors, including personality, have an effect on employee satisfaction. If a person was generally content, the person was more inclined to be satisfied at work (Gehart, 1987; Staw & Ross, 1985). Motowidlo (1996) argued there were three factors that could describe a large proportion of employee satisfaction: (a) the immediate work environment, (b) the social environment, and (c) the organizational environment. The emotions involved in employee satisfaction can migrate into more lasting feelings, which can affect the decision of an employee to remain or leave the company (Mueller & Lawler, 1996).

Statement of the Problem

While there are contributions in the areas of employee involvement and its relationship to employee empowerment (Daily & Bishop, 2003) and employee empowerment and its relationship to employee satisfaction and intent to leave (Bowen & Lawler, 1995; Brossoit, 2000; Lashley, 1999; Osborne, 2002), a relatively few studies attempt to combine the two relationships into a larger relational flow between employee involvement, employee empowerment, and employee satisfaction. Corrigan (1998) studied the relationship between these three elements; however, the sample population involved a small manufacturing facility and did not make distinction between job-types in the analysis. Thus, the relationship between employee involvement, employee empowerment, and employee satisfaction in a large manufacturing environment involving complex production processes had not been thoroughly investigated. The

examination of both relationships independently in a large manufacturing environment appeared to be relevant and can have applicability to other businesses.

Purpose of the Study

The purpose of this study was to determine the effects, if any, between employee involvement, employee empowerment, and employee satisfaction. Another relationship investigated was the affect of employee satisfaction on the intention of an employee to leave the company. Previous research has been conducted that indicates a relationship between these facets; however, the majority of the work has been performed in either service industries or smaller manufacturing environments (Bowen & Lawler, 1995; Corrigan, 1998; Daily & Bishop, 2003; Scott, Bishop, & Chen, 2003; Spreitzer, 1995). This study tested a Fortune 100 manufacturing company with a population in excess of 50,000 employees across several facilities.

The differences in attitudes regarding these facets were examined by four separate job-types: (a) hourly employees, (b) salary nonmanagement employees, (c) engineers, and (d) management employees. Typically, studies involving employee involvement, employee empowerment, and employee satisfaction investigated one specific job-type. For this reason, an examination of the potential differences in attitudes between several job-types was relevant. Additionally, previous research indicated there are four basic processes within employee involvement (Lawler, 1986) and four cognitions of empowerment (Thomas & Velthouse, 1990). These were tested to determine their specific affects on both involvement and empowerment. The intention of an employee to voluntarily leave the company is another topic that was

addressed and was measured against employee satisfaction. As a means to illustrate the full scope and purpose of this study, the full flow of the relationships tested is provided in Figure 1.

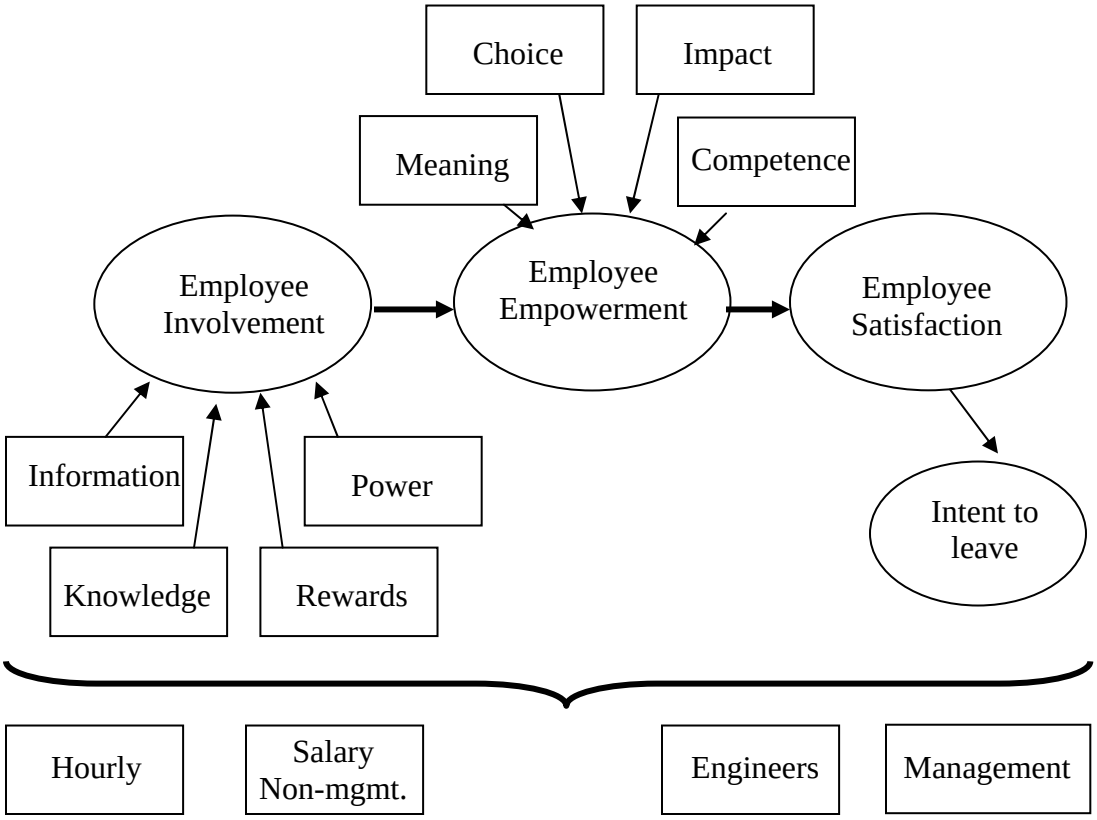
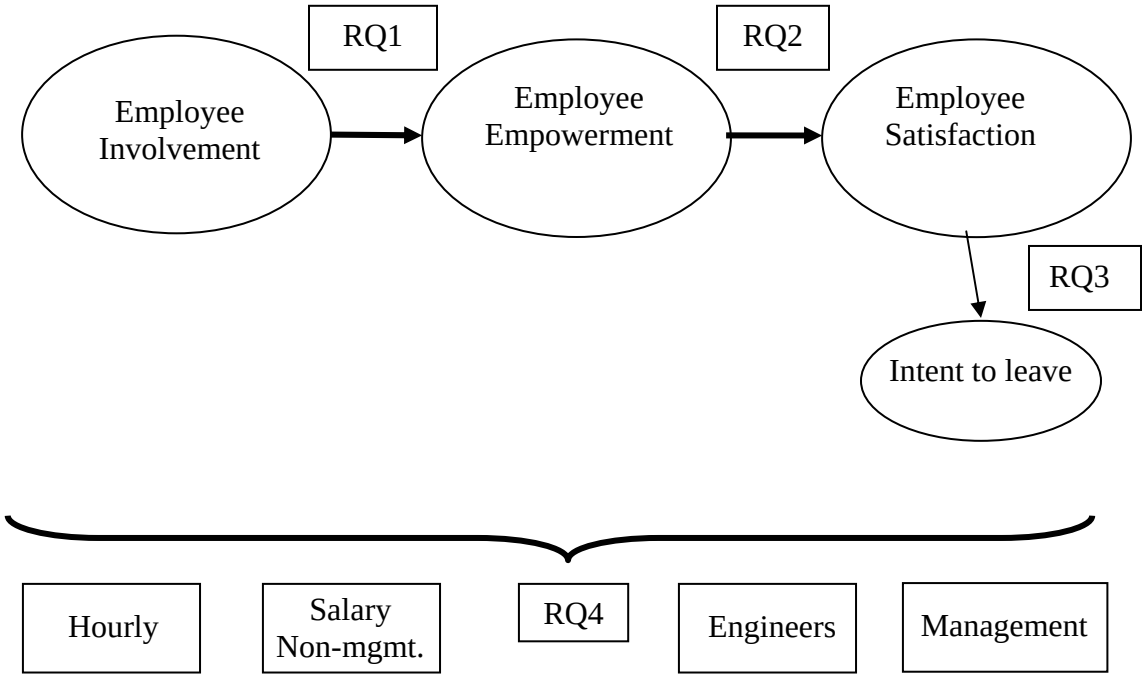


Figure 1. Description of processes, cognitions, and job-types to be examined in this study.

Research Questions

Within the framework of research conducted in the literature review, several issues are grounded in theoretical and practical analyses. Certain relationships have been identified in earlier research in service industries and small manufacturing environments; however, few studies have examined the employee interactions in a large manufacturing setting and across various job-types. For this reason, specific research questions stand out and are illustrated in Figure 2:

1. How does the level of employee involvement affect the level of employee empowerment?
2. How does the level of employee empowerment affect the level of employee satisfaction?
3. How does the level of employee satisfaction affect the level of intention to leave the company?
4. How does job-type—hourly, salary nonmanagement, engineers, and managers—affect the respective components or employee involvement, employee empowerment, and employee satisfaction?



Legend: RQ–research question

Figure 2. The relational condition of the categories to be tested and the corresponding research *questions.*

Additionally, using the subsets described by Lawler (1986) and Thomas and Velthouse (1990), additional research questions will be examined, and are illustrated in Figures 3 and 4:

5. Within employee involvement:

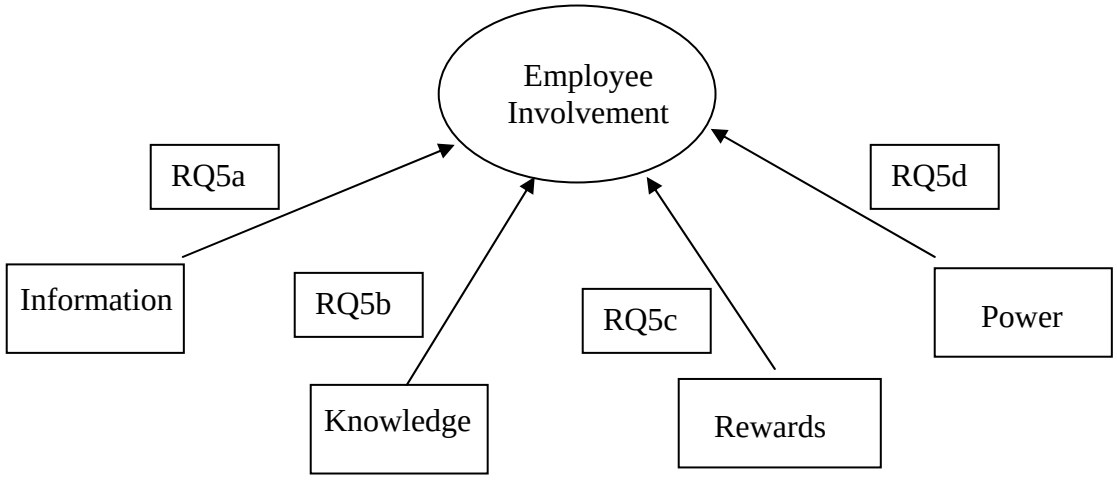
   (a) How does the level of information received by an employee affect the level of employee involvement?

   (b) How does the level of knowledge of an employee affect the level of employee

involvement?

(c) How does the level of power received by an employee affect the level of employee involvement?

(d) How does the level of rewards of an employee affect the level of employee involvement?



Legend: RQ-research question

Figure 3. The relationship between the four processes identified by Lawler (1986) to employee involvement and the corresponding research questions.

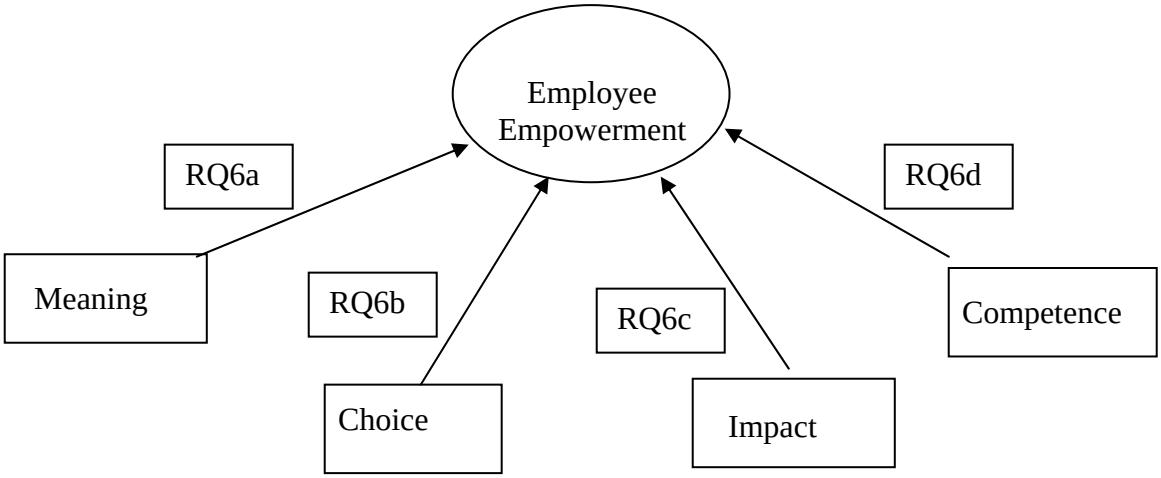
6. Within employee empowerment:

(a) How does the level of meaning in an employee's job affect the level of employee empowerment?

(b) How does the level of choice in an employee's job affect the level of employee empowerment?

(c) How does the level of impact in an employee's job affect the level of employee empowerment?

(d) How does the level of competence in an employee's job affect the level of employee empowerment?



Legend: RQ-research question

Figure 4. The relationship between the four cognitions identified by Thomas and Velthouse (1990) to employee empowerment and the corresponding research questions.

Hypotheses

Based on the proposed relationships described above, a set of hypotheses were developed to empirically address the research questions. The first two hypotheses test the linear relationship between employee involvement, employee empowerment, and employee satisfaction. The third hypothesis is divided into three facets and tests the difference in the

perceptions of employee involvement, employee empowerment, and employee satisfaction by the four job-types: (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) management. The fourth hypothesis tests the relationship between employee satisfaction and the intent to leave the company. The fifth hypothesis examines the relationships of the four components of employee involvement (Lawler, 1986) to overall employee involvement and the sixth hypothesis examines the four components of employee empowerment (Thomas & Velthouse, 1990) to employee empowerment. Therefore, the objectives of this study are accomplished through the analysis of the following hypotheses:

Hypothesis 1 ($H1_o$). There is not a significant relationship between the level of employee involvement and the level of employee empowerment.

Alternative Hypothesis 1 ($H1_A$). There is a significant relationship between the level of employee involvement and the level of employee empowerment.

Hypothesis 2 ($H2_o$). There is not a significant relationship between the level of employee empowerment and the level of employee satisfaction.

Alternative Hypothesis 2 ($H2_A$). There is a significant relationship between the level of employee empowerment and the level of employee satisfaction.

Hypothesis 3 ($H3_o$). There is not a significant relationship between the level of employee satisfaction and the level of intention to leave the company.

Alternative Hypothesis 3 ($H3_A$). There is no significant relationship between the level of employee satisfaction and the level of intention to leave the company.

Hypothesis 4a ($H4a_o$). There is not a significant difference in the perception of employee involvement by the different job-type categories.

Alternative Hypothesis 4a ($H4a_A$). There is a significant difference in the perception of employee involvement by the different job-type categories.

Hypothesis 4b ($H4b_o$). There is not a significant difference in the perception of employee empowerment by the different job-type categories.

Alternative Hypothesis 4b ($H4b_A$). There is a significant difference in the perception of employee empowerment by the different job-type categories.

Hypothesis 4c ($H4c_o$). There is not a significant difference in the perception of employee satisfaction by the different job-type categories.

Alternative Hypothesis 4c ($H4c_A$). There is a significant difference in the perception of employee satisfaction by the different job-type categories.

Hypothesis 5a ($H5a_o$). There is not a significant relationship between the level of information received by an employee and the level of employee involvement.

Alternative Hypothesis 5a ($H5a_A$). There is a significant relationship between the level of information received by an employee and the level of employee involvement.

Hypothesis 5b ($H5b_o$). There is not a significant relationship between the level of knowledge of an employee and the level of employee involvement.

Alternative Hypothesis 5b ($H5b_A$). There is a significant relationship between the level of knowledge of an employee and the level of employee involvement.

Hypothesis 5c ($H5c_o$). There is not a significant relationship between the level of power of an employee and the level of employee involvement.

Alternative Hypothesis 5c ($H5c_A$). There is a significant relationship between the level of power of an employee and the level of employee involvement.

Hypothesis 5d ($H5d_o$). There is not a significant relationship between the level of rewards received by an employee and the level of employee involvement.

Alternative Hypothesis 5d ($H5d_A$). There is a significant relationship between the level of rewards received by an employee and the level of employee involvement.

Hypothesis 6a ($H6a_o$). There is not a significant relationship between the level of meaning in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6a ($H6a_A$). There is a significant relationship between the level of meaning in an employee's job and the level of employee empowerment.

Hypothesis 6b ($H6b_o$). There is not a significant relationship between the level of choice in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6b ($H6b_A$). There is a significant relationship between the level of choice in an employee's job and the level of employee empowerment.

Hypothesis 6c ($H6c_o$). There is not a significant relationship between the level of impact in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6c ($H6c_A$). There is a significant relationship between the level of impact in an employee's job and the level of employee empowerment.

Hypothesis 6d ($H6d_o$). There is not a significant relationship between the level of competence in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6d ($H6d_A$). There is a significant relationship between the level of competence in an employee's job and the level of employee empowerment.

Methodology

Contextually when considering research in employee processes, cognitions, and satisfaction, various methods have been utilized with reasonable success. While proponents of both qualitative and quantitative approaches argue the benefits of one and the flaws of the other, several researchers, including Allen-Mears (1995), Atchison and Lefferts (1972), and Koustelios and Bagiatis (1997) have advocated a mixed research methodology. There are obvious differences between the two methods, yet their incongruence does not explicitly define one method superior over the other. Tashakkori and Teddlie (1998, as cited in Sogunro, 2002) believed that both qualitative and quantitative methodology are compatible. In addition to the distinctions made between qualitative and quantitative methodologies, Scandura and Williams (2000) also observed a historical shift from laboratory research to field study in employee research.

For these reasons, it appears prudent for the methodology of this dissertation to be mixed. First, a correlation analysis was performed on several factors involving employee involvement, employee empowerment, and employee satisfaction. The research instrument is composed entirely of data that were collected in mid-2003 by a Fortune 100 manufacturing company. These data include the results of an employee survey, which is administered annually. For anonymity, wherever the actual company name was included in the survey question, it was replaced by "COMPANY." The quantitative data are formatted using a five-point Likert scale. The survey is conducted on company time and is anonymous and voluntary. The delivery system is both conducted on the company intranet and paper-and-pencil.

Using the same survey instrument, participants were given the opportunity to submit written comments based on an open-ended question. It is the intent to qualitatively analyze the comments as they relate to the topics within the dissertation, provide specific comments that may add depth to the discussion of the quantitative analysis, and provide descriptive statistics on the categories of comments given by the participants. Comments were coded and combined with other employee comments within the four job-types: (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) management. Further, to segregate the written comments by the factors within the scope of this research, the comments were further coded into separate categories for analysis: (a) employee involvement, (b) employee empowerment, (c) employee satisfaction, and (d) other comments.

This study focused on job-type and will test for differences between hourly, salary, engineers, and management employees. Comparisons of the correlations and the means of the sample groups among hourly, salary, engineers, and management were examined. Descriptive statistics of the proportional relationship of comments in the tested areas compared to other types of comments were also provided.

The variables chosen are categories identified by Lawler (1986) for employee involvement and Thomas and Velthouse (1990) for employee empowerment. Raw data from the survey was compared using the correlation analysis. Comments regarding employee involvement, empowerment, or satisfaction were categorized and described. Additionally, selected comments were used as a means to provide additional insight into the quantitative scores.

Specific employee involvement processes and employee empowerment cognitions were examined. These subsets were selected from previous studies conducted by Lawler (1986) and Thomas and Velthouse (1990). A factor analysis was conducted to determine the appropriate survey questions to combine in each category.

In addition to the quantitative data collected, qualitative data are collected within the survey instrument. These data are in the form of comments resulting from an open-ended question. All comments from the survey instrument were analyzed for two separate reasons: (a) to potentially increase the richness in understanding of the differences in the quantitative data and (b) to compare and contrast the ordinal relationship of quantitative mean data to the ordinal value of categorized responses from the open-ended question.

Scope and Limitations

The study was conducted using secondary data from a Fortune 100 company. The company is involved in the manufacture of technical products. Job-types were input by employees during the exercise of the survey instrument, and these categories of job-types were used to compare and contrast various opinions regarding employee involvement, employee empowerment, and employee satisfaction. The survey was conducted over a relatively short period of time in mid-2003 and used two different media: (a) company intranet and (b) paper-and-pencil. From this, several limitations exist.

Any research utilizing statistical methods has inherent limitations: random sampling errors, systematic error, non-response error, and response bias (Cooper & Schindler, 2003). While every employee was encouraged to complete the survey, there was not a full participation

rate. This survey is one point in time and was not compared in a longitudinal manner. Effects on employee perceptions could be more pronounced in a single survey time period. The company selected for this analysis resides in a business environment which is not as diversified as many other companies; economic conditions would have a more predominant affect—either positive or negative—due to the nature of the business. The research performed using these data in the primary analysis made by "COMPANY" is shared and compared to other companies. Despite these limitations, through the research of other studies conducted on these topics it appears there may be portability in the information to be gained from this study, although that association is not within the scope of this analysis.

Since the survey data are not collected using sampling techniques, but rather made available to all employees of COMPANY, there may be potential bias in the sample who decided to complete the survey. There were a high percentage of employees who chose to submit their responses to the survey, but it is possible that those intending to leave either voluntarily or non-voluntarily opted to not complete the survey in larger percentages than others who plan to remain with the company, possibly skewing the data.

Since the data used was secondary in nature, no input in the structure or language of the questions was afforded to this analysis. While one of the goals of COMPANY is to assess employee satisfaction, more focused questions surrounding the specific relationships of involvement, empowerment, and satisfaction would have been used had the researcher had an opportunity to develop the survey instrument.

Significance

The perceived significance of this study is based on two items: (a) the relationship between employee involvement to employee empowerment to employee satisfaction in a large manufacturing environment, and (b) the test of differences in attitudes of these relationships among four separate job-types.

Several previous studies track the relationships between employee involvement processes and employee empowerment cognitions but fail to continue the possible relationship of employee satisfaction. Other studies research the relationship between employee empowerment and employee satisfaction but do not investigate whether employee involvement is an enabler to this condition. Still other research involves the potential affects of employee satisfaction on voluntary attrition. This study attempted to combine these facets to understand the full relationship of the enablers of employee involvement on employee empowerment, its affect on employee satisfaction, and the intention of employees to leave the employment of the company.

Most research involves only one job-type, and is typically concentrated on non-managers. The significance of this analysis was to identify the relationships previously described and determine if these perceptions are consistent across job-types in the same manufacturing environment. For this reason, examination of the data as they relate to Research Question 4, as well as Hypotheses 4a, 4b, and 4c were especially important.

Definition of Terms

Choice. The act of initiating and regulating actions in self-determination, involving causal responsibility for actions (Thomas & Velthouse, 1990). Associated with self-

determination, control, and locus of causality (Deci, Connell, & Ryan, 1989). The sense of having an option in initiating and regulating action, encapsulating autonomy in the pursuit and continuance of behaviors and practices within the workplace, such as decisions on procedure, pace, and effort expended (Bell & Staw, 1989; Spector, 1986). One of the four employee empowerment cognitions identified by Thomas and Velthouse.

COMPANY. The name inserted where the actual name of the company would be documented to provide anonymity and meet with the guidelines established by the non-disclosure agreement signed by the researcher to use the company data.

Competence. The degree to which a person can skillfully perform task activities (Thomas & Velthouse, 1990). Similar to the concept of self-efficacy (Conger & Kanungo, 1988). Also related to effort-performance expectancy. One of the four employee empowerment cognitions identified by Thomas and Velthouse.

Employee Involvement. Entails the employee perception of his importance or identity within his organization (Bandura, 1982, 1986; Stryker, 1986). It is a combination of several initiatives, and is considered in many analyses a precursor to empowerment (Kanter, 1989; Lashley, 1999; Lawler, 1986).

Employee Empowerment. Identified as a sense of intrinsic motivation, and goes beyond merely self-efficacy (Conger & Kanungo, 1988; Spreitzer, 1995). Empowered employees are typically described as self-motivated and committed individuals who feel responsible to perform at high levels of effort (Thomas & Velthouse, 1990). Additionally, when a distinction is made, it is considered to be distinct from employee involvement; as in the difference between a cognitive result and a process (Corrigan, 1998).

Employee satisfaction. An emotional state resulting from experiences at work (Locke, 1976). Feeling derived from three distinct facets: (a) emotional response to the work environment, (b) the relationship between expectations and outcomes, and (c) satisfaction with pay (Luthans, 1989). It has been determined to be directly related to psychological empowerment (Spreitzer & Kizilos, 1997).

Information. Data regarding an employee doing their job well, being informed about what is expected in their job, having the appropriate tools, and having the correct metrics to track the work group of an employee with respect to the goals of the company. One of the four employee involvement processes identified by Lawler (1986).

Intention to remain. The degree of likelihood of an employee maintaining membership in an organization (Iverson, 1992). Refers to the behavioral intent of the employee, and has been observed to have a negative influence on turnover (Bluedorn, 1982; Price & Mueller, 1981).

Impact. The degree behavior is perceived to have an effect over strategic, administrative, or operating outcomes in the work environment of an employee (Thomas & Velthouse, 1990). The observable increment of change in outcomes (Ashforth, 1989; Daily & Bishop, 2003). The opposite of learned helplessness (Martinko & Gardner, 1982). The influence an employee has through their efforts on other stakeholders of the organization (Kirkman & Rosen, 2000). One of the four employee empowerment cognitions identified by Thomas and Velthouse.

Knowledge. A process implying a comprehension of various components: (a) competencies of the current work itself; (b) understanding of the work systems within the group; and (c) an understanding of the company and of the organization with relationship to its business (Vandenberg, 1996). Greater than a fundamental understanding of the business, it is an

extension of understanding the organizational mission, vision, goals, and functions (Steinecke, 1993). One of the four employee involvement processes identified by Lawler (1986).

Locus of control. A cognitive variable related to the impact dimension of empowerment (Thomas & Velthouse, 1990). Explains the degree to which people believe they, as opposed to other exogenous influences, determine their outcome (Rotter, 1966).

Meaningfulness. The value of a work goal or purpose, judged in relation to the individual's own ideals or standards (Thomas & Velthouse, 1990). Characterizes an intrinsic feeling of the employee about their work. A perception of caring about their work and their contribution (Corsun & Enz, 1999). Identified with respect to a motivational construct (Conger & Kanungo, 1988). A commitment to the organizational mission as a feeling of purpose, and having a belief in the value of corporate direction (Kirkman & Rosen, 2000) One of the four employee empowerment cognitions identified by Thomas and Velthouse.

Power. The process of receiving and accepting authority and autonomy to make decisions in the organization (Spreitzer, 1992). Often misconceived by management as a finite quantity and its control is zero sum game (Tannenbaum, 1968). One of the four employee involvement processes identified by Lawler (1986).

Rewards. A process of enumerating employees believed to have a strong relationship with the success of employee involvement initiatives (Lawler, 1986). Designed to reinforce the behaviors of individuals, teams, and business units (Bowen & Lawler, 1990; Vest & Scott, 2000). May be based on either individual or group performance. One of the four employee involvement processes identified by Lawler (1986).

Self-efficacy. Refers to a belief in the capabilities of an individual to mobilize the motivation, cognitive sources, and courses of action needed to meet given situational demands (Ozer & Bandura, 1990).

Structure of the Dissertation

The structure of this dissertation is a five-chapter format. The introduction chapter describes, among other things the topic, problem statement, research questions, methodology, and definition of terms applicable for this study. Chapter 2 is a review of the literature and is segregated along the areas to be examined within the data: (a) employee involvement, (b) the relationship between employee involvement and employee satisfaction, (c) employee empowerment, (d) employee satisfaction, (d) employee productivity, and (e) employee intent to leave. Chapter 3 provides a rational for the methodology chosen, the statistical tests to be performed to reduce the risk of error, and a description of the methodology to be used in the study. Chapter 4 documents the results of the analysis performed and provides interpretation from this information. Finally, chapter 5 provides a summary of the information and makes recommendations for further research.

CHAPTER 2. LITERATURE REVIEW

Introduction and Structure of the Chapter

Introduction

Understanding the processes of employee involvement, the perceptions of employee empowerment, the perception of employee satisfaction, employee productivity, and the intent of an employee to remain at the company has gained the attention of a great number of researchers and employers. Further, the relationships between these concepts are worth examining as a means to provide causal effect or antecedents to behaviors which drive either positive or negative conditions in the workplace. Since these topics involve emotional and behavioral conditions, the research is not exact in its definition or conclusion but similar trends do become visible.

Involvement entails the employee perception of his importance or identity within his organization (Bandura, 1982, 1986; Stryker, 1986). Non-executive and nonmanagement employees have expertise that through involvement processes can be exploited. Employee involvement is a combination of several initiatives, and is considered in many analyses a precursor to empowerment (Lashley, 1999; Lawler, 1986; Kanter, 1989). Total Quality Management is one such initiative that spans across several employee involvement processes (Bowen & Lawler, 1992). A linear, causal relationship has also been examined between employee involvement processes and employee empowerment cognitions (Daily & Bishop, 2003, Spreitzer, 1996).

Empowered employees are typically described as self-motivated and committed individuals who feel responsible to perform at high levels of effort (Thomas & Velthouse, 1990). Through analyses it is also concluded that empowered employees are viewed by their leaders as

valuable assets (Quinn & Spreitzer, 1997). Empowerment has also been associated with an emphasis on quality in the work performed by employees (Howard & Foster, 1999). Empowerment has been identified as a sense of intrinsic motivation, and goes beyond merely self-efficacy (Conger & Kanungo, 1988; Spreitzer, 1995). When distinctions are made, empowerment is considered to be distinct from employee involvement; as in the difference between a cognitive result and a process (Corrigan, 1998).

Employee satisfaction is also an emotional state resulting from experiences at work (Locke, 1976). Satisfaction can arise from three distinct facets: (a) emotional response to the work environment, (b) the relationship between expectations and outcomes, and (c) satisfaction with pay (Luthans, 1989). Employee satisfaction has been determined to be directly related to psychological empowerment (Spreitzer & Kizilos, 1997).

The relationship between employee satisfaction and employee productivity is a tenuous one. While there has been significant research performed in this area, conclusions as to the causal effect of satisfaction on productivity are varied. An examination of various analyses will be provided as a means to either include or exclude this segment in the scope of this research.

The intention of an employee to remain at their company will be surveyed. This intention is an emotional state and designated as the degree of likelihood an employee will remain employed with an organization (Currivan, 1999). Voluntary attrition is examined as a relation to employee satisfaction because of the strong relationship between satisfaction behaviors and the intent to leave (Atchison & Lefferts, 1972).

A review of the research from a conceptual view will be performed to understand the various methods of collecting and analyzing information regarding employee issues. Attention

will be given to quantitative, qualitative, and mixed methodology studies to determine the most appropriate way to continue with this research.

Structure of the chapter

The chapter is segregated into five separate categories to better understand the flow of the research within the context of the proposed study: (a) employee involvement; (b) the relation between employee involvement and employee empowerment; (c) employee empowerment; (d) employee satisfaction; (d) employee productivity; and (e) employee intent to leave. Within each category, specific studies will be reviewed from a total level as well as specific components that are argued to relate to the specific category. For example, in employee involvement there is sufficient analysis to argue the examination of the subject within four separate processes: information, knowledge, power, and rewards (Lawler, 1986). In employee empowerment, the literature provides cognitive subsets worth more examination: meaning, choice, impact, and competence.

At the end of the review, a section describing the context in which this study should be performed is discussed. Attention is paid to employee satisfaction analyses and their methodology. A comparison of quantitative, qualitative, and mixed methodologies is given to provide background for the rationale for determining the methodology of this analysis.

Employee Involvement

Over the past several years, companies in every market, including manufacturing, have made serious attempts to implement employee involvement initiatives. Bluestein and Bluestein

(1992) indicated that this process is even becoming prevalent in unionized environments, involving the collaboration of company management and union representatives. This union-management cooperation was also described by Cohen-Rosenthal and Burton (1994).

The perception of how the employee views his importance or identity within the organization has also been investigated (Bandura, 1982, 1986; Beach & Mitchell, 1990; Schlenker, 1985; Stryker, 1986). The concept of the four motivation inducement systems—reward, task, managerial, and social—is another view of the processes by with employees gain involvement and satisfaction in the work environment (Leonard, Beauvais, & Scholl, 1995, as cited by O'Connell, 1999).

Essentially, the premise by which employee involvement programs are incorporated involves the concept that non-executive, nonmanagement employees possess invaluable understanding and knowledge important to the company. Through employee involvement, these resources are released through the process of incorporating practices that both require and reward employee involvement.

Employee involvement is an amalgam of many concepts and has developed out of many predecessors. Employee involvement processes do not always share the same methods, and can include indirect and relatively modest scope techniques such as employee suggestion boxes and employee opinion surveys. Other techniques or processes are more direct and larger in scope.

Participative management

One such concept is participative management. Scarselletta (1999) identified several facets of participatory management and employee involvement programs. In an attempt to

synthesize the programs, Scarselletta found several processes that share similarities in their involvement techniques. The concepts and practices involved in the synthesis of Scarselletta (1999) are consistent with the analyses performed by several researchers (Applebaum & Batt, 1992; Lawler & Mohrman, 1992; Pasmore, Francis, Haldeman, & Shani, 1982). Further, while Scarselletta provides additional categories for comparison, they remain consistent with the processes identified by Lawler (1986): information, power, knowledge, and rewards.

When comparing with participative management, employee involvement appears to be a broader concept. Coye and Belohlav (1995) credit Lawler (1986) with identifying the positive nature of attributes within participative management approach and augmenting them into an employee involvement organizational process. Coye and Belohlav indicated that the greatest differentiator between traditional participative management and employee involvement is the way in which participation is viewed. They also cited employee involvement as a function of the four organizational processes—information, knowledge, power, and rewards—compared to a specific program segregated from other processes, as is the case of participative management. Additionally, Lawler (1992) said:

> Creating a high-involvement organization involves making choices about organizational design that create a world in which individuals know more, do more, and contribute more. Such an organization is not the result of a change in job design or pay systems; it is the result of a change in the entire design of the organization. (p. 5)

Lawler (1986) argued that the effectiveness of a participative program within an organization was directly related to the degree in which information, knowledge, power, and rewards are vertically integrated into the organizational structure. Lawler further stated that it was significant to the success of the process that all four subsets be simultaneously integrated. It was believed that without this combination, employee involvement would be ineffective.

> Power without knowledge, information, and rewards is likely to lead to poor decisions. Information and knowledge without power leads to frustration because people cannot use their expertise. Rewards for organizational performance without power, knowledge and information leads to frustration and lack of motivation because people cannot influence their rewards. Information, knowledge, and power without rewards for organizational performance are dangerous because nothing will ensure that people will exercise their power in ways that will contribute to organizational effectiveness. (p. 42)

Participation in employee involvement programs

Lawler and Mohrman (1992) performed an analysis to understand the incorporation of employee involvement initiatives within Fortune 1000 firms. Significant levels of participation were found, with over 60% of employee surveyed indicating they were engaged in some process of employee involvement. Of the four specific facets described by Lawler (1986), information appeared to have the highest level of integration, with 76% indicating the company shared information regarding its overall operating results. The figures were reduced when sharing information about specific work units (54%), business plans and goals (47%), and only 20% of the employees surveyed said they received information about the performance of their competitors in relation to their company.

Interestingly, only 6% indicated their companies were using quality circles, and only 11% responded that their companies offered other forms of participation groups. There was relatively low participation in training in group decision-making and problem solving skills, leadership skills, and business acumen training, with only 6% of respondents indicating these resources were available. There did appear to be a relatively high integration of reward systems, as 46% received stock ownership plans, 31% were offered profit sharing, 12% of the companies used individual incentives, and 6% offered team incentives.

The utilization of these techniques, while not integrated equally, did have an effect on the perception of employees. 70% of the respondents indicated that quality had improved, 66% believed that employee satisfaction had increased, and 20% believed there was a decrease in turnover and absenteeism as a result of these processes.

Four processes of employee involvement and competitive advantage

In their analysis, Bowen and Lawler (1995) built on the earlier work of Lawler (1986) and believed that management practices that integrate the four processes of employee involvement—power, information, knowledge, and rewards—gives employees a greater sense of belonging. Employees integrated into the business have more positive feelings about themselves and about their work. These perceptions are typically derived not by chance, but as a result of well-designed, systematically implemented organizational practices and procedures. Bowen and Lawler believed that as a result, the practices and procedures incorporated within the company can become a source of competitive advantage for the firm.

While this can be potentially rewarding and a competitive advantage for the organization, the process of vertically integrating moving information, knowledge, power, and rewards can be a difficult one. In an analysis performed by Frey (1993, as cited by Potterfield, 1997) in a manufacturing firm, the process of workers taking more responsibility for the day-to-day decisions was arduous. What was initially believed to be a management process by which these workers were offered more power over their jobs was perceived to be a transfer of additional managerial job duties by the employees. The employees believed they were being asked to do the duties of management in addition to their own without reward. These efforts failed until

detailed information was shared about the profitability of the company and a profit sharing plan was initiated.

Mohrman, Lawler, and Ledford (1996) continued the discussion of Bowen and Lawler (1995), stating the definition of employee involvement is a combination of practices in the work environment which include information, power, knowledge, and rewards. Through employee involvement, facets within these four processes are transitioned vertically in the organization to non-executive and nonmanagement employees. Mohrman, Lawler, and Ledford also indicated that there was a significant trend in the recent past towards a number of employee involvement initiatives utilizing the practices of information, knowledge, power, and rewards transfer downward within the organizations among many Fortune 1000 companies. While information was not highlighted as in the Lawler and Mohrman (1992) study, employee involvement processes such as self-managed teams and knowledge-based pay were found to be the most utilized techniques.

TQM, BPR, and Information Systems in employee involvement

Other concepts utilizing employee involvement are generally considered to be more direct and ambitious, including high involvement management (Lawler, 1986); self-managed work groups (Lawler & Mohrman, 1992); worker participation (Zwerdling, 1980); job and work re-design (Hackman & Oldham, 1980); high performance work systems (U.S. Department of Labor, 1994); and Total Quality Management (Crosby, 1992; Deming, 1986; Juran, 1989). While the titles of these employee involvement systems differ, their basic premises remain the

same: they are processes by which employees are involved in the decision-making processes that were previously the sole responsibility of management.

Mohrman, Lawler, and Ledford (1996) viewed Total Quality Management (TQM) as an encompassing technique, including quality councils, cross-functional planning, re-engineering, customer satisfaction, and so on. They found that there is a strong correlation between the implementation of employee involvement processed and the use of TQM practices. Kanji and Sa (2002) believed that employee involvement including innovation and learning should be incorporated proactively through the TQM process.

Information Systems (IS) are an integral part of not only the TQM process, but other initiatives such as Business Process Reengineering (BPR). Al-Mashari and Zairi (2000) stated that BPR focuses on core concepts of business processes and on redesigning business processes using a radical Information Technology enabled approach to organizational change (p. 12). With the utilization of IS, Business Process Reengineering has the potential of reshaping business processes and facilitating the flow of information. This is particularly important in the global environment.

In a survey conducted by Senthil, Devadasan, Selladurai, and Balahandayutham (2001) it was discovered that the essential objectives of TQM can be achieved with more vigor if BPR concepts are integrated with it. Their conclusion was that it would be more productive to apply strategy-based BPR concepts on a suitable TQM model (p. 687). Hume, DeVane, and Slater (1999) believed BPR should be incorporated into organizational prototyping:

> Organizational prototype success depends on top management support and may be combined with other comprehensive change efforts (e.g. TQM, BPR). However, the initiative and implementation is bottom-up. Of particular interest to the IS community, IS personnel may be prime candidates to serve as OP

> facilitators. Many IS professionals have developed proficient skills in eliciting user requirements pursuant to IS development; these skills may transfer to another forum, that of user involvement in work process design. (p.49)

Selladurai (2002) suggested that a profitability, productivity, performance (PPP) model goes beyond both TQM and BPR as separate entities and integrates them in the pursuit of a single concept of quality. Selladurai believed that information systems within the PPP framework could provide a catalyst for improvement:

> Productivity in business processes may be enhanced through the incremental change improvements of TQM and the rapid, innovative, revolutionary change implementations of BPR. The use of information technology (IT) and knowledge management to enhance productivity will be the wave of the future. Managing the new business processes means developing new products concurrently and adapting the organization's resources and product development processes to implement this strategy. (p. 617)

The influence of job characteristics and rewards to employee involvement and satisfaction

In the context of employee involvement, Eskildsen and Dahlgaard (2000) described the Hackman and Oldham (1980) work design model, which develops many of the work concepts of Herzberg (1966). This model was validated by Evans and Lindsay (1996). In the model, psychological states are influenced by job characteristics, which in turn affect employee satisfaction and other outcomes. Eskildsen and Dahlgaard indicated that from the five core job characteristics, both quality of work and employee satisfaction can be enhanced if the design of the job involves involvement and information.

Pun, Chin, and Gill (2001) performed a mixed-methodology analysis within the manufacturing environment to determine the importance of employee involvement. When comparing the quantitative and qualitative information, the data were found to largely correlate with each other; however, there were two exceptions: (a) rewards was a lower priority in the

survey compared to the interviews, and (b) employee satisfaction was considered the leading benefit of employee involvement in the interviews, replacing quality improvement as the leader in the survey. Management commitment and rewards were found to be the most critical factors in both methods of analyses. It was concluded that employee involvement generates greater performance, is a facilitator of the use of employee skills and knowledge, and creates better problem solving solutions. Essentially, it was determined that the critical factors and sub-factors produce employee involvement benefits including quality improvement, productivity enhancement, and employee satisfaction.

Employee involvement differentiated by population

Additionally, the extent of implementation and participation in employee involvement programs may be differentiated by population (Miller & Prichard, 1992). Further, in an analysis of secondary data involving Fortune 1000 companies, Coye and Belohlav (1995) determined the participation of employees in programs such as TQM was dependent on factors such as the number of existing involvement programs.

Knowledge

According to Vandenberg (1996), the process of knowledge implies a comprehension of various components: (a) competencies of the current work itself; (b) understanding of the work systems within the group; and (c) an understanding of the company and of the organization with relationship to its business. Steinecke (1993) elaborated on this concept, stating that in addition to the fundamental understanding of the business, knowledge of an employee extended to

knowing the organizational mission, vision, goals, and functions. Through this deeper knowledge, an employee can better understand his relation to the organization.

Further, it is essential for employees to possess this knowledge if they are expected to perform in an effective manner. Senge (1990) stated that knowledge is broader than information, it is the impetus for action. Employees could not be expected to influence the business except by chance without knowledge (Lawler & Mohrman, 1992). Steinecke (1993) argued that knowledge is the foundation of greater employee involvement with regards to analyzing and decision making. Corrigan (1998) believed that there is a direct positive relationship between knowledge and employee value. This is especially true with flatter organizations. Organizations attempt to share the mission and vision with fewer mid-level managers, therefore traditional communication systems are restricted. Corrigan stated that employees would be required to access more information, and would therefore need to acquire different knowledge based skills to adapt to the new business model. Mohrman, Lawler, and Ledford (1996) found there was a strong relationship between the development of knowledge and skills towards employee satisfaction.

Knowledge can also be considered to be training; however, training could be thought of as an important subset to the larger theme of knowledge. For example, Backeberg (1995) conducted research on training as it relates to employee perceived empowerment and commitment to the organization. Many of the attributes cited by Backeberg are identical to the attributes of knowledge.

The knowledge process of employee involvement involves the aspects of learning, personal growth, and the attributes necessary for employees to perform their regular functions at

work (Kaplan and Norton, 1992). Specific examples of knowledge within this context would include all members of a work group having the skills and abilities to get the job done, the current job making good use of the skills and abilities of an employee, and the opportunity to understand and obtain developmental experiences required to perform the current work requirement.

Learning and growth. There are three principle sub-components to the learning and growth perspective: people, systems, and organizational procedures. The integral nature of the balanced scorecard will often assist management in the determination of objectives that should be achieved. For example, monitoring and managing the financial, customer, and internal business process objectives on the balanced scorecard can reveal large gaps between existing capabilities of people, systems, and procedures. This integration may provide guidance in the requirements to achieve targets for breakthrough performance. In order to close the gaps identified, businesses should invest in training and encouraging new skills for employees, enhance information technology and systems, and align organizational procedures and routines.

Kaplan and Norton (1996b) argued these objectives are articulated in the learning and growth perspective of the balanced scorecard. Further, as identified in the customer perspective, employee-based measures should include a blend of outcome measures – employee satisfaction, employee retention, employee training, and employee skills—along with specific drivers, such as detailed indices of specific skills required for the new competitive environment. An example for information systems capabilities could be the measurement of the real-time availability of accurate customer and internal process information to front-line employees. Organizational procedure measurement could focus on the alignment of employee incentives with overall

organizational success factors, as well as the measured rates of improvement in critical customer-based and internal processes.

Much of what is considered knowledge in the business setting can be formulated using the learning and growth section of the balanced scorecard (Kaplan & Norton, 1992). For example, Lipe and Salterio (2000) measured information including: (a) average tenure of personnel; (b) hours of training/employee; (c) information systems within the organization; and, (d) employee suggestions/employee. Leauby and Wentzel (2002) included employee innovation in the learning and growth segment helps to answer the specific facet of how a business unit or company may use the value of its employees and other resources to continuously improve and create value. Leauby and Wentzel further argued the learning dimension of the balanced scorecard can help companies focus on future requirements by fostering an environment that encourages the continuous evaluation of their ability to improve, to innovate and to learn. Examples of measures in this facet could include (a) the number of new products/services introduced, (b) the amount of time to develop and introduce new features, (c) number of patents applied for, and (d) technological improvements. Additionally, research has indicated that employee relations are also critical for future success. In addition to specific learning and growth facets, balanced scorecards include other employee measures such as tracking employee satisfaction, employee turnover, and the percentage of employee suggestions implemented.

Organizational Learning Index. Arora (2003) discussed the integration of the organizational learning index (OLI) which had replaced the balanced scorecard at a large industrial company in India. The OLI is designed to measure the effectiveness of processes that promote learning. According to Arora, the OLI measured how well the company is addressing

three important questions: (a) is the company nurturing an environment that creates a quest for more knowledge among employees; (b) is the company creating and providing enough learning opportunities for individuals and teams; and (c), does the company ensure the availability of infrastructure and systems, so when one individual learns, the whole organization learns. Learning opportunities that have been used at the company are training, job rotation, task forces, assessments, and audits.

Knowledge, learning, and TQM. Techniques within Total Quality Management (TQM) can be used in conjunction with other knowledge measures to benefit the company in a way that may be slightly different than a pure balanced scorecard. For this reason, TQM and the balanced scorecard should not be viewed as not mutually exclusive techniques. The relationship between TQM and business scorecards was noted by Kanji and Sa (2002). Palo (2003) applied thoughts involving learning and training as they relate within the TQM framework. In the study it was concluded that communication competencies and customer value training are components to TQM could be appropriate measures for companies. Extending this thought, the same learning and growth—or knowledge—behaviors important in TQM could be metrics for employee measurement in a company scorecard. Therefore, by identifying and focusing on these skills in the learning process, the company will be able to see revenue and profit changes from the training and use these data as a quantitative measure to provide meaningful data for employee development, learning, and growth scorecard items.

Knowledge and its relationship to self-esteem. Brockner (1988) described self-esteem as a general feeling of self-worth. Daily and Bishop (2003) stated that individuals who have a high self-worth, or self-esteem, will have a higher level of employee satisfaction through their

involvement. Gist and Mitchell (1992) believed through self-esteem, employees view themselves as valued contributors to the organization with skills and knowledge worth contributing. Thus, the accumulation and application of knowledge is integral to the self-esteem of an employee, which is positively related to employee satisfaction. Sundbo (1999) stated that employees must have self-esteem and be motivated to participate in employee involvement programs. It was believed that various methods, including training programs, would be adequate to achieve results. Sundbo was especially interested in the learning organization, and in the analysis determined that communications and team training was especially important in the development of self-esteem and employee participation.

Knowledge does not always yield direct results to the bottom line. Further, Kaplan and Norton (2001a, 2001b) indicated assets such as knowledge and technology seldom have a direct impact on revenue and profit. This is not to say these components do not add to the financial success of a company, rather these intangible asset improvements affect financial outcomes through chains of cause and effect relationships involving intermediate stages. An example of this relationship would be in the service management profit chain. Application of employee training can lead to improvements in service quality. Better service quality can lead to higher customer satisfaction, which in turn can lead to an increase in customer loyalty. Increased customer loyalty will generate repeat sales, increasing revenues and margins for the company. While the initial employee training does not necessarily have a direct relationship to revenues, it can be demonstrated through intermediate stages the training of employees can have a positive—or negative, if not used correctly—effect on profits.

Information

The concept of receiving pertinent and relevant information is an important process within employee involvement. Examples of information within this context include information regarding an employee doing their job well, being informed about what is expected in their job, having the appropriate tools—such as those prepared by Information Systems (IS) within the company, and having the correct metrics to track the work group of an employee with respect to the goals of the company. Kouzes and Posner (1987) stated without information employees will not take responsibility. They believed that with the proper information, employees can achieve extraordinary results. Information strengthens the resolve of an employee and provides them with the resources to become successful. Kouzes and Posner also believed that without information employees would not be able to direct their creative energies.

Vertical integration of information. Potterfield (1997) stated that an organization exhibiting employee involvement is ideally an open system where information is shared freely and where communication takes place in every direction. This would include both vertical integration of information within an organization as well as across organizational boundaries. Importantly, information should be shared from the lower levels of the organization to management. With the appropriate information, employees closest to the process would be able to make the correct decisions, to take the initiative, and to act on issues and concerns. Through the dissemination of information, responsibility for the success of the firm would be shared by all members of the organization (Belasco & Stayer, 1994; Bowen & Lawler, 1992; Quinn, 1992).

Within the context of information, Semler (1994) cited a manufacturing company where traditional hierarchy was eliminated and thus information was shared among all employees. The

traditional corporate structure was condensed into three levels of employees: (a) counselors, who set corporate policy; (b) partners, who are similar to division managers and are responsible for the operation of their respective divisions; and (c) associates, who are comprised of the remainder of the employees. Through sharing information, the company involved employees directly in the decision making process, shared information about its goals and performance, and developed a profit sharing plan for all employees. Because of their involvement in receiving information, employees were expected to contribute in ways that were not expected in the past, including the design and development of processes within their work groups, and to continually improve the quality and efficiency of their output.

Lawler (1986) reminded all that information should not be viewed exclusively as a downward path of dissemination. On the contrary, Lawler believed that an essential part of the successful integration of information within an organization also involved a consistent and appropriate flow of information from lower-level employees to upper-level management. Examples of this type of information would include suggestions for improvement in processes, employees opinions, and employee attitudes. Continuing along these lines, Lawler (1992) later stated when both directions of vertically integrated information occur, employees at all levels are able to control organizational processes and functions that were previously only within the grasp of executive management.

Important facets of information. Jaffe, Scott, and Tobe (1994) described that in order for an employee to become involved, information in the values of the organization was essential as opposed to the strict observation of a supervisor. They argued that the among the values

employees desire in the workplace are: (a) integrity and fairness; (b) competence—or the ability to get the job done; (c) teamwork; (d) communication, or information; and (e) personal growth.

Drucker (1988) stressed the importance of information within the context of the future of management, describing business of the future as an information-based organization. Information is therefore an integral part of employee involvement; in order to contribute to future successes employees should have access to data about the organization, their goals and plans, quality, customer, feedback, and organizational processes (Vandenberg, 1996). Steinecke (1993) further argued that employees should be provided with information about the past, current, and more importantly, future direction of their respective organizations. Steinecke believed that only through this information sharing could employees contribute in a meaningful way to the organization. Randolph (1995) added without information it is almost impossible for employees to act responsibly when it comes to the direction of their organization.

Information may be used within the context of employee involvement to provide teams the objective data necessary to facilitate cost reductions and quality improvements. Lawler and Mohrman (1992) described a condition called open book management, which is a philosophy by which executives share relevant sensitive financial information with employees in an effort to provide meaningful input for decision making. Kanter (1989) believed that organizations choosing to involve employees should assure that more information is available to people at all levels, using even more sources than previously conceived. Lawler (1992) suggested that information regarding the mission and the performance of the organization are critical to success. Kanter (1983) also argued that information concerning the organizational mission is essential if employees are to understand the direction of the company and feel free to move their respective

work groups towards that direction. Additionally, organizations should use all resources available to provide these data (Kanter, 1989). Information regarding the mission of an organization is an important antecedent of employee empowerment because (a) it assists the employee in creating a sense of meaning and purpose (Conger & Kanungo, 1988), and (b) it augments the ability of an employee to make and influence decisions that are congruent with the goals and mission of the organization (Lawler, 1992).

Daily and Bishop (2003) indicated that information about performance is essential for employees. All individuals within the organization should be aware of the respective performance of their organization, and through this information, assist in the decision making process for future direction. Additionally, Daily and Bishop stated that information on performance is fundamental to reinforcing a sense of competence and value within the organization.

Kaplan and Norton's balanced scorecard. One such source of information available to organizations for the use of all employees is the balanced scorecard (Kaplan & Norton, 1992). The balanced scorecard attempts to monitor elements of a company strategy, with attention being paid to several key aspects versus a more focused approach merely on financial elements. One of the more important elements of the balanced scorecard is the notion company leaders should not have to choose between financial and operational measures to manage the company.

Many companies using the balanced scorecard have realized that using the scorecard represents a fundamental shift in the underlying assumptions made about performance measurement. In research performed by Kaplan and Norton (1992, 1993) it was observed when most managers in high level positions, especially those in the finance organization, had difficulty

implementing the balanced scorecard without the involvement of the employees who have the most complete picture of the company's vision and priorities. This was considered to be a departure from the normal process of implementing systems, since most past processes and systems had been designed and overseen by financial experts. Kaplan and Norton believed this was due to the balanced scorecard putting strategy, and not control, as its focus (Kaplan & Norton, 1996a, 2000).

The primary purpose of the balanced scorecard is to provide the information necessary to allow managers and employees to look at the business from alternative perspectives. Additionally, the categories may be viewed within the context of providing answers to four basic questions: (a) how do we look to shareholders; (b) how do our customers see us; (c) what must we excel at; and, (d) can we continue to improve and create value (Kaplan & Norton, 1992). The four perspectives are interrelated to the vision and the strategy of the company as well as with each other.

Power

The process of having power within an organization has been a difficult area to reconcile. Spreitzer (1992) believed employee involvement, or empowerment, is defined as the process of receiving and accepting power to make decisions in the organization. There is often a misconception by management that power is finite quantity and its control is within a zero sum game; therefore, for managers to share power with employees is to lose a portion of their own power. Tannenbaum (1968) identified such behaviors and thoughts within managers. Managers believed that by sacrifice and hard work they had earned power and authority in the organization,

and to involve employees in the decision making process the manager must relinquish a portion of his power. Church and Waclawski (1996) stated that sharing power in a control-oriented organization can be extremely difficult, and may meet with resistance or passive acceptance by management. Taken even further, leaders can have a negative influence on employees by exerting too much control (Kouzes & Posner, 1987).

One approach to the process of power has been to conceptualize it as an internal drive to influence control upon others (White, 1959). This may also be categorized as an intrinsic motivation to be self-determining (Deci, 1975). The orientation of power has also been argued to be an effect of the locus of control of an individual (Rotter, 1966; Trickett, 1991) and primary and secondary control (Rothbaum, Weisz, & Snyder, 1982). It is suggested that a sense of control is fundamental for a person, or an employee, to have feelings of power.

Stewart and Manz (1995, as cited in Brossoit, 2000) believed this behavior toward power sharing was symptomatic of larger leadership issues among managers. One example of how power is shared within an organization is the perception of the employee towards how his manager or supervisor encourages him to work across organizational or functional boundaries. By fostering this process, the manager is sharing power with the employee to access data and resources outside of their perceived sphere of influence.

Power and TQM. Mohrman, Lawler, and Ledford (1996) analyzed several aspects of organizational performance, profitability, and employee satisfaction among companies with and without TQM initiatives. Their research indicated there was a strong relationship to power and employee satisfaction only among the companies with TQM initiatives.

TQM relates to power in the sense that it can be a motivational source and an enabler. Conger and Kanungo (1988) stated that this was:

> A process of enhancing feelings of self efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques or providing efficacy information. (p. 474)

Thomas and Velthouse (1990) built upon this concept, perceiving power as an energizing force among people.

Leadership and delegation. As stated earlier, difficulty with power sharing can be symptomatic of larger leadership issues (Stewart & Manz, 1995, as cited in Brossoit, 2000). Thorlakson and Murray (1996) also indicate that power sharing is similar to the delegation of what is viewed as significant authority. In a leadership context the emphasis is placed on the energizing aspect (Thomas & Velthouse, 1990). Leaders attempt to energize their employees to act outside of their typical scope through providing a vision or direction. Managers as leaders enable employees to participate in the process of improving the organization (Yukl, 1989). Bennis and Nanus (1985), Block (1987), Burke (1986), Conger (1989), and Nielsen (1986) are examples of the leadership approach.

Power may also be associated with increased involvement, perceived transfer of authority, or delegation. Kanter (1983) believed these facets can lead an employee to have a sense of perceived control, or a transfer of power. Through this, it is thought employees become more confident and in control of their work environment (House, 1988). Hackman and Oldham (1980) argued this as way to enhance job satisfaction by vertically loading some aspects of power. Another aspect is the augmentation of self-efficacy by attempting to reduce the feeling of

powerlessness (Conger & Kanungo, 1988), as well as increasing task motivation (Thomas & Velthouse, 1990).

Menon (2001) described the relationship between specific types of perceived control and types of perceived competence. Interesting influences on perceived control were: (a) one can influence the way work is done in my department, (b) one has the authority to work effectively, and (c) one can influence decision taken in his department. Further, perceived competence was influenced by: (a) having the skills and abilities to get the job done, (b) having the competence to work effectively, and (c) having the capabilities to perform the job well.

Relational perspective of power. Potterfield (1997) argued that the sharing of power was affected by the culture and structure of the organization. Some company structures and cultures make the sharing of power easier than others. Potterfield believed that the organization should be examined at the outset of attempts to involve employees, with a focus on the best structure to facilitate involvement among its members. Other examples of this process include Belasco and Stayer (1994), Bowen and Lawler (1992), Jaffe and Scott (1991), and Pickard (1993). Conger and Kanungo (1988) also stated that when employee involvement and empowerment are considered as they relate to the "relational dynamic it becomes the process by which a leader or manager shares his or her power with subordinates. In the management literature, this idea of delegation and the decentralization of decision-making power is central to the empowerment notion" (p. 473). Bowen and Lawler (1992) further stated that employees are involved if they receive:

> Information about organizational performance; are rewarded for contributing to organizational performance; have the knowledge and skills to understand and contribute to organizational performance; have the power to make decisions that influence organizational direction and performance. (p. 35)

Block (1987) also found that organizations espousing more bureaucratic contexts and authoritarian management styles negatively influenced employee involvement. Interestingly, Conger (1986, as cited by Conger & Kanungo, 1988) found that conditions during the restructuring of an organization or a company can also influence the perception of involvement, indicating a lowered self-efficacy was present during major reorganizations.

Conversely, Mohrman, Lawler, and Ledford (1996) found that organizations utilizing TQM initiatives had a strong influence on the positive perception of employee satisfaction with power. They believed this was a result of the focus of TQM on problem solving and decision making.

Shared decision-making. Wagner (1994) believed that an integral part of employee participation involves the process by which power and decision-making are shared among participants who under other circumstances are not considered hierarchically equivalent. This view is shared by other researchers, including Beer (1991) and Kanter (1983).

Vandenberg (1996) stated that fundamentally, power can be defined as shared decision making among managers and employees. In this way employees are encouraged to participate in decisions that affect their work environment. Vandenberg also indicated that an employee will be more committed to their work environment if he is allowed to be involved in the definition of work processes. In addition to shared decision-making, the vertical integration of power should also include an emphasis on shared authority and shared accountability as well (Steinecke, 1993). Ford and Fottler (1995) also concluded that an increase in employee decision-making should be consistent with an increase in the level of responsibility for the outcome. Employees with this power will not only make decisions about their work, but will use other resources

outside the scope of their department to enhance their chance of success. Further, employees have the authority to implement the decisions—but are also held accountable for the results.

Sharing power and decision making does not involve all decisions (Vandenberg, 1996). Power should be limited to areas and issues which an employee has a reason to need the information, but it is generally believed that these limitations should be the exception. Lawler (1992) believed that work groups should be organized in a way that most decisions could be made by employees. It was argued that the employee performing the task should have the best understanding of the needs, and therefore should be in the best position to make decisions. Gibson, Ivancevich, and Donnelly (1988) described this type of power as the ability to get things done in the manner the person wants them done. Employees are given the authority to perform their daily operations and make decisions with regard to their tasks (Lawler, 1986).

Sharing power and its relationship to employee involvement and empowerment. Conger and Kanungo (1988) believed that prior research equated employee involvement or empowerment with the delegation or sharing of power as a representation of solely the power process. They felt that this view did not fully integrate the structural, or management, and psychological approaches of employee participation.

While there are studies previously mentioned that indicate a strong relationship between power sharing and increased employee participation, other research in employee participation in decision-making indicated there are contrasting results. Cotton, Vollrath, Froggatt, Lengnick-Hall, and Jennings (1988) found a distinct difference in the forms of decision-making as they relate to employee satisfaction. Leana, Locke, & Schweiger, (1990) and Wagner (1994) believed that only including direct effects in the examination of employee participation satisfaction

provides a specious argument. They indicated that the contrasting results in research conducted regarding employee participation in decision-making could be due to a disregard of enabling or mediating relationships between participation and key outcomes. Additionally, Spector (1986) stated that the role of the supervisor has an effect on the feeling of personal control of an employee. Spector found a positive relationship between high levels of perceived control and levels of employee satisfaction.

Locus of control. Power can also be described as the perception of control, or locus of control, is also significant to employee involvement. Spector (1997) believed locus of control to be a cognitive variable. Locus of control can be a diverse process; Thomas and Velthouse (1990) also related the locus of control to the impact dimension of empowerment. Rotter (1966) indicated that locus of control explained the degree to which people believe they, as opposed to other exogenous influences, determine their outcome. People with an internal locus of control typically believe they have more influence on all aspects of their life, including their work environment.

Other researchers concluded that power is fundamentally a relational concept to describe the perception of power or control that an individual perceives—internal locus of control—or the organization and other outside influences possess—external locus of control (Bacharach & Lawler, 1980; Crozier, 1964; Dahl, 1957; Hinnings, Hickson, Pennings & Schneck, 1974; Kotter, 1979; Parsons & Smelser, 1956; Pfeffer, 1981).

This may be interpreted in conjunction with the social exchange theory (Blau, 1964), which conceptualizes power as a function of the dependent and interdependent nature of participants within the system. Power or control occurs when the performance of an individual

or group are contingent not only on their own actions but on the actions and responses of outsiders (Thibault & Kelley, 1959). Locus of control occurs in a relative condition when the power of the individual or group is a summation of the net result of action and reaction (Pfeffer, 1981).

Power and its relationship to other processes within employee involvement. Conger and Kanungo (1988), as well as Bacharach and Lawler (1980) described the interrelationship between power and other processes of employee involvement. They argued at the interpersonal level, the principle sources of power for the individual employee would be the availability to access specialized information and knowledge. Their actions were fund to be dependent upon their power base, which included legal, coercive, remunerative—control of material rewards, knowledge—control of information, and expertise.

Conger and Kanungo (1988) also relate these interdependencies to the perception of powerlessness by an employee. Block (1987), Conger (1986, as cited in Conger & Kanungo, 1988) indicated that specific facets which interrelate can contribute to a reduced level of self-efficacy and personal power. Kanter (1983) believed that information systems and access to resources, and the ability to influence job design all had an effect on the perception of powerlessness of an employee.

Rewards

The process of rewarding employees is believed to have a strong relationship to the success of employee involvement initiatives (Lawler, 1986). Several analyses have been conducted demonstrating the relationship between rewards and performance in organizations that

have high levels of participation in employee involvement programs. Reward systems are redesigned to reinforce the behaviors of individuals, teams, and business units (Bowen & Lawler, 1990; Eisenberger, Rhoades, & Cameron, 1999; Lawler, 1986; Vest & Scott, 2000). Rewards may be based on both individual and group performance. Through rewarding for group performance, leaders attempt to match employee involvement and commitment to the success of the organization and the company (Lawler & Mohrman, 1992). Lawler (1986) indicated this is accomplished by aligning the objectives and interests of the employee with the goals of the organization.

Within this context, rewards can include both intrinsic and extrinsic motivators. Examples include satisfaction with the recognition received and satisfaction with the amount of pay. Cappelli and Sherer (1988) indicated that pay systems, or extrinsic motivators, are based on market analyses. Others (Dunlop, 1957, as cited in Cappelli & Sherer, 1988; Livernash, 1957, as cited in Cappelli & Sherer, 1988) emphasized that pay comparisons and satisfaction with pay may follow wage contours, which can effect employee satisfaction. These contours are not only affected by market conditions, but economic conditions as well. In an analyses performed in the United States during the 1930s, Hoppock (1935) found high levels of employee satisfaction, which was concluded to be affected by the general economic conditions and their satisfaction to be employed when many others were not.

Intrinsic rewards focus more on beliefs and feelings of fairness in addition to other non-compensatory reward systems. Employees have a sense of accomplishment when performing a task that is recognized by others to be a contribution to the goals or mission of the organization

(Lawler, 1986). The perception of fairness has significant weight in this type of reward (Eisenberger, Rhoades, & Cameron, 1999; Hackman & Suttle, 1977).

Individual and group rewards. When employee involvement programs are incorporated and reward systems are utilized, decisions have to be made about the nature of rewards. Incentive systems that reward performance have been identified as an integral part of the success of employee involvement initiatives (Bowen & Lawler, 1992). One of these decisions, although by no means a mutually exclusive one, is whether to reward based on individual or group performance. Lawler (1986) stated that in order to be effective a reward system should recognize the contribution of the individual employee. While reward systems for groups or organizational performance was acknowledged to be beneficial, Lawler argued by rewarding for group performance often does not provide the individual employee with a clear understanding of how their specific actions affect the performance or success of the organization. For this reason, Lawler believed that basing rewards on individual performance was important to the success of employee involvement through (a) recognizing and rewarding personal competencies and (b) providing incentives for the individual employee for participation in decisions and efforts that directly affect his processes.

Group or organizational rewards have been recognized to add value to the involvement and satisfaction of employees as well. When groups or organizations are rewarded, an individual employee may be able to associate the achievement of higher level objectives to the reward. This association may be a tenuous one, however, and should be clearly defined and perceived as fair by the employee (Adams, 1963; Lawler, 1986; Lawler, Mohrman, & Ledford, 1995).

Equity theory. It could be considered naïve if a manager does not acknowledge the employees either consciously or subconsciously compare their benefits and rewards to those around them as well as others outside the organization. Adams (1963) asserted that employees evaluate and compare in a ratio form their respective job inputs—such as skills and efforts—to outcomes—such as rewards and interesting work. Comparing this ratio to other employees and outside people an employee makes a determination as the whether he perceives his rewards are comparatively fair. As previously noted, to be equitable and fair, the link between individual and organizational performance should be clear (Hackman & Suttle, 1977).

Cappelli and Sherer (1988) described their equity theory largely based on extrinsic rewards; however, equity and fairness are not exclusive to the extrinsic valuation. Lawler (1986) based his arguments on a more intrinsic view, indication a more behavioral aspect where rewards should be both achievable and valued by the employee. If the distribution system of rewards is perceived to be unfair, inaccurate, or unattainable, they can be as ineffective as not using reward systems at all (Vandenberg, 1996).

Cognitive evaluation theory. Deci and Ryan (1985, 1987) described the motivation of an employee to be self-determining, the avoidance of being pressured, and to act on or make choices in their cognitive evaluation theory. Rewards are assumed to have an aversive form of social control that can reduce the self-determination of an employee. These concepts were developed in the cognitive evaluation theory. Essentially, Deci and Ryan believed the presence of tangible rewards lessens the potential enjoyment, or intrinsic motivation, an employee can obtain through the accomplishment of goals and tasks. They stated “rewards tend to be experienced as controlling, which of course makes sense, as rewards are typically used to induce

or pressure people to act in ways different from what they would do freely" (1987, p. 1026). The opposite was reported by Freedman and Philips (1985) and Overskeid and Svartdal (1998); the effects of tangible rewards were found to have a positive effect on perceived autonomy.

Eisenberger, Rhoades, and Cameron (1999) maintained when considering cognitive evaluation theory, the potential outcomes could be affected by individual and group reward systems. They indicated that individuals should receive similar objectives and feedback as received by the rewarded group. If this did not occur, there would be confusion in the reward and the individual feeling of intrinsic motivation.

Employee involvement through rewards and its relation to empowerment. Hechler and Wiener (1974) investigated the effect of extrinsic rewards on self-esteem. Their conclusion was extrinsic reward systems were favorably related to employee perceptions, quality, and empowerment. Eisenberger, Rhoades, and Cameron (1999) differentiated between perceived autonomy and perceived competence as possible conduits of involvement and empowerment. Deci and Ryan (1985) argued that rewards do not provide any greater medium for empowerment than feedback, or information. Other research (Harackiewicz & Sansone, 1991; Porter & Lawler, 1968; Sansone & Harackiewicz, 1998) or self-efficacy (Bandura, 1997; Zimmerman, 1985) suggested that reward has symbolic properties that may be associated with facets of empowerment, or self-efficacy (Bandura, 1997; Zimmerman, 1985).

Eisenberger, Rhoades, and Cameron (1999) also believed that there may be different reward perceptions of empowerment dependent on the type of performance standard achieved. Absolute performance standard—solving a particular number of problems—was segregated from a normative performance standard. Deci and Ryan (1985) argued that surpassing a performance

standard might in itself indicate competence, which is a facet of empowerment. Burger (1992) indicated the effects of rewards on employee involvement and empowerment was stronger among employees with a strong desire for control. Thompson, Chaiken, and Hazelwood (1993) maintained that rewarding a person for participation in a task without performance objectives produced a negative effect on intrinsic motivation with a strong desire for control. Since individuals often develop their perceptions about their own competence through comparing their performance against others (Suls & Wills, 1991), the information that individual performance is superior to those within the respective reference sample may indicate ability. For this reason, reward in the normative situation might have provided little indication of competence or empowerment already afforded through this type of comparison by the individual and a favorable performance feedback.

The Harackiewicz model of intrinsic motivation (Harackiewicz & Sansone, 1991) indicated that performance-contingent reward had a positive relationship on individuals and creating within them a desire to enhance performance as opposed to those receiving a performance objective with favorable feedback without a reward. Harackiewicz, Manderlink, & Sansone (1984) found that performance-contingent reward produced greater intrinsic motivation within the same performance objective and favorable performance feedback without reward. Additionally, performance-contingent reward may augment the perception of increased competency or self-efficacy (Bandura, 1977; Rosenfield, Folger, & Adelman, 1980). Bandura stated that “rewarding quality of performance enhances perceived competence which, in turn, predicts intrinsic interest” (p. 221).

Employee Involvement Summary

Employee involvement may be described and categorized in a number of ways, as documented thus far. Most describe employee involvement as a process used across many types of organizations, including manufacturing and union companies (Bluestein & Bluestein, 1992); a motivational system (Leonard, Beauvais, & Scholl, 1995, as cited in O'Connell, 1999); and an incorporation of many processes involving many of the facets of participative management (Scarselletta, 1999). While there are a number of similar variations within the research (Eskildsen & Dahlgaard, 2000; Pun, Chin, & Gill 2001), the Lawler (1986) definition of employee involvement as a process incorporating four subsets—power, information, knowledge, and rewards—expresses an excellent foundation by which to understand the processes affecting employee involvement.

It can be concluded that knowledge is far more than simply employee training. Learning and growth opportunities, when understood and committed in the business environment, can enhance employee involvement. TQM practices appeared to be an exceptional example of knowledge specifically and employee involvement generally. An increase in knowledge through the types of initiatives cited within this review can have a positive affect on employee self-esteem.

Employee involvement is enhanced when the information systems are more vertically integrated to share information throughout the organization. One of the better examples of information sharing involved the incorporation of the Kaplan and Norton (1992) balanced scorecard, and other similar information sharing systems. Additionally, through the use of

Information Systems, the more rapid information flows through the organization the more involved employees can be.

The success of power as a process in employee involvement is somewhat dependent on the manner in which it is delegated. TQM initiatives when properly integrated in the corporate culture can provide power systems to lower level employees in a manner that will increase involvement (Conger & Kanungo, 1988). A transition in culture also appears to be necessary to evolve employees from managers to leaders. By doing so, leadership can be more freely shared (Bennis & Nanus, 1985; Yukl, 1989). Employees have to feel involved in decision-making that affects their processes (Conger & Kanungo, 1988; Kanter, 1983; Vandenberg, 1996). Power as an involvement process is significantly related to and is an antecedent for empowerment (Thomas & Velthouse, 1990).

To be successful in employee involvement, rewards should be tied to performance in a way that is understood and deemed fair by the employee (Adams, 1963; Lawler, 1986; Vandenberg, 1996). Deci and Ryan (1985, 1987) argued that extrinsic rewards detract from the self-determination of employees and therefore reduce their feeling of self-worth. Managers can use rewards to control employees and force changes in behavior, but if rewards are set up for the betterment of the organization, this should not be an issue (Heckler & Wiener, 1974). Employees with a greater desire for control will also view rewards differently than those employees without a strong desire for control.

Throughout the literature it seems reasonable to conclude that the four processes of employee involvement (Lawler, 1986) are a reasonable way to collect various initiatives. TQM and other initiatives can span across several involvement processes; however, as a means of

understanding the overall implications of employee involvement and its relation to employee empowerment the four processes of knowledge, information, power, and rewards are excellent subsets to assess processes and initiatives.

Relation between Employee Involvement and Employee Empowerment

When a distinction is made between employee involvement and employee empowerment, it is generally believed that involvement is a precursor or antecedent to empowerment (Corrigan, 1998; Daily & Bishop, 2003; Kanter, 1989; Lashley, 1999; Lawler, 1986). There are different subsets, facets, or cognitive differences within each group, yet the general ideology of involvement preceding empowerment is consistent, except when both can be considered to exist concurrently (Scott, Bishop, & Chen, 2003). Other employee involvement initiatives, such as TQM, can have a positive or synergistic effect on this relationship (Bowen & Lawler, 1995). The linear relationship between employee involvement and employee empowerment has been found in several studies to have a positive relationship (Corrigan, 1998; Daily & Bishop, 2003; Lashley, 1999; Spreitzer, 1996).

Perceived interchangeability between involvement and empowerment

One issue with the understanding of the relationship between employee involvement and employee empowerment is the interchangeability between the terms that can happen within the literature (Collins, 1994; Denton, 1994; Lawler & Mohrman, 1992; Ogden, 1992; Plunkett & Fournier, 1991; Wagner, 1994). Lashley (1999) described more of an overlap between the concepts as opposed to interchangeability between the terms. There are several similar

characteristics, especially when comparing involvement to psychological empowerment and self-efficacy. Watson (1986) stated that both employee empowerment and involvement attempt to satisfy the individual psychological needs of the employee.

Further, it has been argued that empowerment was the result of an evolutionary process, beginning at industrial democracy, morphing into employee participation and then onto employee involvement (Marchington, Goodman, Wilkinson, & Ackers, 1992; Psoinos & Smithson, 2002). Much of the disagreement may result from the definition of empowerment being a structural or psychological one. For example, Psoinos and Smithson believed:

> The major difference between these concepts is related to the "transfer" of decision-making authority. Whereas in both involvement and participation, management retains control, in empowerment employees have—at least to some degree—authority to make and implement heir own decisions. (p. 133)

In addition to inputs being viewed by many researchers as similar, the outcome of both concepts are considered in most cases to be similar. Marchington, Goodman, Wilkinson, and Ackers (1992) indicated that employee involvement processes are used to improve communication, increase commitment, and enhance other cognitions that are associated with employee empowerment (Thomas & Velthouse, 1990). These varied opinions may tend to confuse the discussion; however, the process of comparing and contrasting these views is beneficial to better understand how empowerment and involvement are similar, dissimilar, and their apparent common relationships.

The relationship from involvement, to empowerment, to satisfaction

Lashley (1999) described a model by which management used several processes including quality circles, employee suggestions, training, employee involvement in decision-

making, autonomy, and delegation of power as a means to provide the work environment to generate an empowered workforce. Once established, more satisfied employees would positively relate to organizational objectives, which included improved quality, increased productivity, and reduced turnover.

Harmon, Scotti, Behson, Farias, Petzel, Neuman, & Keashly (2003) performed a post-facto analysis based on several of the questions proposed for the research in this dissertation. The basis of the analysis was to understand the relationship between what was called a high-involvement work system and employee satisfaction. They defined this as a holistic work design that includes the characteristics of involvement, empowerment, development, trust, openness, teamwork, and performance based reward systems. Within the research, a series of exploratory and factor analyses were performed on the survey questions, finding a high correlation in many cases. It was concluded from the study that high-performance work systems were strongly related to employee satisfaction. A relationship significant at the $p < .05$ ($r = .79$) level was found between high involvement work systems and employee satisfaction.

Empowerment and involvement as they relate to TQM

There has been significant research performed to examine the relationship and interdependence of TQM, employee involvement, and employee empowerment (Daily & Bishop, 2003; Hua, Chin, Sun, & Xu, 2000; Mohrman, Lawler, & Ledford, 1996; Pun, Chin, & Gill, 2001; Silos, 1999). Bowen and Lawler (1995) believed that there was a distinct relationship between the TQM initiatives, employee involvement, and employee empowerment. In their analysis, Bowen and Lawler determined that employee involvement programs precede quality

programs. Additionally, quality programs and employee involvement programs can be separate or combined into an overarching program.

When separate programs exist, however, the perception is that employee involvement is part of TQM. Bowen and Lawler (1995) argued this may be due to management perception of TQM as a more acceptable initiative, one that emphasizes work process versus power and management style. Additionally, it was concluded that TQM, involvement, and empowerment can act as reinforcements and provide synergy (Bowen & Lawler, 1995; Lawler, 1992; Lawler, Mohrman, & Ledford, 1995).

High involvement work practices were described in four categories: (a) power, (b) information, (c) knowledge, and (d) rewards. Components of power include quality circles, job-enrichment programs, and self-managed teams. Information involves customer feedback, data on unit performance, and data on competitors. Knowledge includes the skills to analyze business results and group process skills. Rewards are tied to performance and customer satisfaction levels, and include both individual and group rewards. These components of the high involvement work practices were found to have a relationship to employee empowerment, which was in turn found to have a positive relationship to employee satisfaction. Several common concepts of TQM and other initiatives are listed in the high involvement practices described by Bowen and Lawler (1995). Many of these initiatives have found their way in TQM initiatives, employee involvement processes, and employee empowerment. These include quality circles (Barbee & Bott, 1991), job enrichment (Hirst, 1991), and self-managed teams (Foy, 1994; Pickard, 1993).

Involvement processes, employee involvement, and employee satisfaction

Cotton (1993) indicated that employee involvement is a participative process initiated to utilize the full capacity of employees and motivate them to increase commitment and generate organizational success. Daily and Bishop (2003) believed that (a) management support, (b) training or knowledge, (c) reward systems, and (d) teamwork were processes that had significant positive relationships to employee involvement success, which in turn lead to employee empowerment. In their model, management support and training flowed solely through teamwork while reward systems were related to teamwork and individually affected the success of employee involvement. Training (r = .41) and rewards (r = .41) were found to have a significant relationship at the $p < .01$ level to teamwork. Teamwork was discovered to have a positive significant relationship at the $p < .001$ level (r = .47) to employee involvement success. Employee involvement success was found to have a significant influence at the $p < .001$ level (r = .46) to empowerment. This model has similar characteristics of other research, but does differentiate the importance of teamwork where others (Bowen & Lawler, 1995; Lawler, 1986) do not. Regardless, the results of a strong positive relationship between employee involvement success and employee empowerment is consistent with other research.

Corrigan (1998) applied the processes of employee involvement as defined by Lawler (1986) to the employee empowerment cognitions of Thomas and Velthouse (1990). This relationship was then continued to determine an affect to job performance. Corrigan found positive effects between both employee involvement to employee empowerment and employee empowerment to job satisfaction. Finding a positive relationship between employee involvement and employee empowerment, Corrigan further analyzed specific facets of involvement and empowerment

against each other to determine a causal relationship. While not all involvement processes directly affected empowerment cognitions, several relationships were found to exist: (a) information was found to have an affect on meaning; (b) knowledge affected both choice and impact; (c) power affected both impact and self-determination—or competence; and (d) rewards affected competence.

Scott, Bishop, and Chen (2003) analyzed groups within the manufacturing environment to understand the relationship between employee involvement, employee empowerment, job satisfaction, and the intent of the employee to leave the company. These relationships are consistent with the relationships observed and documented by several other researchers (Clegg, & Jackson, 1990; Fried & Farris, 1987; Griffeth, 1985: Wall, Corbett, Martin, Spector, 1997). The focus of their study as it relates to involvement and empowerment related to perceived task interdependence and participation in decision-making. A strong positive relation was found between: (a) perceived task interdependence and participation in decision making (r = .30, p <.01); (b) perceived task interdependence and job satisfaction (r = .33, p < .01), and (c) participation in decision-making and job satisfaction (r = .34, p < .01). A strong negative relationship (r = -.49, p < .01) was found between job satisfaction and intention to leave the company. These relationships are demonstrated in Figure 14.

Spreitzer (1995) added to the discussion regarding the relationship between involvement and empowerment. While the definition of empowerment is similar to the definition of empowerment by Thomas and Velthouse (1990), Spreitzer defined involvement processes in a different manner. These processes involve (a) locus of control; (b) self-esteem; (c) access to information; and, (d) rewards, all effecting empowerment. The concepts can be considered

generally consistent with those described by Lawler (1986), Kanter (1989), Conger and Kanungo (1988), Daily and Bishop (2003), and Bandura (1977). Spreitzer then argued empowerment has an effect on both the effectiveness of management and innovation in the workplace. These relationships include locus of control, self-esteem, access to information, and rewards, which affect the empowerment cognitions of meaning, competence, self-determination, and impact. Spreitzer further believed that empowerment directly influenced both managerial effectiveness and innovation in the workplace.

Employee involvement to empowerment summary

There is a strong linkage indicated in several studies performed regarding the relationship between employee involvement and employee empowerment (Bowen & Lawler, 1995; Corrigan, 1998; Daily & Bishop, 2003; Spreitzer, 1995). One of the largest issues when reviewing the research occurs when attempting to define both involvement and empowerment (Collins, 1994; Denton, 1994; Lawler & Mohrman, 1992). Several studies use the terms interchangeably, which can potentially cause confusion. Essentially, it can be argued that when making a distinction between the two concepts, employee involvement can be thought of as actionable processes while employee empowerments can be thought of as elements in a cognitive state. Nonetheless, as long as the definitions are clearly stated in the research the confusion is minimized.

Through this relationship, employee involvement can be considered an antecedent to employee empowerment. This is not to say that the only way in which employees can become empowered is through involvement; however, many facets—especially when considering the four processes of knowledge, information, power, and rewards—enable employees to have a

feeling of empowerment. Additionally, there are further evaluations that continue the relationship of involvement and empowerment to employee satisfaction (Bowen & Lawler, 1995; Corrigan, 1998; Harmon, Scotti, Behson, Farias, Petzel, Neuman, & Keashly, 2003). An investigation of these relationships appears to be well founded by previous research.

Employee Empowerment

Empowered employees have been identified sharing several characteristics through the literature: they are self-motivated, they are committed people dedicated to high levels of effort, they demonstrate initiative at work, and they have focus in accomplishing tasks and projects in the work environment (Block, 1987; Kizilos, 1990; Thomas & Velthouse, 1990). Additionally, empowered employees are frequently referenced and identified as valuable assets to organizations (Kaye & Jordan-Evans, 2001; Quinn & Spreitzer, 1997; Spreitzer, 1996).

Employee empowerment shares many common threads with employee involvement initiatives (Corrigan, 1998). Empowerment has also been associated with an emphasis on quality (Howard & Foster, 1999). While employee involvement may be considered more process oriented, and in many cases a precursor to successful empowerment, employee empowerment is more of a state of mind, or cognitive variable. Thomas and Velthouse (1990) built on the research and analyses performed by Conger and Kanungo (1988) to describe a richer cognitive theory of empowerment. Thomas and Velthouse determined there are four cognitive variables or task assessments that determine employee empowerment. Spreitzer (1995) provided further applications of the four variables, with self-determination (Deci, 1975) being synonymous with choice. Spreitzer found positive relationships between the four cognitions and employee

empowerment: (a) meaning (r = .72, p < .01), (b) competence (r = .58, p < .01), (c) self-determination (r = .92, p < .01), and impact (r = .92, p < .01). It should be noted, however, that while each of these cognitions can be isolated and measured, there is an interdependence between the facets that may directly or indirectly affect the other cognitions of empowerment (Mathieu, Martineau, & Tannenbaum, 1993).

Conger and Kanungo (1988) added to the discussion of employee empowerment through their segregation of this cognitive concept from organizational initiatives, such as power sharing and information sharing. They stated that much of the previous research in this area had treated empowerment from a management practice perspective, and as such "employee participation is simply equated with empowerment" (p. 473). Conger and Kanungo, as well as Spreitzer (1995) argued that empowerment was based on the sense of intrinsic motivation, such as self-efficacy. The four cognitions of empowerment represent the perception of an employee with relation to the total work environment (Spreitzer).

While related, empowerment is fundamentally distinct from involvement. Employee involvement is a process or collective of processes to manage organizational behavior, while empowerment is a cognitive result or effect of the involvement process (Brossoit, 2000; Corrigan, 1998). Lawler (1986) stated that empowerment is contingent upon work environmental conditions typically associated with employee involvement and participation processes.

Defining empowerment

Conger and Kanungo (1988) defined empowerment as the motivational concept of self-efficacy. Brossoit (2000) defined empowerment as a motivational construct based on specific cognitions employees make about their work environments. Thomas and Velthouse (1990) argued that empowerment is composed of several facets unable to be captured solely by the concept of self-efficacy. They believed that broadly defined, empowerment is "increased intrinsic task motivation manifested in a set of four cognitions (or task assessments) reflecting an individual's orientation to his or her work role" (p. 1). The four components identified by Thomas and Velthouse are: (a) impact, which represents a performance-outcome expectancy; (b) competence, an effort-performance expectancy, which is synonymous with self-efficacy in Conger and Kanungo (1988); (c) meaningfulness, an anticipated outcome attraction or aversion; and (d) choice, the perceived opportunity for a decision based on these variables. These four components or cognitions will be discussed later in detail.

It has also been argued that the construct of empowerment synthesizes several definitions. These include increased involvement of employee goal setting, decision-making, motivation techniques, and enabling employees to work in a participative environment (Osborne, 2002; Spreitzer, 1995, 1996).

Ethical implications and over emphasis of defining empowerment

It can be argued that the examination of employee empowerment not only has positive benefits to the employee and the organization, but can have detrimental affect as well. It is possible that organizations may turn their attention on empowerment metrics and not address the

actual conditions that foster a more empowered work group. Several studies, including Gandz and Bird (1996), Kanungo (1992), and Kanungo and Mendonca (1996) discussed these thoughts and the ethical implications of employee empowerment. From an ethical perspective, the initiation of employee empowerment should be made for the right reasons.

Additionally, the disagreement regarding definitions may further reduce the impact of employee empowerment. St. Clair and Quinn (1997) believed that overemphasis on determining precise definitions could have a negative effect on the development of empowerment. Bartunek (1995, as cited in Menon, 2001) stated it was not appropriate to treat empowerment as a mutually inclusive, singularly defined concept. Empowerment will most likely not mean the same to everyone. Liden and Arad (1996) indicated that employee empowerment can be defined within the process of employee involvement, especially power.

Attempts have also been made to demonstrate relationships between various initiatives, processes, and assessments. In their cognitive model of empowerment, Thomas and Velthouse (1990) provided a synthesis of concepts by combining environmental events—which share similarities with employee involvement processes—with the empowerment assessments: (a) impact, (b) competence, (c) meaningfulness, and (d) choice. Significant variables were compared to understand their relationship to these processes. Charismatic leadership was found to influence competence and meaningfulness (House, 1977). Transformative leadership was related to impact, competence, and meaningfulness (Bennis & Nanus, 1985). Delegation was associated with choice (Leans, 1987). Job design was found to influence impact, meaningfulness, and choice (Hackman & Oldham, 1980). Finally, reward systems were argued to be related to competence and choice (Deci, 1975). While comparing, contrasting, and

synthesizing empowerment philosophies, it is important to make distinctions between specific processes and cognitions to provide a framework for meaningful discussion. However, once distinguished, the distinctions should not be considered an excuse to exclude research due to dissimilar definitions.

Empowerment as a managerial practice versus employee cognition

Disagreement remains on the separation and distinction between empowerment and involvement. Several researchers have professed a more structural approach, indicating employee empowerment is more process related—similar to employee involvement—as opposed to the cognitive notions of Thomas and Velthouse (1990) and Spreitzer (1995). Ugboro and Obeng (2000) argued that empowerment is dependent on strategies that enhance both the self-efficacy of the employee and the confidence in accomplishing task objectives. Burke (1986) suggested that an empowerment practice is for managers to express confidence in employees in conjunction with establishing realistic goals and expectations. Bennis and Nanus (1985) also argued that setting challenging and rewarding performance objectives fostered empowerment. Block (1987) associated notions of power and autonomy with empowerment. Still other research concluded rewards, autonomy, control, meaningfulness, and opportunities for career advancement were contributors to empowerment (Hackman, Oldham, Janson, & Purdy, 1975; Kanter, 1979; Oldham, 1976; Strauss, 1977; Waterman, Waterman, & Collard, 1994). House (1988) argued that employee selection and training programs increasing skills in conjunction with an organizational environment that encourages self-determination is essential for employee

empowerment. This difference of views regarding empowerment may also be studied from the aspect of two forms of empowerment: (a) psychological and (b) structural.

Psychological empowerment

More recent analysis of the nature of empowerment appears to disassociate the managerial processes that may be considered employee involvement initiatives with a more cognitive, or psychological, emphasis on empowerment (Eylon, 1994, as cited in Menon, 2001). Menon also indicated that perceived control and the removal of the conditions that lead an employee to feel powerless are the first stage of the empowerment process as described by Conger and Kanungo (1988). Thomas and Velthouse (1990) believed two specific facets—impact and choice—also reflect the importance of perceived control for psychological empowerment. Under their definition, Thomas and Velthouse described impact as the degree to which the behavior of an individual makes a difference, and choice as the extent of personal causation for the behavior.

Conger and Kanungo (1988) defined psychological empowerment as "a process of enhancing feeling of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques of providing efficacy information" (p. 474). Spreitzer (1995) stated psychological empowerment is a "motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact" (p. 2). Corsun and Enz (1999) argued that psychological empowerment is possible in the absence of systematic programs, which are part of structural empowerment. They believed perhaps the most important empowerment

vehicle is the creation of an environment where employees share with other employees, and become actively involved in functions typically considered to be outside of their organizational roles.

Koberg, Boss, Senjem, and Goodman. (1999) examined the correlations and consequences of psychological empowerment among technical workers, professionals, and managers. They determined that the perception of empowerment was associated with increased job satisfaction, and was negatively related to their intent to discontinue employment. Spreitzer (1995) performed research around key management practices considered to be precursors to psychological empowerment. These precedents are consistent with the involvement processes described by Lawler (1986).

Vogt and Murrell (1990) defined the psychologically empowered employee as one who:

> Has an open and healthy worldview and a positive and accurate self-concept: sees self as making an impact, having the ability to do; recognizing meaning in one's pursuits, and progressing in life; is able to discern reasons for outcomes and to evaluate self in ways which are encouraging; and finally, that person is able to envision success. She or he is capable of meaningful activity, concentrated efforts, initiating action, flexible interactions, and personal resiliency. (p. 17)

Rosen (2000) indicated that psychological empowerment attempted to explain the relationship between employee involvement activities and outcomes such as Quality of Work Life. Further, psychological empowerment is considered a process by which the power and personal control of the employee was increased (Riggio, 1990). In essence, it can be concluded that an employee with a high perception of psychological empowerment has a greater sense of power, believes actions can impact the organizational goals, and has autonomy to create change.

Structural Empowerment

Corsun and Enz (1999) made a distinction between psychological empowerment and structural empowerment. Structural empowerment placed an emphasis on management practices to create change in the workplace as opposed to psychological empowerment, where the direction is on more employee intrinsic motivation (Thomas & Velthouse, 1990). Corsun and Enz (1999) believed that job redesign and management intentions were not solely adequate to empower employees. An example of structural empowerment would involve managerial influence on the employee in their regular task. Tabdora (2000) associated this type of managerial style with the hierarchical organizational structure. Discreet and isolated functions are within the organization are characteristic of structural empowerment. Eylon and Bamberger (2000) defined structural empowerment as a particular set of strategies and practices used by the managers and executives of the organization. Campbell (2000) stated that this type of structure associated the role of the manager with the sole authority to think, plan, and organize. The role of the employee was relegated to carrying out the commands of the manager, which is representative of structural empowerment. Conger and Kanungo (1988) indicated that management practices are merely one facet that may or may not empower employees. While there is merit in the discussion of facets and techniques concerning structural empowerment, it appears that psychological empowerment is more relevant to the concept of empowerment as an intrinsic condition.

Self-efficacy and empowerment

The theory of empowerment proposed by Conger and Kanungo (1988) was developed within the construct of the motivational construct of self-efficacy by Bandura (1977). Conger and Kanungo maintained that empowerment is most obviously manifested and observed as an incremental increase in effort-performance expectancies. Ozer and Bandura (1990) commented "self-efficacy refers to a belief in one's capabilities to mobilize the motivation, cognitive sources, and courses of action needed to meet given situational demands" (p. 472). Additionally, Brief and Aldag (1981) found that when an employee perceives work activities can be performed with competence, employee performance is generally higher.

In an analysis conducted by Conger and Kanungo (1988), there were significant antecedents identified that influence employee empowerment. As they relate to a feeling of powerlessness, poor communication, rewards systems that were not based on performance, and lack of job clarity including feedback systems were significant. Conger and Kanungo found that self-efficacy information was provided to employees through approaches recommended by Bandura (1986). By doing so, the effort-performance expectancies and belief in self-efficacy were enhanced. This created a more positive outcome as it related to employee involvement and empowerment. Backeberg (1995) identified a relationship between knowledge, or training, to self-efficacy, influence, and meaning. It was also believed that self-efficacy had a positive relationship to both commitment and performance. Meaning, influence, and self-efficacy can all be translated into forms of empowerment.

Four cognitions of empowerment

While self-efficacy is an important component of employee empowerment, Thomas and Velthouse (1990) believed that it alone is not sufficient in understanding and explaining employee empowerment. Thomas and Velthouse identified four task assessments they believed to be more inclusive to the nature of empowerment: (a) meaning, (b) choice, (c) competence, and (d) impact.

Meaning is a comparison of the value of the job task goals and purpose in relation to the individual standards or ideals of the employee. The greater the relationship, the greater the sense of meaning will be for the employee. If this is not a strong relationship, it is argued that the employee will lack a sense of meaning and will feel less empowered (Hackman & Oldham, 1980; Thomas & Velthouse, 1990).

Deci (1975) and Spreitzer (1995) described self-determination as a relationship consistent with choice (Thomas & Velthouse, 1990), so often within the literature one or the other are used to describe this cognition. Deci stated that a self-determining employee experiences a sense of choice through the initiation and regulation of actions. An employee would experience a feeling or sense of choice regarding the decisions on how to perform tasks. Wagner (1994) argued if employees simply perceives they are following orders given by managers they will not feel empowered.

Competence, or self-efficacy, is the belief of the employee that required job tasks can be performed confidently with a level of skill. Conger and Kanungo (1988) maintained without a sense of confidence employees will typically feel inadequate and will not feel empowered.

Finally, impact is related to the perception of an employee that their functions add value. Thomas and Velthouse (1990) stated that impact relates to the accomplishment of the task or producing intended effects in the work environment. It was believed that employees will feel empowered if they (a) perceive their actions positively affect movement towards the goals or vision of the company and (b) believe their actions have an effect on making progress towards those goals.

Additive nature of empowerment facets

While Thomas and Velthouse (1990) expanded on the notion of empowerment from solely a self-efficacy issue into four cognitions, they also believed that every cognition does not have to be present for empowerment to occur. In addition, Spreitzer (1992, 1995) and Harrell and Stahl (1986) described that empowerment is not a bimodal condition; essentially an employee may be viewed as more or less empowered as opposed to empowered or not empowered. Spreitzer (1992) earlier indicated that a more complex formulation of empowerment had no greater predictability to the empowerment levels of employees than additive models. Spreitzer believed that the four areas of empowerment combine additively rather than multiplicatively to create an overall perception of empowerment. Being additive, the absence—or zero value—would reduce the level of empowerment, but would not make the over-arching value of empowerment zero as if one were multiplying the subsets. Together, the cognitions provide an active rather than passive operation to the work environment.

Empowerment and intrinsic motivation

Descriptions offered by Deci (1975) regarding intrinsically motivated people are consistent with descriptions of empowered employees (Thomas & Velthouse, 1990). Deci and Ryan (1985) characterized intrinsically motivated behavior as individuals with more confidence, flexible, creative, and resilient when compared to extrinsically motivated behavior. Bennis and Nanus (1985) believed when individuals were intrinsically motivated they are more sensitive to the quality of their work. They further believed that intrinsic motivation had deeper meaning to the individual, therefore it was more likely to be sustained through time.

Osborne (2002) argued that employee empowerment can be considered related to the expected value theory (Vroom, 1964). Shepperd and Taylor (1999) indicated the Expected Value Theory holds goal-directed behavior and consists of three components: expectancy, instrumentality, and value. Shepperd and Taylor stated when the components are view as a whole, motivation should be greater when employees: (a) perceive a relationship between effort and performance; (b) perceive a relationship between performance and outcome; and (c) have a perceived value regarding the outcome (Shepperd & Taylor, 1999).

Relation to job satisfaction

Several attributes and cognitions, including autonomy, meaningfulness, impact, and information can be positively associated with job satisfaction (Fried & Ferris, 1987; Hackman & Oldham, 1976, 1980; Kraiger, Billings, & Isen, 1989). Additionally, perceived control by the employee and choice were found to have a relationship to employee satisfaction (Wanberg & Banas, 2000). In a meta-analysis performed by Spector (1986), perceived autonomy and

employee participation were positively related to work satisfaction. Spreitzer (1995) also argued that individuals who feel empowered enhance their perceived value of work and increase their satisfaction level. Bandura (1986) believed that meaningfulness, impact, and competence can affect employee confidence, which in turn promotes a sense of intrinsic satisfaction.

In a study to understand the relationship of empowerment and satisfaction, Ugboro and Obeng (2000) analyzed 250 organizations that have implemented TQM initiatives and were members of the Association for Quality and Participation. Ugboro and Obeng used a more restrictive definition of empowerment, that of Conger and Kanungo (1988). Employee empowerment was studied as to how it relates to delegation of decision-making authority, participation in decision-making, and access to information. Further, Ugboro and Obeng found that there was a strong relationship between employee empowerment and employee satisfaction.

Brossoit (2000) identified a positive relationship between the four cognitions of empowerment to empowerment as an additive total, and additionally found a positive relationship between empowerment and work satisfaction. These relationships were consistent with the research performed by Spreitzer (1995). Brossoit found that there was a significant relationship between empowerment and (a) meaning ($r = .60$, $p < .01$), (b) choice ($r = .66$, $p < .01$), (c) competence ($r = .56$, $p < .01$), and impact ($r = .86$, $p < .01$). Further, empowerment was found to have a significant positive relationship to work satisfaction ($r = .59$, $p < .01$).

Competence

Thomas and Velthouse (1990) define competence as the degree to which a person can skillfully perform task activities. Competence is very similar to the concept of self-efficacy as

described by Conger and Kanungo (1988). Bandura (1977) argued when a person had high levels of self-esteem they are likely to project those feelings of worth to the work environment in a form of competence. Bandura (1989) further stated that employees with low self-esteem do not participate or become involved as much when compared to other employees with higher esteem levels. This concept was also related to effort-performance expectancy. Thomas and Velthouse believed when employees experienced success in the work place rather than obstacles or rejection, competence would be positively affected. Daily and Bishop (2003), as well as Gist (1987) viewed competence within the same context as self-efficacy, and defined it as the belief of the individual in his capability to perform activities with skill.

Competence, self-esteem, and related processes. In their research, Conger and Kanungo (1988) determined that clear boundaries of decision-making authority had a strong effect of the degree of competence perceived by employees. Spreitzer (1995) determined that self-esteem is positively related to competence. By sensing self-esteem, employees can believe they are valuable assets to their organization. Spreitzer also found that an involvement antecedent, information, strongly influenced employee behavior in the competence cognition. This was especially true when the information was performance related. Bennis (1989) believed knowledge and learning processes contributed to competence. Bennis argued competence was further augmented is the knowledge and learning could be focused around information relevant to the success of the organization. Feedback about the performance of an individual or group, especially if made in a proactive manner, would directly influence competence. Additionally, Thomas and Velthouse (1990) stressed the strength of positive promotion of information to enhance employee competence.

Senge (1990) discussed competence within the context of personal mastery. Competence was described as an enriching enabler to personal vision which allowed the employee to more clearly focus and understand business goals and objectives. Corsun and Enz (1999) believed that competence was related to self-efficacy, which was viewed as the sense of performing work in a competent manner.

Quinn and Spreitzer (1997) believed it was essential for organizations to attract and retain employees who are effective and innovative. They stated this could be achieved through the competence cognition of empowerment. Through increased competence, employees become more effective and transformational in their work environment. When compounded with employee involvement information processes, this competence allows employees the opportunity to understand what improvements need to be made within their organizations. Quinn and Spreitzer indicated a clear understanding of the organization vision allows employees to improve themselves and increase their competence levels. This positive relationship between knowledge and competence was further argued by Corrigan (1998).

Competence and self-efficacy. Levels of competence and self-efficacy have been demonstrated to have a strong relationship in the analyses of employees (Bandura, 1977; Menon, 2001; Wood & Bandura, 1989). Wood and Bandura believed self-efficacy involved belief in the individual's capabilities to become motivated, develop cognitive resources, and take action required to satisfy the demands of business. Bandura further stated that self-efficacy affects the choice a person will make in business settings; employees are reluctant to enter in to situations that exceed their perceived competence level. Conversely, employees generally seek out activities in which they feel competent or can potentially excel. These concepts could therefore

be considered essential for an employee to feel psychologically empowered. In an analysis performed Soritiou and Wittmer (2001), it was found the perception of competence was viewed as important by 68 % of the respondents.

Meaningfulness

Meaningfulness is defined as the "value of a work goal or purpose, judged in relation to the individual's own ideals or standards" (Thomas & Velthouse, 1990, p. 672). It characterizes an intrinsic feeling of the employee about their work. Meaningfulness is a perception of caring about their work and their contribution (Corsun & Enz, 1999). Conger and Kanungo (1988) identified meaningfulness with respect to a motivational construct. Additionally, it can be viewed as a commitment to the organizational mission as a feeling of purpose, and having a belief in the value of corporate direction (Kirkman & Rosen, 2000). Meaning has also been described as the value of a work goal or purpose, which may be compared to individual ideals and standards and involves a value judgment of the compatibility between the two sets (Brief & Nord, 1990; Daily & Bishop, 2003; Hackman & Oldham, 1980; Thomas & Velthouse, 1990).

Relation to antecedents. As noted in precious research (Backeberg, 1995; Corrigan, 1998; Spreitzer, 1995), employee involvement processes have a strong relationship to meaningfulness. Access to information about the organizational profitability, its competitive condition, as well and vision and goal communication strongly affects the perception of meaningfulness for an employee. Randolph (1995) argued that company and organizational information are essential for employees to determine their relation and meaning within the total context.

An association between the feelings of meaning was also established with reward systems. If monetary or non-monetary rewards can be directly related by the employee to objectives of the company, the employee will not only become more involved (Lawler, 1986) but will increase his sense of empowerment (Herrenkohl, Judson, & Heffner, 1999). Additionally, to be meaningful to the employee, the reward and recognition system should be considered fair.

Conger and Kanungo (1988) discussed the association of the involvement process of power with meaningfulness. They argued that employees perceive themselves to be empowered through meaning when they have power or feel capable of handling other employees and work situations. If the power to cope with these issues is not present, employees tend to feel frustrated. Further, if a person has the power to motivate other employees or assist them in their attempts to deal with work situations, he will develop a sense of empowerment associated with meaningfulness (Bass, 1960). Osborne (2002) believed that there was a distinction between the level of empowerment through meaningfulness associated with the manner in which the power was attained by the employee. Meaningfulness in the concept of an intrinsic motivational construct, is more powerful when the employee accrues power as opposed to it only being bestowed, as described structural empowerment.

Other aspects of meaningfulness. Teaming and working with others has been argued to promote a sense of meaningfulness. Bennis (1989) indicated that employees will feel a sense of community when the leaders of the organization instill a sense of belonging and teaming. The sense of community should be harmonious with the personal feelings of the individual. Spears (1998) stated that an employee is guided by personal values and a interrelationship between personal and shared visions. Through this, a person will experience a sense of meaningfulness.

Senge (1990) commented that meaningfulness is derived through building a shared vision. A shared vision is one of the five principles Senge believed is necessary in promoting a learning organization. Senge additionally stated that as a result of personal mastery, personal vision is clarified, energy is more focused, and the work environment is viewed in a more objective sense, which should augment the sense of meaningfulness of the employee.

Quinn and Spreitzer (1997) performed an analysis in the manufacturing environment to understand the role of empowerment in the organization. Through openness and teaming, employees perceived themselves to be empowered, and in a large sense believed they had a more sharing role in the company. They believed they were engaged in a corporate culture that viewed people are a valuable asset, hence increasing their belief of meaning in the organization. Further, meaningfulness was found to increase satisfaction among workers. Osborne (2002) also concluded that meaningfulness had a positive effect on employee satisfaction.

Conversely, low degrees of meaningfulness have been found to relate to feelings of apathy and detachment (May, 1969). Employees in this condition felt they did not relate well to important events or objectives within the company. This association was observed by several other researchers, including Gagne and Senecal (1997) and Kraimer, Seibert, and Liden (1999).

Choice

The cognition of choice within the empowerment framework has several synonyms. Among them, choice has been associated with self-determination, control, and locus of causality. Deci, Connell, and Ryan (1989) described this facet as the sense of having a choice by an individual in initiating and regulating action. It encapsulates autonomy in the pursuit and

continuance of behaviors and practices within the workplace, such as decisions on procedure, pace, and effort expended (Bell & Staw, 1989; Spector, 1986). Thomas and Velthouse (1990) defined choice within the context of initiating and regulating actions in self-determination, involving causal responsibility for actions. They further indicated that it involves the locus of causality (deCharms, 1968), whether the behavior of an individual is perceived to be self-determined. Burger (1992) stated that control in specific contexts was similar to self-determination. Additionally, Burger observed that people who scored high on desire for control measures preferred making their own decisions, and made efforts to avoid circumstances where they may have a loss of control or self-determination.

Importance of choice to empowerment. Rulle (1999) indicated that choice was essential to employee empowerment. In an analysis cited by Rulle, Kraimer and Seibert (1997) determined that there is a relationship between two separate cognitions of empowerment. Self-determination, or choice, when perceived as a measure of power potential, has to be present for another empowerment cognition. Essentially, the potential of having power—choice—is a precursor for actual power used—impact. This is consistent with research performed by Kraimer, Seibert, and Liden (1999), who found choice to be an important factor to employee empowerment, and strongly related to the impact cognition of empowerment. Similar results were found by Corrigan (1998), Moye (2003), and Spreitzer (1995).

Osborne (2002) stated that the ability to make choice is a basic premise of psychological empowerment. Deci (1975) argued that motivational feeling of power is associated with an intrinsic desire for self-determination, which emphasizes the value of choice. Similarly, Kirkman and Rosen (2000) believed autonomy is an element of choice. Through the ability to

determine work practices, have discretion in implementation of new processes, employees exercise their autonomy by making choices. Corsun and Enz (1999) also argued the behavior of self-determination as a facet of empowerment and stated choice had a significant impact on empowerment. Deci and Ryan (1985) indicated that employee flexibility, creativity, and resiliency are directly associated with perceived choice, which influences empowerment.

Herrenkohl, Judson, and Heffner (1999) argued that by the ability to make decisions about processes and other environmental factors at work employees will feel a sense of responsibility, which in turn promotes empowerment. Bass (1960) also stated that employee contribution in the decision-making process, as well as establishing goal and objectives for the work groups, demonstrated choice and enhanced empowerment. Fairholm (1988) believed that through the empowerment process, the ability of employees to identify and utilize their competencies and capabilities is facilitated. Further, with the employee involvement antecedent of power, additional opportunities to exploit these understandings are created. Fairholm concluded that given these parameters, empowered employees become more capable of making good choices.

Eisenberger, Huntington, Hutchison, and Sowa (1986) discovered that employees develop beliefs concerning their value and contribution level in the decision-making process of their organizations. These influences are found in policies, procedures, and business decisions. Choice and self-determination are essential when employees approach their contribution in these events, and there is a distinct difference in the value created by employees when given these opportunities based on their perception of self-determination and empowerment (Burger & Cooper, 1979).

Impact

Thomas and Velthouse (1990) defined impact as the degree behavior is perceived to have an effect over strategic, administrative, or operating outcomes in the work environment of an employee. Impact is the observable increment of change in outcomes (Ashforth, 1989; Daily & Bishop, 2003), and is the antithesis of learned helplessness (Martinko & Gardner, 1982). Additionally, it is dissimilar to locus of control where impact is viewed within the work context and locus of control is a personality characteristic both inside and outside of work. Kirkman and Rosen (2000) believed that impact is perceived to be the influence an employee has through their efforts on other stakeholders of the organization.

Relation to the work environment and empowerment. Hackman and Oldham (1980) believed impact to be similar in certain aspects to knowledge of results, which is "the degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his or her performance" (p. 80). The significance of the distinction is the isolation of impact to the work environment. Additionally, Hackman and Oldham argued that this feedback for perceived impact would be generated from the employee and the work specifically, as opposed to other outside sources such as peers or managers.

Corsun and Enz (1999) believed that impact was directly associated to empowerment through what they described as personal influence. Personal influence is described to exist when an employee perceives he can cause a change in the results of the organization. This is consistent with Covey (1999), who emphasized employees prefer not to be used as inanimate assets by their company; rather they prefer a sense of contribution, or the ability to make an

impact on the outcomes of their organization. Nyham (2000) argued employees require an understanding of their performance through meaningful data or feedback as well as power to influence processes within their work area. Through these elements, Nyham believed an employee enhances the opportunity to experience impact. Herrenkohl, Judson, and Heffner. (1999) stated when an employee has absorbed responsibility in decision-making on work processes and procedures, he will have a greater sense of impact and through this cognition feel empowered. Further, Sigelman (1999) argued that employees who seek self-fulfillment through achievement will better understand their contribution to the organization and will have a larger sense of impact.

Employee empowerment summary

Employee empowerment is best defined as cognitive elements as opposed to employee involvement, which can be more process oriented. Two main types of empowerment appear in the research: structural empowerment and psychological empowerment. Structural empowerment deals more with the delegation of power and decision making than psychological empowerment, which tends to view the condition from a more intrinsic and self-determined aspect. A significant portion of the research involved self-efficacy (Bandura, 1977; Conger & Kanungo, 1988; Ozer & Bandura, 1990), which relates to the psychological view of empowerment and lead the discussion to the four cognitions of empowerment (Thomas & Velthouse, 1990). Thomas and Velthouse believed that empowerment was deeper than only self-efficacy, and concluded there were four components of empowerment: competence, meaningfulness, choice, and impact.

Competence appears closely related to the original thoughts of Bandura (1977) on empowerment. It relates to self-esteem and relates well to employee involvement precursors such as information and knowledge. Quinn and Spreitzer (1997) argued an employee exhibiting competence was able to bring his work and his organization to new levels in a transformational way. There is a strong relationship between competence in an area and the comfort of an employee performing a task that is important to realize.

An employee needs to feel a sense of meaning in their actions. There is a strong need for employees to see their specific work or tasks contribute to the overall missions and goals of the organization. Information and reward systems are especially important employee innovation processes with regard to meaningfulness. Without the proper information and reward system validating the importance of their actions, employees will find it more difficult to associate their work to the success of the organization.

The cognition of choice has been labeled many other terms in the research: self-determination, control, and locus of causality (Deci, 1975; deCharms, 1968; Thomas & Velthouse, 1990). An important antecedent to choice is the employee involvement process of power, as choice is often perceived as a measure of power potential (Kraimer, Seibert, & Liden, 1999). Choice was important to other empowerment cognitions, especially impact (Rulle, 1999). Autonomy was also described as an element of choice (Kirkman & Rosen, 2000). Within the research, differences were found between employees who possessed self-determination or choice as opposed to those who did not when describing the creation of value (Burger & Cooper, 1979).

Impact is the observed increment of change an employee facilitates in the workplace (Daily & Bishop, 2003). Information was a valued antecedent to impact, as the understanding of

the value of work and sensitivity analyses of changes made are essential. With impact, an employee perceives he has personal influence over the outcome of the workgroup (Corsun & Enz, 1999). Additionally, when employees are involved in the decision-making process on work processes, a greater perception of impact is typically observed (Herrenkohl, Judson, & Heffner, 1999).

While different, the four components rely on each other in on additive basis and are related to employee involvement, as many of the processes within involvement are antecedents to empowerment. Significant research has been performed in this area, and the four cognitions of empowerment serve as a strong basis to approach the relationship between employee involvement, empowerment, and ultimately to employee satisfaction.

Employee Satisfaction

Locke (1976) defined job satisfaction as an emotional state which results from the job related experiences of an employee. Satisfaction involves both feelings and attitudes an employee has about the specific aspects of the job. As with other feelings, employee satisfaction can be either positive or negative. Luthans (1989) expanded on Locke and described employee satisfaction within three specific facets: (a) emotional response to the work environment, (b) the relationship between employee expectations and outcomes, and (c) satisfaction with pay, working conditions, and work content. Spreitzer and Kizilos (1997) believed that employee satisfaction was associated with psychological empowerment.

Employee participation and satisfaction

Scott, Bishop, and Chen (2003) indicated that participatory initiatives in companies in the United States have stimulated employee involvement, increased flexibility and autonomy, and causally increased employee satisfaction. These relationships are consistent with several other studies (Cohen, Ledford, & Spreitzer, 1996; Cordery, Mueller, & Smith, 1991; Harris, 1992; Manz & Sims, 1987; Versteeg, 1990). Locke and Schweiger (1979) also determined there was a relation between participation in decision-making and employee satisfaction. Other relationships affecting employee satisfaction includes job participation (Griffeth, 1985), job enrichment (Wall, Corbett, Martin, Clegg, & Jackson, 1990), and participative management (Fried, 1991; Fried & Ferris, 1987; Hackman & Oldham, 1980; Spector, 1997).

Scott, Bishop, and Chen (2003) and Locke and Schweiger (1979) found a significant relationship between employee participation and job satisfaction, as well as a strong correlation between satisfaction and voluntary attrition. They also argued that the relationship between employee participation, empowerment, and employee satisfaction involved: (a) employee input in work processes; (b) enhanced commitment; (c) control, choice, or self-determination, and (d) communication. These thoughts are consistent with the research conducted by several others, including Thomas and Velthouse (1990), Spreitzer (1995), and Lawler (1986).

Other components to employee satisfaction

There are other facets that have an effect on employee satisfaction which are somewhat related to the factors identified in previous research, but their distinction warrants additional discussion. A study performed by Martensen and Gronholdt (2001) was focused on employee

loyalty; however, the relationship to employee satisfaction was addressed. Martensen and Gronholdt believed that the estimation of the model provided a good explanation of employee satisfaction ($R^2 = 0.73$). It was determined that factors influencing loyalty are issues that involve the individual person and: (a) how the daily leader and colleagues interact with and behave towards the employee, (b) the extent of self-development, (c) employee attitude and commitment, and (d) the pride of the employee in their work and accomplishments. As previously stated, several aspects of the study performed by Martensen and Gronholdt are similar to other research, but the distinctions are worth noting.

Ren (2001) further identified this relationship between employee personality traits, or characteristics, in addition to exogenous conditions that will affect employee satisfaction. It was concluded that employee job satisfaction would affect employee behavior and performance, which in conjunction with the external and situational factors, would affect organizational performance. External and situational factors were also determined to affect organizational performance, which affected employee behavior and performance. Finance and accounting practices—consistent with the information processes—were believed to influence organizational performance as well.

Cappelli and Sherer (1988) investigated employee satisfaction from an exogenous and economic view. They found that there was a strong relationship between market forces and employee satisfaction. Local and national economic conditions will factor in to employee satisfaction, as well as the specific health of the company at which the employee is working in relation to competitors. This is consistent with research performed in the 1930s by Hoppock

(1935), who determined that overall employee satisfaction was affected by the economic conditions.

Effects of the similarity between employee perceptions and employee satisfaction

Awareness of the environment in which an employee works, their perceptions of expectations, as well as an understanding of the expectation of their management is an important aspect in employee satisfaction. In research performed by Sefton (1999), it was determined that there is a relationship between employee satisfaction and the perceptions of employees, perceptions of managers, and the compatibility between these perceptions. Sefton determined an employee was more satisfied when the perceptions and realties within the work environment were consistent. For example, when employee participation was congruent between (a) the current level of participation and the expected level, (b) the current level and the ideal level, and (c) the current level and the perceived level of participation, job satisfaction would be positively influenced. In addition, communication satisfaction and organizational commitment would be enhanced.

Longevity, individual differences, education, and satisfaction

While there is an empirical relation between work environment and employee satisfaction, Staw and Ross (1985) determined employees may be satisfied for reasons other than their current work situation. Their research involved individuals who had changed employers or changed job-types, and indicated that satisfaction was relatively stable in the individuals making the change. Staw and Ross concluded that there are individuals who are satisfied at one job are

likely to be satisfied at another job, and were related to the personality of an individual. Muchinsky and Morrow (1980) also identified this concept as one of the three factors involved in the intent to discontinue employment. Gehart (1987) also found evidence that satisfaction correlated across jobs and was related to personality. Newton and Keenan (1991) performed a longitudinal study and discovered a moderate—but consistent—relationship between attitude and satisfaction. Newton and Keenan noted there were fluctuations when an employee started a new job, where the satisfaction levels were higher. The analysis nonetheless determined that some individuals are more likely than others to be satisfied at work strictly due to their underlying personalities.

The relationship between the education level of an employee and employee satisfaction has also been a subject investigated in scholarly research. According to Bluedorn (1982) Education levels were not significant to job satisfaction, but they did influence the decision to leave a company by an employee. Interestingly, the higher the education level, the more likely an employee indicated intent to leave the company. Mohrman, Lawler, and Ledford (1996) also did not find a significant relationship between employee education levels and employee satisfaction.

The Motowidlo model of job satisfaction identified the relationship of individual characteristics may affect job satisfaction (Motowidlo, 1996). The model is based on information processing regarding employee satisfaction and involved the cognitive process an employee uses to assess their perceived attitude. These assessments are based on several factors, including: (a) the immediate work environment, (b) the social environment, and (c) the organizational environment. According to Motowidlo:

> This information-processing model suggests four different ways of defining job satisfaction: Normative favorability (the favorability of the population of events and conditions in the work environment), experienced favorability (the favorability of events and conditions in the input sample), remembered favorability (the favorability of events and conditions in the retrieved sample), and volitional favorability (the favorability that people try to present in their self-reports of job satisfaction). These four constructs are causally related to each other. (p. 183)

The model emphasized there are differences in the cognitive processes of employees and how they associate these differences to employee satisfaction. These variances will affect the outcome of employee involvement initiatives and attempts to empower employees.

Affective attachment and employee satisfaction and intent to leave

Affective attachment (Lawler, 1992) linked what are perceived to be more immediate emotions such as satisfaction with more lasting affective attachments such as commitment, or intent to remain with a company. Mueller and Lawler (1996) further argued the relationships between work environment, satisfaction, and organizational commitment. The conditions in which an employee operates will produce either positive or negative emotions, and the employee will attempt to understand these feelings within the context of their work environment. These emotions are then projected on the organization, which then is perceived to be responsible for these emotions. If the projection is positive, the employee is more likely to remain with the company; if negative, the employee is more likely to leave (Mueller & Lawler, 1996).

Involvement, rewards, and employee satisfaction

A relationship has been identified through several analyses regarding employee involvement, rewards, and employee satisfaction (Kanungo 1982; Mohrman & Lawler, 1996).

Employees with higher job involvement are more likely to receive organizational rewards. Rewards are assumed to lead to greater employee satisfaction and as a consequence enhance organizational commitment. Mohrman and Lawler described this as a social exchange, which assumed that employee satisfaction—as well as the intent to remain at the company—is developed through an exchange of employer reward for employee work. Further, rationale for employee satisfaction and commitment has been implicitly or explicitly assumed to be involved in an exchange relationship between the organization and the employee. The performance, motivation, and satisfaction of the employee are proportionately influenced by the employee perception of desired rewards from the employer (Mottaz, 1988; Price & Mueller, 1986; Rusbult & Farrell, 1983).

Employee Satisfaction by job-type

The specific work tasks, responsibilities, and functions an employee is performing can have an effect on their overall satisfaction level. Light (1992) found that there were differences in the attitudes on intrinsic and extrinsic motivation between white collar and blue collar workers, with white collar workers being more intrinsically motivated. There was no overall statistically significant difference in the overall employee satisfaction between the groups, however. In an analysis performed by Moye (2003), it was found that individuals in higher level positions within the company felt more empowered and satisfied than those who held lower-level positions. Specifically, managerial job-types had a stronger relation to empowerment than other job-types. Moye also investigated the separate cognitions of empowerment against specific job-types and found employees in higher positions in the organization had a stronger perception of

meaning, choice, and impact than other employees. Levels of education were not found to have a strong relation to empowerment; however, education was strongly negatively correlated to the intent to remain at the company.

Employee satisfaction summary

Employee satisfaction is an emotional state resulting from the experiences an employee accumulates at work. It involves both feelings and attitudes about the condition of work and the relationship of the employee to his work. Employee involvement and empowerment are essential keys to employee satisfaction (Cohen, Ledford, & Spreitzer, 1996; Locke & Schweiger, 1979; Scott, Bishop, & Chen, 2003; Sefton, 1999). Other factors, while identified in a different manner, are consistent with the characterization of Lawler (1986) and Thomas and Velthouse (1990) (Martensen & Gronholdt, 2001: Ren, 2001).

Personality was found to have a strong relationship to employee satisfaction. Several studies found that if an employee is satisfied at their work, they are likely to be satisfied at other similar jobs (Gehart, 1987; Staw & Ross, 1985). Satisfaction levels did appear higher at the beginning of employment (Newton & Keenan, 1991). Interestingly, there does not appear to be a strong relationship between employee satisfaction and education levels; however, education levels are related to the intent to leave of an employee (Bluedorn, 1982; Mohrman, Lawler, & Ledford,1996). Three factors were found to assess the majority of employee satisfaction: the immediate work environment, the social environment, and the organizational environment (Motowidlo, 1996). Further, the emotions involved in employee satisfaction can develop into

longer lasting opinions, or affective attachments, causing an employee to either remain or leave the company (Mueller & Lawler, 1996).

Types of reward systems will have an affect on employee satisfaction. Rewards as a process of employee involvement correlate to higher recognition of achievement, increasing employee satisfaction in a social exchange relationship (Mohrman, Lawler, & Ledford, 1996). Employee job-type also has an effect on employee satisfaction. Generally, the higher level the employee is in the organization, the more satisfied they are about their work (Moye, 2003).

Employee satisfaction and the relationships to employee involvement and empowerment are well documented in the research. Most of the analyses deal with one specific type of job classification, and is usually designed to understand employee satisfaction in nonmanagement employees. In general, research indicates there are positive relationships between employee involvement and employee empowerment to employee satisfaction. Additionally, attempts are made to relate employee satisfaction to employee productivity as well; therefore, an evaluation of this concept is warranted.

Employee Productivity

Since there is a relationship to profitability, employee productivity has been investigated within scholarly research in great detail. Antecedents to employee productivity have been sought in order to causally affect efficiency. The research in this area yields interesting conflicts in the association between employee involvement, empowerment, satisfaction, and employee productivity.

Cummings and Worley (1993) indicated that there is a large amount of literature indicating a relationship between employee involvement initiatives and productivity based on the change in management systems allow employees to realize some financial success through reward systems and therefore connect this to overall corporate profitability. One example is Harter and Schmidt (2002), who analyzed several companies and found that there was a relationship between a shift in structural empowerment, employee satisfaction, and employee productivity. There were data suggesting a relationship to increased profits from these conclusions as well. In another example, Lawler, Mohrman, and Ledford (1995) believed the correlation between employee involvement and productivity occurs when employees are more involved in decision-making, they become more satisfied and therefore more productive.

Cummings and Worley (1993) further cautioned in their analysis that "there is growing evidence that this satisfaction-cause-productivity premise is too simplistic and sometimes wrong" (p. 310). They believe that a more realistic explanation of the relationship is that of Lawler and Ledford (1981), one that is more indirectly related to employee productivity. Employee involvement influences (a) communication and coordination, (b) motivation, and (c) capabilities which all were believed to positively influence productivity.

In research that appeared to validate the weaker relationship between employee satisfaction and employee productivity, Iaffaldano and Muchinsky (1985) determined that there was only a .17 correlation between individual employee satisfaction and individual level performance. Ryan, Schmit, and Johnson (1996) stated that there is a synergistic relationship among employees, therefore the organizational performance is not limited to the summation of all individual level performance. For this reason it was argued that there are other factors which

affect organizational productivity. Other studies in the relation of employee satisfaction and employee productivity were skeptical of any strong relationship because no appreciable difference was found when comparing satisfied and dissatisfied employees to productivity (Bayfield & Crockett, 1955; French, 1974; Kahn, 1960; O'Brien, 1978; Prybil, 1973; Robbins, Low, & Mourell, 1986; Wanous, 1974). French (1974) stated that job satisfaction and productivity are mutually exclusive in many cases; organizations may see increases in either employee satisfaction or employee productivity, but not concurrently. Savery (1982) indicated while employee satisfaction may be positively related to productivity, it is possible that productivity is not related to the antecedents generally argued to be foundational to employee satisfaction: autonomy, power, and choice. Using this rationale, it could be argued that some organizations or work groups can lose productivity from lack of management direction when employees are structurally empowered.

There are other studies that indicate a more favorable relationship between satisfaction and productivity, including foundational work by Likert (1961) and Herzberg, Mausner, Peterson, and Capwell. (1957). The relationship typically described in this research involves the actions of management structurally empowering employees due to the employee feeling more satisfied from greater decision-making ability affecting his work. This satisfaction would in turn lead to a greater productivity level.

Scott, Bishop, and Chen (2003) concluded that a work environment supporting employee involvement, will stimulate job satisfaction, and lead to greater employee productivity. This relationship was also made by several other analyses (Cohen, Ledford, & Spreitzer, 1996; Cordery, Harris, 1992; Manz & Sims, 1987; Mueller, & Smith, 1991; Versteeg, 1990).

While there is significant research devoted to the understanding of employee productivity, the results are mixed. There appears to be more evidence supporting a positive relationship between employee satisfaction and employee productivity; however, this can be dependent on the types of measures used for productivity and profitability. Other influences of productivity, such as economic conditions, may have a stronger affect on this condition as well. It is the intention of this research to involve more internal aspects of employee attitudes. For this reason, employee productivity will be considered out of scope.

Employee Intent to Leave

Relation to employee satisfaction

Employee intention to remain or stay with their company is generally defined as the degree of likelihood of an employee maintaining membership in an organization (Currivan, 1999; Iverson, 1992, Mueller, Boyer, Price, & Iverson, 1994). Additionally, intent to remain refers to the behavioral intent of the employee, and has been observed to have a negative influence on turnover (Bluedorn, 1982, Iverson, 1992; Mueller, Wallace, & Price, 1992; Price & Mueller, 1981, 1986). Voluntary attrition is studied from its relation to employee satisfaction because a significant proportion of turnover has been explained by the relationship between employee attitudes and their behaviors (Atchison & Lefferts, 1972; Bluedorn, 1982; Mobley, 1977; Mowday, Porter, & Steers, 1982; Porter & Steers, 1973; Shore, Newton, & Thornton, 1990).

Other research has identified a moderate relationship between satisfaction and voluntary attrition; dissatisfied employees are more likely to discontinue their employment than those

employees who are satisfied (Locke, 1976; Mobley, Griffeth, Hand, & Meglino, 1979; Muchinsky & Tuttle, 1979; Porter & Steers, 1973; Price, 1977; Steers & Rhodes, 1978). Despite their consistent conclusion, there is a considerable difference in the value of the correlation coefficient. It should also be noted that this correlation is typically lower than 0.40 (Locke, 1976), making other factors relevant to the decision as well.

Attrition and economic conditions

Considering the correlation figures from previous studies, other factors obviously have influence in the intention of an employee to leave the company. One that has been identified through research is economic conditions. Muchinsky and Tuttle (1979), Muchinsky and Morrow (1980), and Carsten and Spector (1987) indicated there was a relationship between economic conditions and voluntary attrition. Another factor of the economy, unemployment, was also tested and found to have a strong relation to the intent to leave (Crowther, 1957; Eagly, 1965). In the study performed by Eagly, there was a -0.84 correlation coefficient between turnover rates and national unemployment rates over a thirty year period.

In a study performed by Muchinsky and Morrow (1980) it was determined that there are three determinants for turnover: (a) economic opportunity factors, (b) individual factors, and (c) work-related factors. It was determined that economic opportunity factors, which included local and national unemployment conditions, had the strongest impact on the intent to leave. Employee satisfaction was found to be an antecedent to leaving, but the effect was not as strong as economic conditions. Muchinsky and Morrow also found that by observing these conditions through time with shifting economic factors, the relationships would vary. For example, when

there are high unemployment conditions, fewer employees will voluntary leave their job and the correlation between satisfaction and attrition will be low. Conversely, when there is lower unemployment it is assumed that the economic conditions as more favorable, thus greater opportunities to seek alternative employment. An employee who is dissatisfied with his job will seek employment elsewhere in these conditions, making the correlation between employee satisfaction and turnover greater. Hulin, Roznowski, & Hachiya (1985) believed that the economy acts as a releasing agent; periods of high alternative opportunity will allow dissatisfied employees to seek employment elsewhere. They concluded that employee satisfaction would be a better indicator of intent to leave in periods of low unemployment.

Carsten and Spector (1987) replicated a study performed by Shikiar and Freudenberg (1982) that attempted to correlate job satisfaction and turnover. Shikiar and Freudenberg had concluded a completely contradictory opinion than Muchinsky and Morrow (1980). Carsten and Spector believed there were significant errors to the methodology in the Shikiar and Freudenberg analysis, and once they made changes to the perceived errors, concluded similarly to Muchinsky and Morrow.

Intent to leave, satisfaction, and age

Another factor relating to satisfaction and the intent to leave is employee age. There appears to be U-shape relationship between employee satisfaction and age, where in the early years and later years of employment an employees are more satisfied at work (Clark & Oswald, 1996; Freeman, 1978; White & Spector, 1987). This relationship could have a secondary effect on intent to leave, especially when companies are experiencing poor economic conditions either

specific to their business sector or the economy in general. Many companies, especially those with union contracts, are seniority biased; therefore, in slower economic times employees involuntarily displaced will affect the age distribution by shifting it to a greater mean age.

Relation of employee involvement, employee satisfaction, and intent to leave

Attrition has long been identified as a cost to organizations. As such, companies have been interested in understanding the causes of employees choosing to leave. Several studies have been performed across various aspects involving the intent to leave. Currivan (1999) analyzed the causal relationship between job satisfaction and employee turnover and found an inverse relationship. It was concluded there was a strong positive relationship between employee involvement, employee satisfaction, and the intention of an employee to remain with the company. This intent to remain was found to be negatively related to turnover.

Intention to leave is an emotional feeling an employee has regarding employment. It varies from attrition rates which may be collected and analyzed. Since this perception has been documented in the research to demonstrate a relationship to employee satisfaction, further analysis appears warranted.

Summary of Conclusions from the Literature Review

Through the analysis of the literature, distinct relationships have been found when relating employee involvement, employee empowerment, and employee satisfaction to each other. Employee involvement practices have been established by many organizations and have evolved in several forms, whether it is TQM or other initiatives. While empowerment—

especially when considering psychological versus structural—is more of a sense or feeling among employees, employee involvement initiatives can enable these cognitions and positively affect their success. Strong association between these has been identified in several analyses (Bowen & Lawler, 1995; Corrigan, 1998; Daily & Bishop, 2003; Spreitzer, 1995). From empowerment there is a prominent positive relationship to employee satisfaction, and this relationship is also well documented (Bowen & Lawler, 1995; Corrigan, 1998; Harmon, Scotti, Behson, Farias, Petzel, Neuman, & Keashly, 2003).

Employee involvement can be described in more discrete terms to better understand the relationships between processes and the overall effect. The four processes described by Lawler (1986): knowledge, information, power, and rewards provide a strong foundation to conduct additional research. The four cognitions identified by Thomas and Velthouse (1990) also are adequate descriptors of separate facets within employee empowerment.

Employee satisfaction, like empowerment, is an emotional state from relations an employee has at work. As such, there is a relationship between empowerment and satisfaction observed in studies performed by researchers (Cohen, Ledford, & Spreitzer, 1996; Locke & Schweiger, 1979; Scott, Bishop, & Chen, 2003; Sefton, 1999). Other factors outside of empowerment have an affect on employee satisfaction, but there is sufficient evidence that this relationship is relatively strong and worth further examination, especially when considering various job-types.

To summarize the aspects of this literature review, a table has been produced to describe the key aspects and their relationships to other components. While not an exhaustive list, researchers have been listed to document the studies performed in the area. The table is

segregated by major characteristic: (a) employee involvement, (b) employee empowerment, and (c) employee satisfaction and associates various relations to the characteristics. These have been identified in Table 1.

Conceptual Framework for the Study

It is essential in the process of performing research to create a proper method by which to analyze information. Credible research will generate dependable data, and the application of accepted methods and practices conducted in a professional manner are integral in generating useful information that can be used by managers and employees to effectively make decisions. Conversely, poorly designed research conducted in a haphazard method can either produce misleading or false conclusions that may lead decision makers to reach counterproductive conclusions. Cooper and Schindler (2001) argued that in order to reduce the risk of potentially damaging analysis, the researcher should attempt to utilize the standard of the scientific method. The adherence to a specific process does not constrict the level of imagination within the rules of scientific methods, rather "the scientific attitude unleashes the creative drive that makes discovery possible" (p.40).

Sample of conceptual framework in other studies

Table 2 lists the job and employee satisfaction studies reviewed. It was reported by Bussing and Bissels (1998) that is had been estimated over 5,000 studies to date involved job satisfaction, so the list is by no means complete. It is most likely not a coincidence, however,

Table 1a.

Summary of key employee characteristics and relationships

Characteristic	Relationship	Researcher(s)
Employee Involvement	Involvement and Identity	Stryker (1986) Beach & Mitchell (1990) Schlenker (1985) Bandura (1982, 1986)
	Participative management	Applebaum & Batt (1992) Lawler & Mohrman (1992) Coye & Belohlav (1995) Lawler (1986, 1992)
	Employee initiatives (e.g., TQM, BPR, high performance work systems systems, self-managed work groups, etc.)	Lawler & Mohrman(1992) Zwerdling (1980) Hackman & Oldham (1980) Deming (1986) Selladurai (2002)
	Four processes and variations (e.g., knowledge, information, power, and rewards)	Lawler (1986) Eskildsen & Dahlgaard (2000) Pun, Chin, & Gill (2001) Corrigan (1998) Lawler & Mohrman (1992)
	Knowledge	Vandenberg (1996) Steinecke (1993) Lawler & Mohrman (1992) Kaplan & Norton (1992) Daily & Bishop (2003)

Table 1b.

Summary of key employee characteristics and relationships

Characteristic	Relationship	Researcher(s)
Employee Involvement	Information	Kouzes & Posner (1987) Bowen & Lawler (1992) Drucker (1988) Conger & Kanungo (1988) Kaplan & Norton (1992, 1993)
	Power	Spreitzer (1992) Kouzes & Posner (1987) Menon (2001) Lawler (1992) Spector (1997)
	Rewards	Lawler (1986) Vest & Scott (2000) Eisenberger et al. (1999) Cappelli & Sherer (1988) Bandura (1977, 1997)
	Employee Empowerment	Bowen & Lawler (1995) Daily & Bishop (2003) Spreitzer (1995) Corrigan (1998) Pun, Chin, & Gill (2001)
Employee Empowerment	Structural empowerment	Tabdora (2000) Eylon & Bamberger (2000) Campbell (2000)
	Psychological empowerment	Menon (2001) Conger & Kanungo (1988) Thomas & Velthouse (1990) Corsun & Enz (1999) Vogt & Murrell (1990)

Table 1c.

Summary of key employee characteristics and relationships

Characteristic	Relationship	Researcher(s)
Employee Empowerment	Additive nature	Thomas & Velthouse (1990) Spreitzer (1992, 1995) Harrell & Stahl 91986)
	Intrinsic motivation	Deci & Ryan (1985) Bennis & Nanus (1985) Shepperd & Taylor (1999) Osborne (2002)
	Four cognitive variables (e.g., competence, meaningfulness, choice, and impact)	Thomas & Velthouse (1990) Conger & Kanungo (1988) Spreitzer (1992) Corrigan (1998)
	Competence	Conger & Kanungo (1988) Bandura (1977, 1989) Daily & Bishop (2003) Senge (1990) Soritiou & Wittmer (2001)
	Meaningfulness	Corsun & Enz (1999) Kirkman & Rosen (2000) Hackman & Oldham (1980) Brief & Nord (1990) Quinn & Spreitzer (1997)
	Choice	Deci et al. (1989) Spector (1986) Bell & Staw (1989) Rulle (1999) Herrenkohl et al. (1999)

Table 1d.

Summary of key employee characteristics and relationships

Characteristic	Relationship	Researcher(s)
Employee Empowerment	Impact	Kirkman & Rosen (2000) Covey (1999) Nyham (2000) Sigelman (1999) Corsun & Enz (1999)
	Employee Satisfaction	Hackman & Oldham (1980) Spector (1986) Spreitzer (1995) Bandura (1986) Ugboro & Obeng (2000)
Employee Satisfaction	Participation	Scott, Bishop, & Chen (2003) Cohen, Ledford, & Spreitzer (1996) Versteeg (1990) Locke & Schweiger (1979)
	Management, leadership working conditions, economy personality, education, etc.	Martensen & Gronholdt (2001) Ren (2001) Cappelli & Sherer (1988) Hoppock (1935) Staw & Ross (1985) Newton & Keenan (1991)
	Job-type	Light (1992) Moye (2003)

Table 1e.

Summary of key employee characteristics and relationships

Characteristic	Relationship	Researcher(s)
Employee Satisfaction	Employee Productivity	
	Strong	Harter & Schmidt (2002) Lawler, Mohrman, & Ledford (1995) Likert (1961) Herzberg et al. (1957) Scott, Bishop, & Chen (2003)
	Weak	Iaffaldano & Muchinsky (1985) French (1974) Wanous (1974) Robbins, Low, & Mourell (1986) Savery (1982)
	Intent to leave	Lawler (1992) Mueller & Lawler (1996) Scott, Bishop, & Chen (2003) Carsten & Spector (1987) Currivan (1999) Eagly (1965)

Table 2.

Example of methodologies used in employee satisfaction studies

Researcher(s)	Year	Methodology type
Abbot	2002	Qualitative; interviews
Atchison & Lefferts	1972	Mixed; interview, questionnaire
Bussing & Bissels	1998	Qualitative; interviews
Carsten & Spector	1987	Quantitative; Meta-analytic review
Currivan	2000	Quantitative; longitudinal
Ellickson	2002	Quantitative; Likert scale questionnaire
Eskildsen & Dahlgaard	2000	Quantitative, Likert scale questionnaire
Fosam, Grimsley, & Wisher	1998	Quantitative; Likert scale questionnaire
Hart	1999	Quantitative; longitudinal
Harter, Schmidt, & Hayes	2002	Quantitative; Meta-analytic review
Jung, Dalessio, & Johnson	1986	Quantitative: questionnaire
Koustelios & Bagiatis	1997	Mixed: interview, questionnaire
Koys	2001	Quantitative: longitudinal
Lloyd & Newell	2001	Qualitative; interviews
Martensen & Gronholdt	2001	Quantitative, Likert scale questionnaire
Premack	1984	Quantitative; Meta-analytic review
Savery	1989	Quantitative; Likert scale questionnaire
Scott, Bishop, & Chen	2003	Quantitative; Likert scale questionnaire
Spillane	1973	Quantitative: questionnaire
Thoresen, Kaplan, Barsky, & Warren	2003	Quantitative; Meta-analytic review
Ugboro & Obeng	2000	Quantitative; Likert scale questionnaire
Waters & Roach	1971	Quantitative: questionnaire

that a random collection of analyses on job and employee satisfaction was predominantly quantitative in nature, as it appears this is the preferred method of comparison. It is therefore necessary to comment on the attributes of both qualitative and quantitative methods.

Selection of quantitative, qualitative, or a mixed analysis

In order to determine the appropriate methodology for a dissertation, the environment of the population and its culture should be investigated with an open mind. A researcher may be excluding valuable resources or means by which to gather valuable data if the study is started with a severe bias on methodology. Sogunro (2002) argued that when determining whether qualitative or quantitative methods are most appropriate:

> Quite simply, the key rule is understanding the nature, and appropriateness of each of the two paradigms, and entering the research or evaluation arena with an open mind. In other words, the strategies selected should suit the nature of the research being undertaken rather than making selection based on biases. (p.7)

Consistency to the educational and social constructs within specialization areas have been determined to be a factor in the selection of methodology. Granger (2001) analyzed the methodological differences between statisticians and economists. Found that research methodology may be a result of background or education. Further, the area in which the study is performed will affect methodology selection. Smeyers (2001) believed that the methodology is a function of what is to be described and how this is to be done. Asking these questions first and responding honestly may draw attention to a range of ethical issues often ignored. "If one accepts causal explanations of human behavior there looms the threat of disappearance of ethical issues" (p. 478).

As they apply to employee satisfaction, pure case studies, such as the one performed by Lloyd and Newell (2001) involving interviews, does not appear consistent with the previous work in employee satisfaction; however, Poppenpoel, Myburgh, and Van Der Linde (2001) indicated that a complimenting process involving qualitative and quantitative methodology may be best. In their analysis, a qualitative inquiry preceded quantitative inquiry in the classical scientific method. The inquiry facilitated the scientific research because of certain directions and observations reached in the qualitative process. Allen-Mears (1995) suggested a need for a third methodology involving a blend of quantitative and qualitative characteristics. In their research involving employee satisfaction, Koustelios and Bagiatis (1997) selected items to be surveyed based on interviews with employees. From that point, the subjects were requested to indicate the extent of their agreement with each item using a five point Likert-type scale ranging from *strongly agree* (1) to *strongly disagree* (5).

Scandura and Williams (2000) analyzed several studies to understand the methodology used by category. When performing a time series analysis of the 1980s and 1990s, their analysis indicated an increase in the trend for use of field studies in organizational behavior and human resource analyses. Additionally, Scandura and Williams reviewed various procedures used to evaluate employee related activities in two time periods: 1985-1987 and 1995-1997. Significant variances in utilization were found between the time periods in several categories, both increasing and decreasing usages. Between the two times series, a significant difference ($p < .05$) was found in (a) analysis of variance techniques (declining from 27.8% to 13.8%), (b) linear regression techniques (increasing from 30.7% to 42.4%) (c) structural equation techniques (increasing from 3.6% to 8.7%), and (d) time series techniques (increasing from 2.6% to 7.5%).

There are several areas in which qualitative and quantitative methodologies differ, yet these differences do not explicitly identify a superior methodology. Situation, environment, and other determinants will influence the choice of methodology. Nonetheless, it is important to understand these differences in order to help select the appropriate methodology. Sogunro (2002) made an effort to compare qualitative and quantitative methodologies by specific facet. Some of the distinctions included collection techniques, where Sogunro indicated the collection of qualitative data was viewed as softer data. It was also highlighted that the collection techniques of quantitative analyses were more passive compared to qualitative analyses. Quantitative analyses typically contain a larger population. The actual analysis of the data is typically viewed as more interpretive with qualitative studies, whereas quantitative studies contain both descriptive and inferential features. Finally, because of the limitations of the sample populations, quantitative analyses are typically considered to be inductive, where it is generally more acceptable in quantitative studies to be deductive.

The choice between methodologies may not be clear-cut or even necessary in some instances. Blended or mixed methodologies have been used (Atchison & Lefferts, 1972; Koustelios & Bagiatis, 1997) with favorable results. Quantitative and qualitative methodologies may not necessarily be viewed as incongruent. Tashakkori and Teddlie (1998, as cited in Sogunro, 2002) argued that qualitative and quantitative models are compatible methodologies and that this compatibility is manifested in many attempts at research. Additionally, quantitative, qualitative, or mixed methodologies may be dependent on the philosophical association of researchers and the cultural biases they bring.

After a thorough review of methodologies among studies similar in nature to this analysis, it is concluded that a mixed methodology approach will be the best alternative to better understand the complexities of employee involvement, empowerment, and satisfaction. While either a quantitative or qualitative examination alone would yield interesting results, the integration of both methods will enhance the opportunity to learn from these data. The methodology of this research will be described in the next chapter.

CHAPTER 3. METHODOLOGY

Statement of the Problem

While there are contributions in the areas of employee involvement and its relationship to employee empowerment (Daily & Bishop, 2003) and employee empowerment and its relationship to employee satisfaction and intent to leave (Bowen & Lawler, 1995; Brossoit, 2000; Lashley, 1999; Osborne, 2002), relatively few studies attempt to combine the two relationships into a larger relational flow between employee involvement, employee empowerment, and employee satisfaction. Corrigan (1998) studied the relationship between these three elements; however, the sample population involved a small manufacturing facility and did not make distinction between job-types in the analysis. Thus, the relationship between employee involvement, employee empowerment, and employee satisfaction in a large manufacturing environment involving complex production processes has not been thoroughly investigated. The examination of both relationships independently in a large manufacturing environment appears to be relevant and can have applicability to other businesses.

Purpose of the Study

The purpose of this study was to determine the effects if any, between employee involvement, employee empowerment, and employee satisfaction. Further, the relationship between employee satisfaction and the intention to leave was examined. Previous research has been conducted that indicates a relationship between these facets; however, the majority of the work has been performed in either service industries or smaller manufacturing environments (Bowen & Lawler, 1995; Corrigan, 1998; Daily & Bishop, 2003; Scott, Bishop, & Chen, 2003;

Spreitzer, 1995). This study tested a Fortune 100 manufacturing company with a population in excess of 50,000 employees across several facilities. This relationship is illustrated in Figure 5.

Additionally, previous research indicated there are four basic processes within employee involvement (Lawler, 1986) and four cognitions of empowerment (Thomas & Velthouse, 1990). These were tested to determine their specific effects on both involvement and empowerment. The intention of an employee to voluntarily leave the company is another topic was addressed and was measured against employee satisfaction.

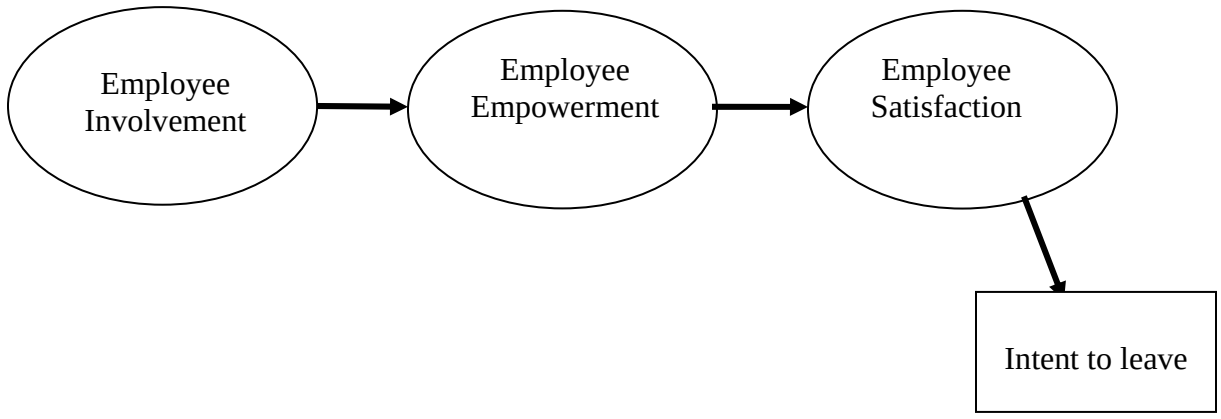


Figure 5. The relationships be tested in this study.

Finally, the differences in attitudes regarding these facets, processes, and cognitions were examined by four separate job-types: (a) hourly employees, (b) salary nonmanagement employees, (c) engineers, and (d) management employees. Typically, studies involving employee involvement, employee empowerment, and employee satisfaction investigated one specific job-type. For this reason, an examination of the potential differences in attitudes

between several job-types appeared to be relevant. These relationships are demonstrated in Figure 6.

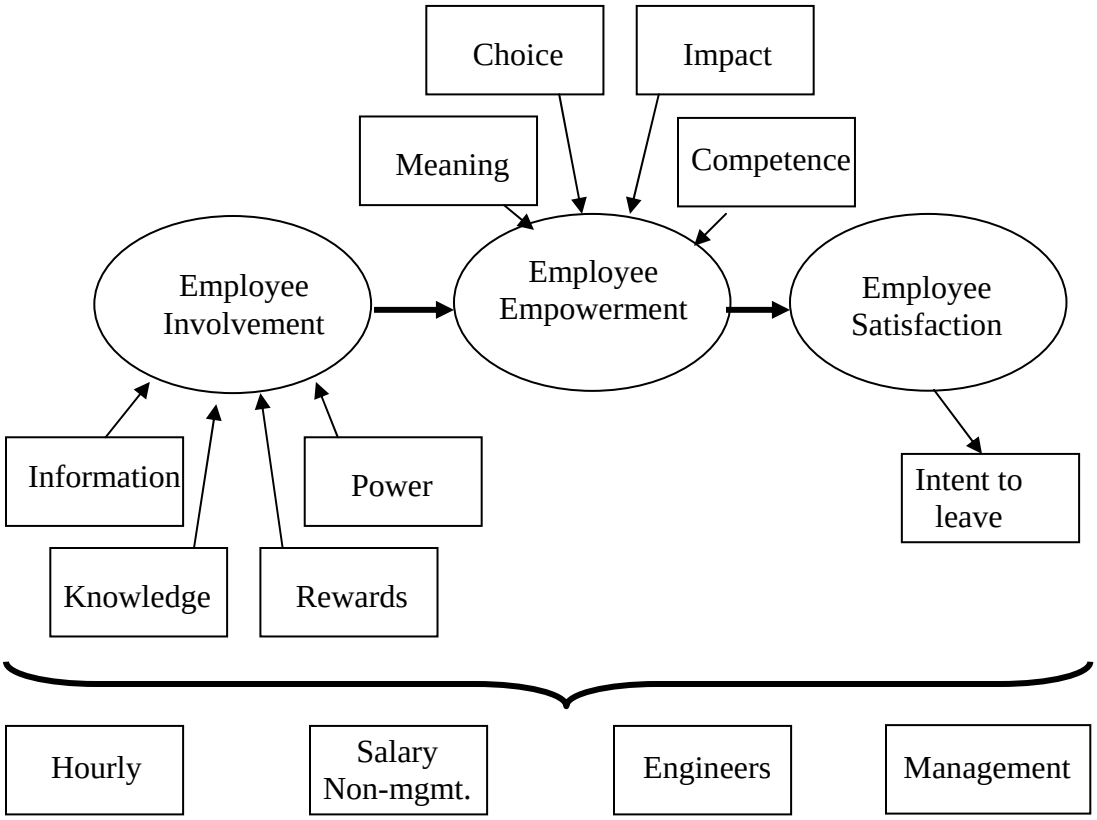


Figure 6. Description of processes, cognitions, and job-types to be examined in this study.

Description of Instrument

The full survey instrument used in this study was developed by the company under study. Individual questions come from two separate resources: (a) a survey instrument used by several Fortune 100 companies in the United States and (b) an internal employee survey subcommittee.

Both sets of questions have been used in previous research (Harmon, Scotti, Behson, Farias, Petzel, Neuman, & Keashly, 2003; Light, 1992; Shay, 2004). The additional questions added by the internal employee survey subcommittee justify their selection by several criteria, listed in Table 3.

Table 3.

Criteria to select additional questions for the COMPANY employee survey

1. Study of how other companies measure morale.
2. Statistical factor analyses (item groups) and correlation conducted on the company Employee Survey data.
3. Selected items that were measurable.
4. Selected items that reflect predictable unit productivity.
5. Selected items that would show significant changes in the company organizations that have actively addressed morale issues.
6. Factors represented by the items have been shown in other companies to predict productivity, motivation, turnover, unionization and customer satisfaction.
7. All items are benchmark company items in order to make it possible to make industry comparisons.

Additionally, company employee satisfaction is measured through various facets selected from previous company survey results. For this reason, questions over time vary depending on a determination of the subcommittee to provide additional opportunities in various areas to isolate

employee opinion. Over the past twelve years, several initiatives or focuses have been modified, and a sample of these modifications is listed in Table 4.

Table 4.

Topics to enhance company survey questions to address selected issues

1. Employee involvement
2. Management practices
3. Communication
4. Learning and development opportunities
5. Recognition and rewards
6. Teamwork
7. Job security and pay
8. Competitiveness

Source of Data

The data for this study were collected from one international business unit of a Fortune 100 company. The data were received directly from the company administrator for the employee surveys. The researcher approached a vice president of the company and asked permission for the data. The vice-president gave permission and forwarded the request to the survey administration group. A non-disclosure agreement was signed by the researcher to prevent anything specific to the name of the company from being published. A meeting was then set up

with the survey administrator. The research topic and questions were discussed, and specific formats and analysis tools were described so the data could be transferred in an acceptable format. The data were provided in an Excel format, and included raw data for all respondents by question and job-type. In addition, employee comments were provided in an Excel spreadsheet by job-type. Since its collection, the results of the company employee opinion survey have been analyzed by the survey administration group; however, no analyses performed by the survey administration group were provided with the data. A high-level conceptual description of the process by which the data were obtained is illustrated in Figure 7.

Data Collection

The company employee survey being used for this analysis was administered between May 12, 2003 and June 6, 2003. Employees were invited to participate through various methods, including interoffice correspondence and management coaching. The survey being used by the specific business unit examined in this analysis consists of fifty questions. Various components of the company have different formats and have added other site-specific questions and statements and the actual number of survey questions for the company is between fifty and sixty-three questions. The survey uses a five-point Likert scale with five representing the most positive response and one representing the most negative response. Some sections within the survey instrument require nomenclature changes. These changes, along with the designated value for the response, are illustrated in Table 5. Further, one open-ended question was provided at the end of the survey and was designed to gather written comments. The open-ended comment used in this survey was: “In your view, what are the two or three most important issues

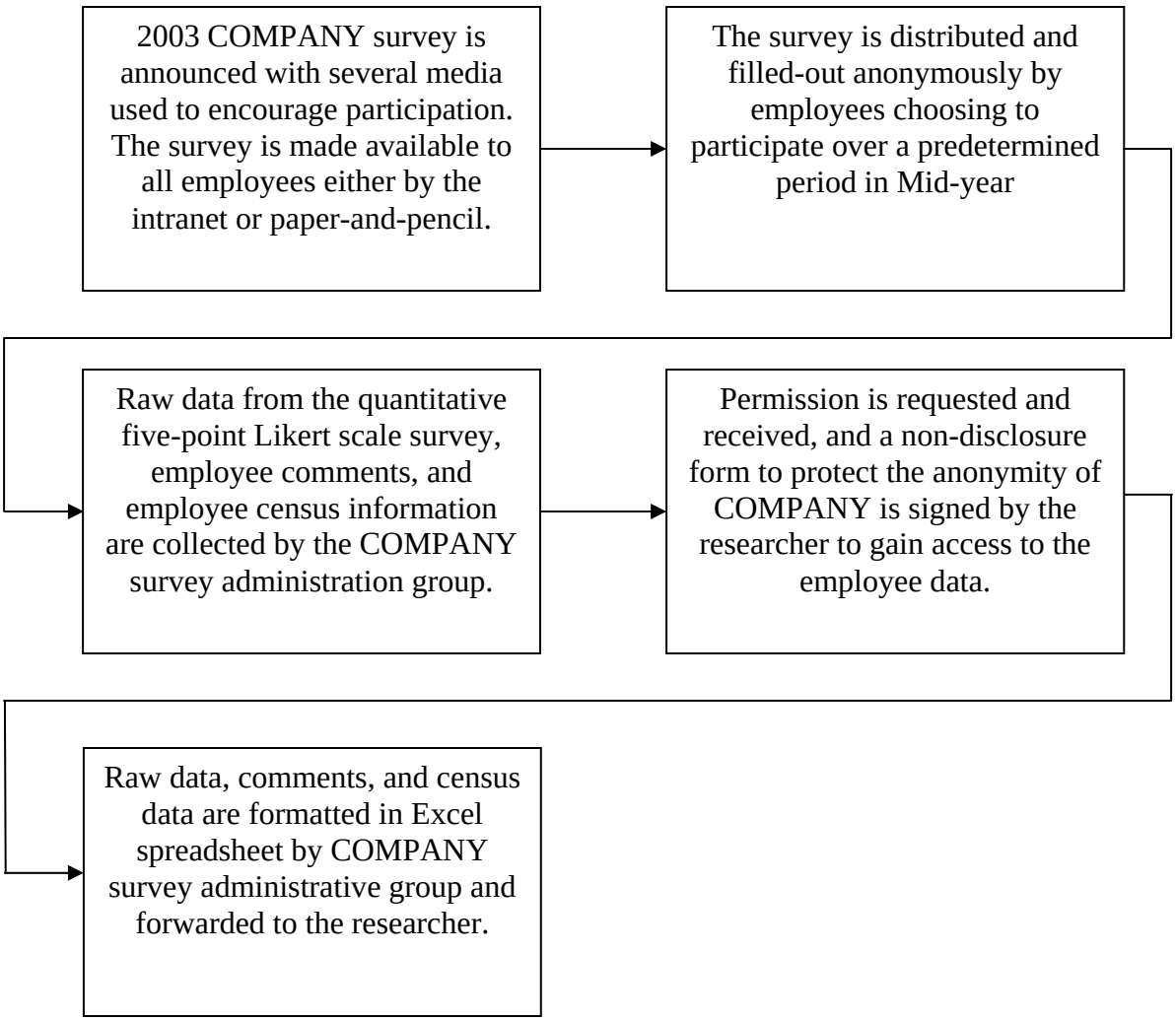


Figure 7. The process by which the employee information was collected and obtained.

that need to be addressed in your operating group?" In 2003, 55% of the respondents filling out the quantitative portion of the survey also included written comments. Employees who complete the survey are also asked to identify their job-type by a code given to them by the company, years of service, program/business unit, function, and location.

Table 5.

Nomenclatures for responses on the employee survey instrument

1	2	3	4	5
Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Very Satisfied	Satisfied	Neither Satisfied or Dissatisfied	Dissatisfied	Very Dissatisfied
Very Good	Good	Fair	Poor	Very Poor
Certainly	Probably	Not sure	Probably not	Certainly not
Almost Always True	Often True	Sometimes true Sometimes Untrue	Often Untrue	Almost Always Untrue

The media for the employee survey was both electronic and traditional paper-and-pencil. In 2003, 67% of the surveys were administered to employees via the company intranet. Employees were asked to complete the survey on a voluntary basis and were made aware that their individual responses—including comments—would be held confidential. The employees were provided time to complete the survey during their regular work schedule. The response rate for the company was very good at 69%.

Population and Sample

The business selected for this analysis is a Fortune 100 company involved in the manufacturing sector. The population of the company is eclectic; locations vary across several geographical locations in North America; employees range in job-type from skilled labor to professional and administrative workers, technical workers including degreed engineers, and managerial employees. The population contains a diverse ethnic background and a moderate amount of female employees, although these census data were not described in the survey. From this, the number of responses for quantitative analysis exceeded thirty-five thousand ($n > 35{,}000$) and the number of qualitative comments was over nineteen thousand ($n > 19{,}000$).

The sample from this population was derived through a process by which the survey was available for all employees to participate should they elect to do so. The response rate for this survey was sixty-nine % of the population of COMPANY. While a random sample would have reduced the risk of skewing the data, it is assumed that the large percentage of responses is representative of the overall population for the purpose of this analysis.

Validity of the methodology

In addition to the compatibility between philosophy, culture, and methodology, both researchers and their readers should have a fundamental confidence in the validity of their choices. Neither qualitative nor quantitative research methodologies hold a monopoly on validity; however, a particular method may have more validity based on the topic or area. Four specific forms of validity were identified by Scandura and Williams (2000): (a) construct validity, (b) internal validity, (c) external validity, and (d) statistical conclusion validity.

To analyze construct validity of the survey instrument, a factor analysis was performed. SPSS was used to conduct the quantitative portion of this analysis. Factor analysis was used to detect which survey questions should be grouped together in the employee involvement and employee empowerment categories and subsets.

Internal validity relates to causality, and it was argued (Cooper & Shindler, 2003) that in order for this to exist, there has to be a cause-and-effect relationship demonstrated by: (a) covariation between the variables being analyzed; (b) the methods applied in the data collection demonstrate that the cause preceded the effect; and, (c) potential alternatives have been eliminated. To test the internal reliability of the survey instrument a Cronbach's Coefficient Alpha test was used. This test is appropriate for estimating internal reliability and indicates the degree to which instrument items are homogeneous and reflect the same underlying construct (Cooper & Shindler, p. 237). Additionally, Cronbach's Coefficient Alpha test has the most utility for multi-item scales at the interval level of measurement (Cooper & Shindler, p. 239). SPSS was used to perform this analysis.

External validity is defined by the ability to apply the research results in other areas, or the portability and ability to generalize the research. Sackett and Larson (1990, as cited in Scandura and Williams) stated that external validity could also be categorized as the ability to generalize. In order to be externally valid, a study should be applicable to the population from which it was drawn as well as different populations, measures, and circumstances. Further, Sussman and Robertson (1986) indicated there should be evidence that researcher interaction has been identified and mitigated to not affect the factors in the study. The majority of this survey was conducted by electronic media and the remainder was conducted by paper-and-pencil

without researcher interaction. All surveys were completed in a similar fashion: (a) on company premises and (b) on company time. Several questions on the survey instrument have been included in other types of business environments and may be considered portable to other populations. The data are shared with several other companies in various markets and are compared as a means to benchmark employee opinions across several companies.

However, it should be noted that because these data were collected as a company-wide survey, as opposed to a random sample there are certain biases which may or may not bias the results of the survey. No assumptions could therefore be made by this researcher with a high degree of certainty on firms other than COMPANY with respect to the conclusions derived from this survey information. Further, other studies (Harmon *et al*., 2003; Shay, 2004) have used either the same data or many of the same questions within the survey instrument. The scope of this research precludes the analysis of the association with other companies and other markets.

Construct validity indicates the reasonableness of the methodology used in the analysis (Scandura & Williams, 2000). The measures and their use have to be representations of valid constructs in order for valid inferences to be projected. Additionally:

> The type of dependent variable reflects the nature of the measures employed, and the sources of data indicate the extent to which method variance might be present in measures. Studies with multiple sources of data reflect issues of measurement and also indicate triangulation. The types of variables and source of data have unique method influences associated with them. For example, self-report measures (especially those from a single source) are a typical example of the measurement of attitudinal variables using Likert-type rating scales. Precision of measurement using self-reports might improve construct validity if multi-item measures are employed. Also, tests for the amount of error in the measurement of a construct, such as tests of reliability (internal consistency) require multi-item measures. (p. 1253)

Last, statistical conclusion validity is defined as the ability to infer and make conclusions based on the statistical evidence provided in the study (Scandura & Williams, 2000). The lack of statistical conclusion validity causes significant concern, as the inappropriate use of a measurement tool will negatively influence both internal and external validity of the research. Several types of statistical methods are available for this type of analysis. Cooper and Shindler (2003) indicated that arithmetic means and standard deviations are appropriate measures of central tendencies. Since the Likert scale survey items are coded at the interval level of measurement, the appropriate bivariate and multivariate statistical tests were applied. Tests included analysis of variance, Bonferroni tests, and correlation analysis using the Pearson product moment coefficient and were concluded to be acceptable tests for these types of data. When comparing several groups to each other, several tests could be used to analyze their relationships. Since parametric methods have been determined to be appropriate, ANOVA and Bonferroni tests were used to compare the four job-types with respect to employee involvement, employee empowerment, and employee satisfaction.

Utilization of Likert-type scales

The use of a quantifiable scale when seeking information about non-mathematical statements has been integrated into scaling systems such as the Likert scale, which was used in this survey instrument. While there are issues and concerns about the limitations of such scales, the use of this method appears to have been accepted in behavioral and attitudinal research, including employee satisfaction (Ellickson, 2002; Eskildsen & Dahlgaard, 2000; Fosam, Grimsely, & Wisher, 1998; Martensen & Gronholdt, 2001; Savery, 1989; Scott, Bishop, & Chen,

2003; Waters & Roach, 1971). Generally, a five-point or seven-point scale anchored by standard "*strongly disagree*" and "*strongly agree*" designations are used. Since the five-point Likert scale is more common in various areas of research, the general population is familiar with the format. Therefore, in addition to external validity, the use of a Likert scale could be considered a benefit as it would reduce the amount of potential confusion and increase the internal validity of the questionnaire.

Quantitative Data

Once the data from the survey instrument are tested, specific relationships between survey questions identified through the factor analysis were compared to better understand the affects illustrated earlier in Figure 1. Additionally, the raw data was segregated by job-type and a comparison was performed between these relationships by job-type as earlier illustrated in Figure 2. Analyses were performed to determine if there are statistically significant differences in the attitudes about these relationships between the four identified job-types to be tested.

From the data, specific employee involvement processes and employee empowerment cognitions were examined. These subsets were selected from previous studies conducted by Lawler (1986) and Thomas and Velthouse (1990). A factor analysis was conducted to determine the appropriate survey questions to combine in each category.

Qualitative Data

In addition to the quantitative data collected and the methods and statistical techniques that will be used to increase the probability of validity, qualitative data are collected within the survey instrument. These data are in the form of comments resulting from an open ended question. All comments from the survey instrument were analyzed for two separate reasons: (a) to potentially increase the richness in understanding of the differences in the quantitative data and (b) to compare and contrast the ordinal relationship of quantitative mean data to the ordinal value of categorized responses from the open-ended question. This relationship is illustrated in Figure 8.

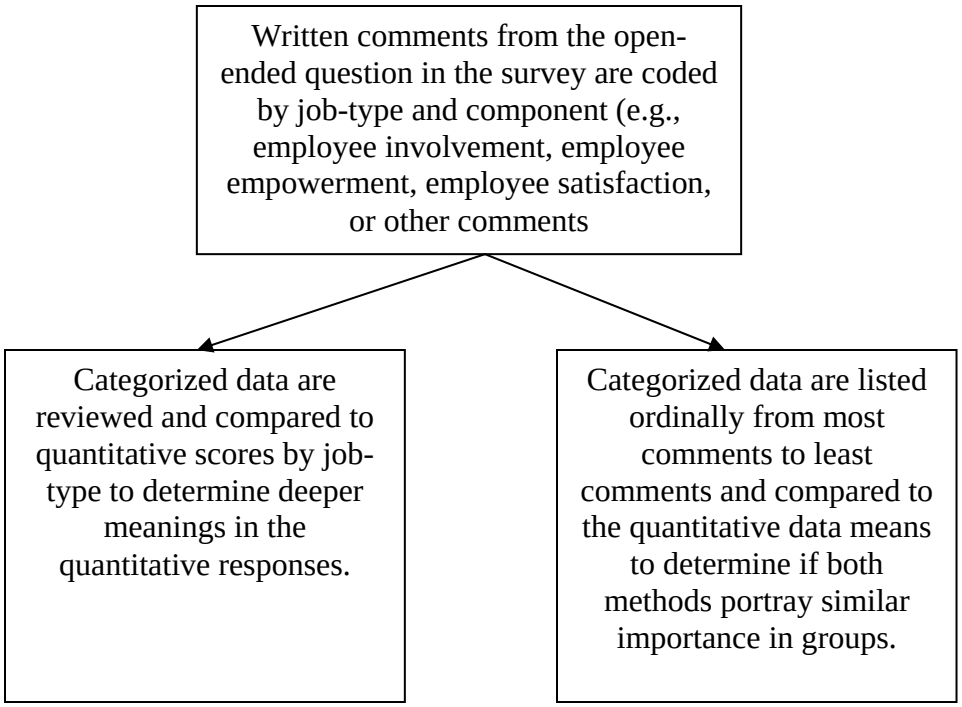


Figure 8. The proposed uses of qualitative data from the survey instrument.

The method of determining the meaning of the qualitative data was to delineate the employee comments by the four job-types: (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) management. Once segregated by job-type, all comments made by employees were reviewed and categorized by the following areas based on the scope of this research: (a) employee involvement, (b) employee empowerment, (c) employee satisfaction, and (d) other comments. Once categorized by job-type and comment type, specific comments were used within the analysis to better understand the relationships between the relationships to be tested.

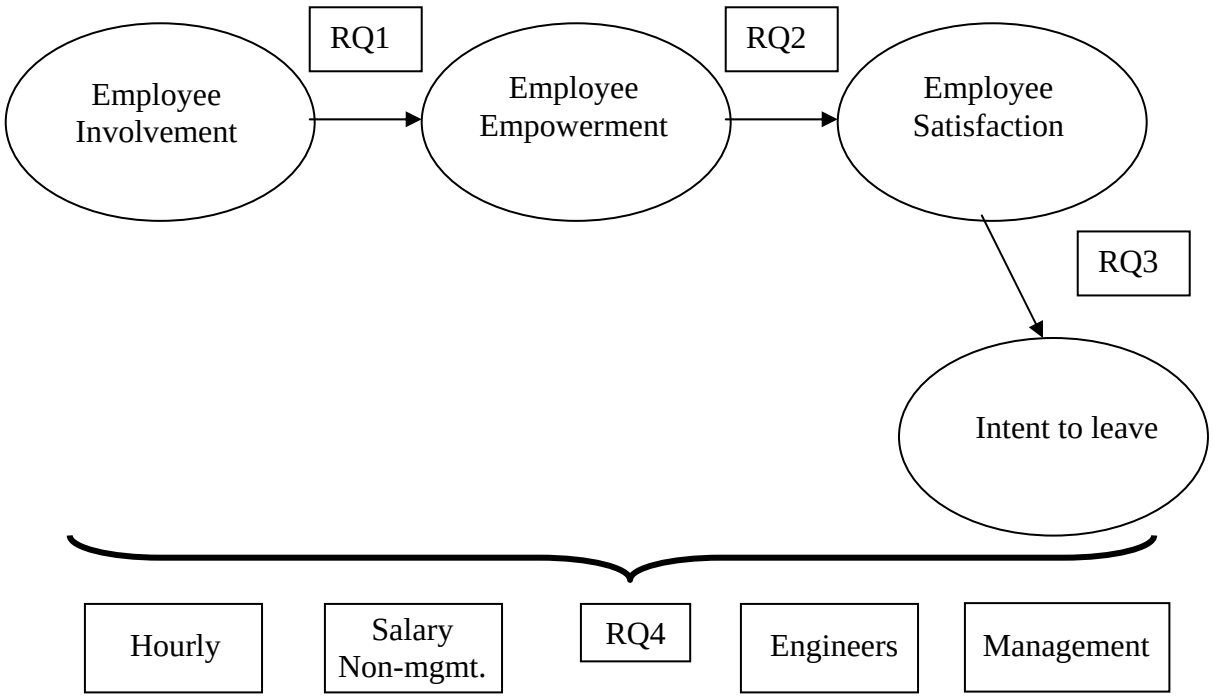
Additionally, descriptive statistics were used to analyze the importance of each category and compare it to the quantitative data to determine if there are similarities between the attitudes and perceptions of the employees from the two research methodology types. Through these coding practices, it is believed that the problems described by Huberman and Miles (1983) concerning data overload can be mitigated. “Qualitative data need to be reduced for analysis to occur, and the choice of a reduction strategy or heuristic will determine what kind of analysis is possible and will thus foreclose other kinds” (Huberman & Miles, 1983, p. 285). Further, “Reduction not only allows analysis, it is analysis, in that clusters and partitions will necessarily follow the analyst’s evolving sense of how the data come together and how they address the research questions s/he wishes to answer” (p. 285). For the purpose of this research, many of the techniques outlined by Huberman and Miles (1983) were performed to provide better analysis of the qualitative data, including (a) coding, (b) policing, or monitoring, (c) progressing focusing and funneling, and (d) matrices. These methods are consistent with the techniques described by Sadler (1981).

Research Questions

Within the framework of research conducted in the literature review, several issues are grounded in theoretical and practical analysis. Certain relationships have been identified in earlier analyses in service industries and small manufacturing environments; however, few studies have examined the employee interactions in a large manufacturing setting and across various job-types. For this reason, specific research questions stand out:

1. How does the level of employee involvement affect the level of employee empowerment?
2. How does the level of employee empowerment affect the level of employee satisfaction?
3. How does the level of employee satisfaction affect the level of intention to leave the company?
4. How does job-type—hourly, salary nonmanagement, engineers, and managers—affect the respective components or employee involvement, employee empowerment, and employee satisfaction?

With the use of the figure previously introduced in chapter 1, the relationships of these research questions are illustrated in Figure 9.



Legend: RQ-Research Questions

Figure 9. The relational condition of employee processes, cognitions, and characteristics and the corresponding research questions.

Additionally, using the subsets described by Lawler (1986) and Thomas and Velthouse (1990), additional research questions will be examined:

5. Within employee involvement:

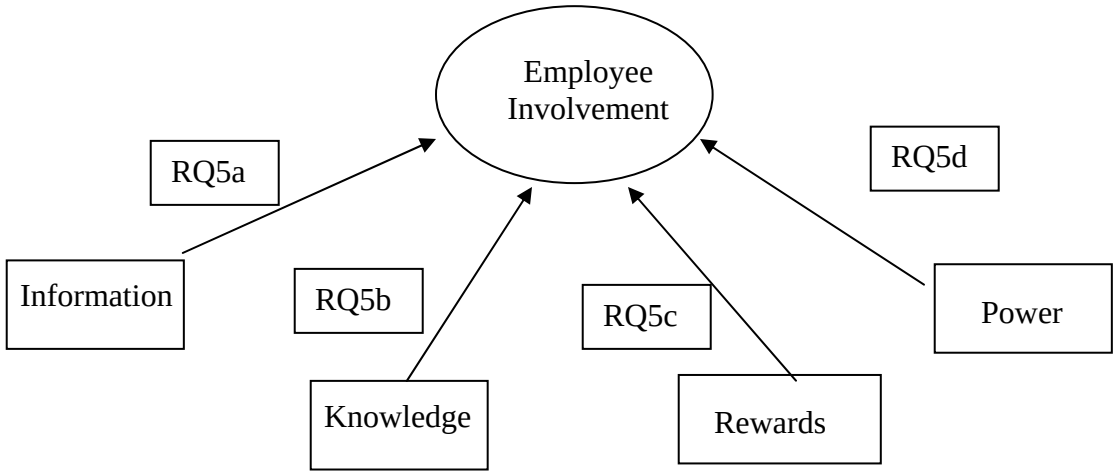
   (a) How does the level of information received by an employee affect the level of employee involvement?

(b) How does the level of knowledge of an employee affect the level of employee involvement?

(c) How does the level of power of an employee affect the level of employee involvement?

(d) How does the level of rewards received by an employee affect the level of employee involvement?

This relationship is demonstrated in Figure 10 using the figure previously introduced.



Legend: RQ-research question

Figure 10. The relationship between the four employee involvement processes to employee involvement and the corresponding research questions.

6. Within employee empowerment:

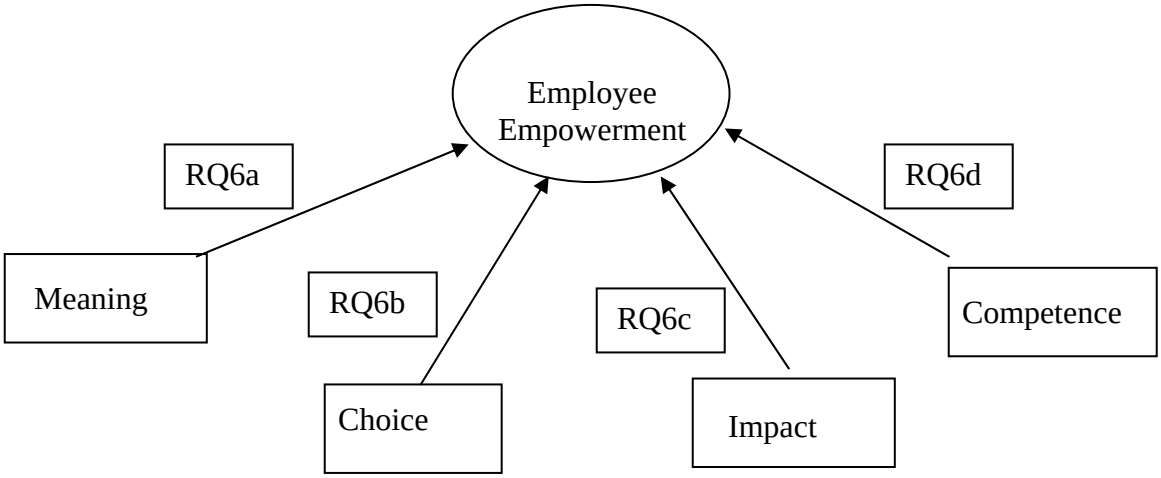
(a) How does the level of meaning in an employee's job affect the level of employee empowerment?

(b) How does the level of choice in an employee's job affect the level of employee empowerment?

(c) How does the level of impact in an employee's job affect the level of employee empowerment?

(d) How does the level of competence in an employee's job affect the level of employee empowerment?

This relationship is demonstrated in Figure 11 using the figure previously introduced in Chapter 1.



Legend: RQ-research question

Figure 11. The relationship between the four empowerment cognitions to employee empowerment and the corresponding research questions.

Hypotheses

From the relationships noted above, a set of hypotheses have been developed to examine the research questions. The first two hypotheses test the linear relationship between employee involvement and employee empowerment, and between employee empowerment and employee satisfaction. The third hypothesis tests the relationship between employee satisfaction and the intent to leave the company. The fourth hypothesis is divided into three facets and tests the difference in the perceptions of employee involvement, employee empowerment, and employee satisfaction by the four job-types: (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) management. The fifth hypothesis examines the relationships of the four components of employee involvement (Lawler, 1986) to overall employee involvement and the sixth hypothesis examines the four components of employee empowerment (Thomas & Velthouse, 1990) to overall employee empowerment. Therefore, the objectives of this study are accomplished through the analysis of the following hypotheses:

Hypothesis 1 ($H1_o$). There is not a significant relationship between the level of employee involvement and the level of employee empowerment.

Alternative Hypothesis 1 ($H1_A$). There is a significant relationship between the level of employee involvement and the level of employee empowerment.

Hypothesis 2 ($H2_o$). There is not a significant relationship between the level of employee empowerment and the level of employee satisfaction.

Alternative Hypothesis 2 ($H2_A$). There is a significant relationship between the level of employee empowerment and the level of employee satisfaction.

Hypothesis 3 ($H3_o$). There is not a significant relationship between the level of employee satisfaction and the level of intention to leave the company.

Alternative Hypothesis 3 ($H3_A$). There is no significant relationship between the level of employee satisfaction and the level of intention to leave the company.

Hypothesis 4a ($H4a_o$). There is not a significant difference in the perception of employee involvement by the different job-type categories.

Alternative Hypothesis 4a ($H4a_A$). There is a significant difference in the perception of employee involvement by the different job-type categories.

Hypothesis 4b ($H4b_o$). There is not a significant difference in the perception of employee empowerment by the different job-type categories.

Alternative Hypothesis 4b ($H4b_A$). There is a significant difference in the perception of employee empowerment by the different job-type categories.

Hypothesis 4c ($H4c_o$). There is not a significant difference in the perception of employee satisfaction by the different job-type categories.

Alternative Hypothesis 4c ($H4c_A$). There is a significant difference in the perception of employee satisfaction by the different job-type categories.

Hypothesis 5a ($H5a_o$). There is not a significant relationship between the level of information received by an employee and the level of employee involvement.

Alternative Hypothesis 5a ($H5a_A$). There is a significant relationship between the level of information received by an employee and the level of employee involvement.

Hypothesis 5b ($H5b_o$). There is not a significant relationship between the level of knowledge of an employee and the level of employee involvement.

Alternative Hypothesis 5b ($H5b_A$). There is a significant relationship between the level of knowledge of an employee and the level of employee involvement.

Hypothesis 5c ($H5c_o$). There is not a significant relationship between the level of power of an employee and the level of employee involvement.

Alternative Hypothesis 5c ($H5c_A$). There is a significant relationship between the level of power of an employee and the level of employee involvement.

Hypothesis 5d ($H5d_o$). There is not a significant relationship between the level of rewards received by an employee and the level of employee involvement.

Alternative Hypothesis 5d ($H5d_A$). There is a significant relationship between the level of rewards received by an employee and the level of employee involvement.

Hypothesis 6a ($H6a_o$). There is not a significant relationship between the level of meaning in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6a ($H6a_A$). There is a significant relationship between the level of meaning in an employee's job and the level of employee empowerment.

Hypothesis 6b ($H6b_o$). There is not a significant relationship between the level of choice in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6b ($H6b_A$). There is a significant relationship between the level of choice in an employee's job and the level of employee empowerment.

Hypothesis 6c ($H6c_o$). There is not a significant relationship between the level of impact in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6c ($H6c_A$). There is a significant relationship between the level of impact in an employee's job and the level of employee empowerment.

Hypothesis 6d ($H6d_o$). There is not a significant relationship between the level of competence in an employee's job and the level of employee empowerment.

Alternative Hypothesis 6d ($H6d_A$). There is a significant relationship between the level of competence in an employee's job and the level of employee empowerment.

Relative to the integration of the research questions and the corresponding hypotheses, the appropriate statistical methods were applied to test the significance between the variables identified. The quantitative tests are listed by research question, dependent variable, and independent variable in Table 6. As mentioned previously, the appropriate survey questions from the instrument were derived using a factor analysis. In addition to the statistical tests, employee comments from the survey will be used to enrich the understanding of the quantitative data.

Survey Questions and their Relationship to the Research Questions

A Cronbach's Alpha test and factor analysis was performed to understand the relationships between the survey questions prior to the analysis of the research questions. The list of the survey questions selected for this study is produced in Table 7. Due to the agreement signed by the researcher, the COMPANY survey questions contained within this study cannot be used without written permission or this researcher.

Table 6.

The relationship between research hypotheses, variables, and statistical methods to be used to test significance

Research Hypotheses	Variable	Variable	Statistical Method	Rejection Criteria
1	Employee involvement	Employee empowerment	Correlation analysis	$p < .01$
2	Employee empowerment	Employee satisfaction	Correlation analysis	$p < .01$
3	Employee satisfaction	Employee intent to leave	Correlation analysis	$p < .01$
4a 4b 4c	Employee job-type	Employee involvement, employee empowerment, and employee satisfaction	ANOVA	$p < .01$
5a 5b 5c 5d	Information Knowledge Power Rewards	Employee involvement	Correlation analysis	$p < .01$
6a 6b 6c 6d	Meaningfulness Choice Impact Competence	Employee empowerment	Correlation analysis	$p < .01$

Table 7a.

The preliminary survey questions to be used to test the variables for this study

Variable	Survey Question
Employee Involvement	
Information	I have enough information to do my job well. The information systems I use are effective. The COMPANY leadership gives a clear picture of our business strategy. Senior executives at COMPANY clearly communicate the long-term strategy of the company.
Knowledge	I am given a real opportunity to improve my skills at COMPANY. My supervisor helps me obtain the developmental experiences I need to do my job well. I receive the needed coaching and feedback about my performance.
Power	I am encouraged to take appropriate action without waiting for approval. I am encouraged to work across organizational and functional boundaries. I have the authority to make decisions that improve the quality of my work.
Rewards	How satisfied are you with the recognition you receive for doing a good job. I feel appreciated by my immediate supervisor How would you rate the amount of pay you get on your job.

Table 7b.

The preliminary survey questions to be used to test the variables for this study

Variable	Survey Question
Employee Empowerment	
Meaningfulness	My work makes good use of my skills and abilities. I feel encouraged to come up with new and better ways of doing things. Conditions in my job allow me to be about as productive as I could be.
Choice	No survey questions were found that load into this category.
Impact	I know my work group's current performance. I am held accountable for the quality of products/services I provide my customer. My work group looks for ways to change processes to improve productivity
Competence	My work group has a clear understanding of our customers' needs. The members of my work group have the skills and abilities to get the job done. My work group effectively teams with other work groups and organizations.
Employee Satisfaction	Taking everything into account, COMPANY is a great place to work. How would you rate COMPANY as a company to work for compared to other companies
Intent to Leave Job	If you have your own way, will you be working for COMPANY 12 months from now.

Protection of Human Subjects

The survey instrument is administered and processed in a confidential nature; therefore, there are no inherent risks associated with the completion of the employee opinion survey. All employees participating in the survey did so voluntarily and the individual information is not accessible to the company population or persons outside the company in a manner that one would be able to detect the identity of a specific individual. Further, the data collected by the company was delivered for use in this research in a manner that continued anonymity for the individual employee.

Information obtained in this study is considered confidential unless its disclosure is required by law. While the company granting access to the employee survey data requires the opportunity to review the information from this study prior to submittal, the company representatives are not given any authority to amend or revise any of the analysis or conclusions as a result of this research.

Prior to their participation in the survey, employees are made aware that their input is confidential. Various methods are used within the collection of the data to assure confidentiality and vary by medium. This information was supplied to Capella University for review in the Institutional Review Board documents and was accepted by the university.

Certain benefits, however, are potentially available to management and employees through the analysis of these data. Executive management of the company as well as survey administration expressed interest in reading the conclusions of this research. It is possible through a better understanding of these data that enhancements may be made to processes which

will affect feelings of employee empowerment and employee satisfaction, thereby enhancing the quality of life for employees.

CHAPTER 4. DATA ANALYSIS AND FINDINGS

Purpose and Statement of the Hypotheses

The purpose of this study was to determine: (a) if relationships exist and (b) if so, how strong are the relationships when examining employee involvement, employee empowerment, employee satisfaction, and the intent to remain employed within a large manufacturing environment. The analysis was based on the extensive database of employee survey results of an international division of one Fortune 100 company. A qualitative analysis of survey comments as well as a quantitative analysis of the scaled questions was used. Comments from a single open-ended question at the end of the survey were segregated by job types and coded within separate categories. Analysis was then performed on the three categories relevant to this study: (a) employee involvement, (b) employee empowerment, and (c) employee satisfaction. Additionally, six hypotheses—along with their sub-hypotheses—were used to test the relationships between variables both in total and across four specific job-types: (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) managers. The null hypotheses to be tested in this analysis are.

$H1_o$: There is not a significant relationship between the level of employee involvement and the level of employee empowerment.

$H2_o$: There is not a significant relationship between the level of employee empowerment and the level of employee satisfaction.

$H3_o$: There is not a significant relationship between the level of employee satisfaction and the level of intention to remain with the company.

$H4a_o$: There is not a significant difference in the perception of employee involvement by the different job-type categories

$H4b_o$: There is not a significant difference in the perception of employee empowerment by the different job-type categories

$H4c_o$: There is not a significant difference in the perception of employee satisfaction by the different job-type categories

$H5a_o$: There is not a significant relationship between the level of information received by an employee and the level of employee involvement

$H5b_o$: There is not a significant relationship between the level of knowledge of an employee and the level of employee involvement

$H5c_o$: There is not a significant relationship between the level of power of an employee and the level of employee involvement

$H5d_o$: There is not a significant relationship between the level of rewards received by an employee and the level of employee involvement

$H6a_o$: There is not a significant relationship between the level of meaning in an employee's job and the level of employee empowerment

$H6b_o$: There is not a significant relationship between the level of choice in an employee's job and the level of employee empowerment

$H6c_o$: There is not a significant relationship between the level of impact in an employee's job and the level of employee empowerment

$H6d_o$: There is not a significant relationship between the level of competence in an employee's job and the level of employee empowerment

The components of employee involvement were based on the processes described by Lawler (1986) and used in other analyses (Bowen & Lawler, 1995; Corrigan, 1998; Lawler & Mohrman, 1992; Mohrman, Lawler, & Ledford, 1996). The components of employee satisfaction were derived from Thomas and Velthouse (1990) and used in other studies (Corrigan, 1998; Spreitzer, 1995). The definitions for employee satisfaction and intent to remain with the company are consistent with other studies (Cohen, Ledford, & Spreitzer, 1996; Lawler, 1992; Mueller & Lawler, 1996; Scott, Bishop, & Chen, 2003).

Participants in the Study

The sample population was a group of people employed at a Fortune 100 company involved in the manufacturing sector. In general terms, the population of the company is eclectic by job-type, with facilities located in several areas in North America. From this population, 35,614 surveys were returned constituting sixty-nine % of the total population of the group. Further, over nineteen thousand comments were received and coded by job-type. A description of the participants in the survey is given in Table 8.

The survey was administered by the company between May 12, 2003 and June 6, 2003. All employees were invited to participate through various methods, including interoffice correspondence and management coaching. The media for the employee survey was both electronic and traditional paper-and-pencil. Employees were asked to complete the survey on a voluntary basis and were made aware that their individual responses—including comments—would be held confidential. The employees were provided time to complete the survey during their regular work schedule.

Table 8.

Frequencies of job-types within sample

Job-type	*n*	Percent
Hourly	9,820	27.6%
Salary Non-Mgmt	15,083	42.4%
Engineers	5,732	16.1%
Managers	3,201	9.0%
Not coded	1,778	5.0%
Total	35,614	100.0%

Qualitative Analysis

Overview

The purpose of including qualitative data in the analysis of this topic was two-fold: (a) to compare the quantity of comments within the researched categories with the quantitative data; and, (b) to provide a richer understanding of the results generated from the quantitative analysis. Comments submitted during the 2003 survey were read for content and for categorization within the context of the analysis. The survey question was open-ended and attempted to generate an interest in the employee to select issues that should be addressed in their work area. The survey question was :"In your view, what are the two or three most important issues that need to be

addressed in your operating group?" This question was located at the end of the 50-question survey.

820 of the 19,610 comments were not included in the analysis because they were not coded by job-type. Comments were then coded using an indexing procedure similar to the one described by Ritchie and Spencer (1994). Many of the comments that were included were coded into more than one category. For this reason, the 18,790 comments included in the analysis generated 24,917 coded comments. A description of the coded comments by category and by job-type listed in percentages is included in Table 9. Often, these multicoded comments described a link between employee involvement and employee empowerment, or employee empowerment and employee satisfaction and were included in both categories. For example, some of the comments stated:

> Need to address how to empower/encourage each other to share knowledge, skills and abilities, and discourage allowing the 'knowledge is power' and 'turf protection' instincts to reign. In this environment, teamwork is more important than ever
>
> Employee involvement in reducing costs - of the [product] – [hourly employees] need to be held responsible for reducing costs - they need to be held accountable by manufacturing managers. Reducing red tape and complicated documentation - we kill ourselves by devising complicated processes that are difficult to follow - and we make them ourselves. Employee ownership in the Company.
>
> Job satisfaction must be realized through correct utilization of skills and the ability to make decisions as appropriate. Sufficient funds need to be allocated for training and skill upgrade and maintenance
>
> Make the people feel empowered to make a difference. Share the data and ask for help.

The total percentage of employee comments coded within the three categories selected for analysis was 64.7%. This number is consistent with the percentage of variance explained in the factor analysis, at 65.0%. The percentages vary by job-type; managers having the highest

Table 9.

Percentage of comments by job-type within categories

Job-type (number of comments)	Employee Involvement	Employee Empowerment	Employee Satisfaction	Mgmt./ Other	Job Security—Exogenous
Hourly (5,179)	27.0%	16.3%	20.6%	23.5%	12.6%
Salary Non-Mgmt (12,481)	25.5%	17.1%	23.0%	22.2%	12.3%
Engineers (4,776)	25.2%	19.2%	17.4%	27.6%	10.5%
Managers (2,511)	29.9%	17.1%	21.2%	20.7%	11.1%
Total (24,947)	26.2%	17.3%	21.2%	23.3%	11.9%

percentage of employee involvement comments, engineers having the highest employee empowerment percentage, and salary nonmanagement having the highest percentage in employee satisfaction. A comparison of these data is presented in Table 10.

The similarity between the quantitative and the qualitative percentages add to the validity of the grouping. The difference in the percentages within the job-types adds to the interest in the findings of the research question regarding if there is a difference in the perceptions of employee involvement, employee empowerment, and employee satisfaction between the four job-types. It should be noted, however, that percentages of comments in categories only give a person a reference point; the actual comments of the employees, their emotion, and their passion provide deep meaning to the analysis.

Table 10.

Percentage of comments by job-type within categories within the model

Job-type (number of comments)	Employee Involvement	Employee Empowerment	Employee Satisfaction	Total
Hourly (5,179)	27.0%	16.3%	20.6%	63.9%
Salary Non-Mgmt (12,481)	25.5%	17.1%	23.0%	65.6%
Engineers (4,776)	25.2%	19.2%	17.4%	61.8%
Managers (2,511)	29.9%	17.1%	21.2%	68.2%
Total (24,947)	26.2%	17.3%	21.2%	64.7%

Due to the volume of comments within the survey it would be extremely difficult and cumbersome to include all 24,917 within this text. Guidelines for the inclusion of comments from the employees were therefore necessary. The criteria for selection and inclusion of a comment within this section of the study were: (a) it should be representative to the sentiment of the group as it pertains to the subject; (b) there should be a significant amount of similar comments on the topic to be described; (c) the emotion of the comment is notable to the discussion from either a differentiating view between job-types or by distinguishing the topic from others; and (d) the inclusion of the comments would not falsely skew the perception of the reader.

Employee involvement

The overall percentage of comments within the employee involvement category was 26.2%. Managers listed comments on employee involvement for 29.9% of their total responses, the highest of all four job-types. Information in the form of communication, vision, and metrics were predominant among the manager comments:

> Communication needs to improve. There is no effective way for decisions to be communicated to the proper people. Either up or down. People need to be held more accountable. Clearer measures and expectations would be nice. Not just financial metrics for your executives, but real data as to progress should be tracked.
>
> Keep up the communication in regards to [COMPANY] Vision and Values. It's very important to keep the company focused on a clear vision.
>
> Provide a vision that all employees can grasp and hold as their own. Something that they can weigh announcements and decisions made by our leadership team as either supporting or not the long term vision of the company
>
> I feel that some of the metrics we put in place cause us to do the wrong things and cost the company money. Such as it is more important to meet our span of control number than it is to do a good job of managing our people. Working [COMPANY metrics] targets is more important than improving our processes so we work most efficient.
>
> Performance measures/metrics and reward systems need to be aligned with [COMPANY] and business unit strategies and objectives. Lots of good strategy defined by senior management, but limited or ineffective tactical objectives or actions developed to meet the strategy (Senior Management says change yet we try to do it with the same processes and procedures).

The process of information within employee involvement was also prevalent among the other job-types as well. Thoughts on communication, vision, and metrics were included:

> Communication - there seems to be a lack of it. We are not informed as to what the company's direction is. Also lacking at the organizational level. So much uncertainty.
>
> Better communication to the employees on everything in general. We usually get our information on what is happening within the company from the news.
>
> Tyranny of the urgent. Bad behavior driven by poor metrics.

> Without compromising our competitiveness, clearly communicating the go forward (5 year) business plan for the individual operating group (e. g. [COMPANY division]), and also the go forward (5 year) business plan for the corporation (e. g. how does the performance of each operating group contribute to the overall success of the company), what are the synergies, if any.
>
> Establishing the right performance metrics for the Company, Operating Divisions, and down to the work groups. Understand and balance the importance (or not) of current metrics. Evaluate and understand the possible long-term consequences of short-term optimization.
>
> As a member of the finance community, I feel the most important issue is the need for quality tools to help us tell our customers the information they want to know. Our tools are rudimentary, archaic & generally based on mainframe applications that date back to the late 70s / early 80s. It's very frustrating to be held accountable for more, more, more visibility & not being given the tools to be able to do that.
>
> Encourage a performance based culture with attention to a few important metrics across the entire enterprise. Tell me what metrics are important and I will show how I will behave. If the measures are changing constantly or too diverse I cannot effectively develop a pattern of behaviors within my team that will satisfy the request. Provide a clear strategy and mission statement for all employees to adopt. The strategy must be defined well enough that individuals can understand their role.

Among the job-types other than management, there was a large amount of comments involving the rewards process of employee involvement. Specifically, many comments described the COMPANY employee incentive plan (CEIP), which is paid to non-executive management and non-union represented salary workers. Engineering, hourly workers, and several of the salary nonmanagement workers are represented by a union. These groups had comments such as:

> Divisive pay policies. [CEIP], bonus and raises unequal across the company. [COMPANY] generates most of the profits which feed [CEIP], yet the money losing operating groups get the payout!
>
> [COMPANY] Employee Incentive Plan [CEIP] should be extended to include union represented employees. - Too much emphasis on Off Loading. It is realized that some off loading must occur in order for our customer to be able to buy our [COMPANY product]

> and to spread the risk of developing new products. But, off loading work also means off loading the profit that goes with the off loaded work.
>
> The [COMPANY] Employee Incentive Plan is supposed to provide [COMPANY] employees with an added incentive to make [COMPANY] highly profitable. Yet a large group of [COMPANY] employees are not allowed to participate in the [CEIP]. The designers and the builders of [COMPANY] products. Those employees whose work DIRECTLY results in profits for [COMPANY]. By denying them this incentive to excel, [COMPANY] is foregoing a considerable opportunity to increase profits handsomely. WHY??? Not allowing them to participate is counter-productive and does not make sense. Judging by their actions, management at the corporate level seems to have forgotten that the people working for [COMPANY] are not part of the problem, they are part of the solution.
>
> The [COMPANY] Company should treat its employees fairly by allowing union workers [union, union, etc.] to participate in the [COMPANY] Employee Incentive Plan. With all the company press about it, it becomes a Employee De-incentive Plan for those of us not allowed. The company does a poor job of promoting engineers. [Name] published data a few years ago and tried to make the case that our engineers are paid as well as engineers at other companies. We looked at the data he presented and came to a very different conclusion.

There were comments within the reward process of employee involvement that discussed other forms of rewards, such as non-monetary recognition for performance including suggestion systems and verbal appreciation; however, there was a distinguishable difference between the job-types in the comments surrounding compensation and the link to performance. Engineers and salary nonmanagement employees were more concerned about reward for performance and the process by which increases in compensation are given. Some of the comments stated:

> I don't feel [COMPANY] is a meritocracy. I don't feel like there is a strong enough link between raises and performance. It seems that incompetence/ mediocrity is ignored or passed along rather than dealt with directly.
>
> Retaining and rewarding highly-skilled, energetic employees. Encourage the right attitude. Employees with superior skills should be given incentives (both monetary and leadership opportunities) to encourage them to stay on.
>
> I am always told that I am valued and do my job very well. And yet, my salary is always at the middle of the curve with actual salary not even reflecting it. I am always told that I

> am making improvement in salary growth, but it never reflect it. Also, the way the employees are ranked is totally biased and it is not based on the actual performance of employee.
>
> Pay for performance only, no more giving raises to people that don't do anything to deserve it. do away with the retention rating system, lay off the ones that don't get the job done, regardless of how long they've been here, or 'who they know'.
>
> Pay, I have been informed by two consecutive managers that I am 'way underpaid', but they go on to say, 'there isn't much I can do as a manager, to improve that'. It seems to me that immediate supervisors should have that ability to reward individuals who show exceptional performance.
>
> There is no difference, for many engineers and other fields, between good work and mediocre work. There has to be motivation for one to perform well, and [COMPANY] does not provide that for most employees.

Overall, it appeared that within the four processes identified by Lawler (1986) the most prevalent categories of comments involved Information and Rewards. Information was important across all job-types, with communication of company goals and vision, and the proper metrics or inadequacies of current metrics to provide proper information for decision making being the most common. A common theme across all job-types was the concern with the accuracy of systems and the velocity of information sharing. Often, employees were concerned that these inaccurate data were being used to make important decisions within the company. Within rewards, there did appear to be a difference between job-types in their attitudes regarding this process, especially as it related to pay for performance. The job-types who are compensated through a union-company negotiated contract did not observe the relationship between rewards and involvement because of specific company involvement programs, such as the CEIP not being part of their negotiated compensation package. Overall, in the comments coded as employee involvement, the comments by managers appeared to be less negative than those of salary nonmanagement, engineers, and hourly workers.

Employee empowerment

The percentage of comments coded into the employee empowerment category was 17.3%, with engineers having the largest portion of their comments within this category at 19.2%. The number of employee empowerment comments was lower than the percentage of comments coded into the employee involvement category. Some comments describe a need to shift the COMPANY culture, and it is possible that the culture within the company is what makes the employees perceive their issues in a process versus cognitive aspect. With respect to employee empowerment, a large portion of them were general in nature, such as:

> Empowering people to make improvements by removing the roadblocks.
>
> Empower people to make decisions individually, eliminate decision-making by committee.
>
> Too many people are in on decisions. Consensus is impossible to get, and good ideas go away because one person can quash it.
>
> We are working apart not together. We have little respect for healthy debate and inclusion. Our energy is more focused on personal survival and not at all on our corporate mission. If the people no longer care about the long term viability of the company, why invest the time and energy.
>
> Cross-functional teaming: trust functional organization to perform their best efforts on assignments, and continue to remove the redundancy of assignments between organizations.
>
> Management should focus more on empowering employees to be as effective as they want to be. Ask this question “does this change empower or encumber?” If it encumbers, don't implement it.
>
> Truly empower people at the working level. I have heard a lot about empowering people over the last few years. This may have been implemented at middle management level, but what it typically means at the working level is that I just added another person who I have to present to in order to gain approval. This typically slows the design process down.

> Low level decisions are not forced down to the lowest possible level; via, the organization is to hierarchical. We often don't feel we have any authority to make any decisions at all. In my previous life with [another company] we were a smaller organization and were more empowered to control our immediate work. It comes down to being silo'd [sic] (i.e., working in a silo-style environment) in [COMPANY] and not having full RAA (Responsibility, accountability and authority). I feel we have R & A but not much authority. In fact it is hard to find who has the authority to make decisions at any level below 'Senior Management'. I notice the high level of frustration in my peers and feel that full R, A & A is the main issue. We don't feel empowered.

The most significant difference in the observed comments between job-types was the concern among engineers regarding competence. While management and salary nonmanagement employees had some comments in this cognition, engineers were very concerned about the potential issues resulting from perceived inadequate rewards and an increase in outsourcing and economic conditions within this framework. Some examples of comments were:

> Knowledge transfer is hindered by large gaps in the experience. New and fresh perspectives are rare and often suppressed by individuals too close to retirement to care. Younger employees need to be protected to provide a more balanced workforce. There is an attitude of pessimism that is very pervasive throughout the company. I believe a majority of this can be attributed to the poor leadership that can be seen at all levels of the company

> Skills, knowledge, and capabilities are being lost at an increasing rate. The losses may be unintentional (someone leaves the company without adequate knowledge transfer), or by design (budget and headcount reductions mean that something has to go). Many of the lost capabilities were developed over a number of years and are not something that can be easily regained when they are needed for some future problem.

> [COMPANY] needs to protect against losing the knowledge and experience to design and integrate [COMPANY product]. The threat comes from an aging workforce, reduced employment and increased reliance on suppliers to do design work.

Within the context of employee empowerment, the perspectives of the comments by engineers were more focused on the competence cognition of empowerment. While engineers had the largest percent of comments within this category among the four job-types, it did not

necessarily relate to a more positive feeling about empowerment. Their rationalization of their unique skills and amount of training in this particular industry was a common theme, and their strong concern that through actions of the company these skills would be lost. While managers and salary nonmanagement employees also described these concerns, the comments by engineers were more frequent and more compelling. Their concern that this loss would significantly affect the future of the company was very different than hourly employee comments who also were concerned about the loss of jobs, but for different reasons. The comments surrounding this topic among the hourly workers centered more on a mistrust of management, and the overall loss of American jobs. The comments of hourly workers on job security were typically so different that they were not coded as competence components. Finally, as with the employee involvement questions, the manager comments were overall less negative than salary nonmanagement, engineers, and hourly employees.

Choice

When performing the quantitative analysis on the established survey questions, it was determined through a factor analysis that no questions loaded well into the Choice cognition of employee empowerment. For this reason, additional consideration is given on this cognition within the qualitative analysis to understand the relative importance it has to employee empowerment as well as a predictor for employee satisfaction. In the review of the comments, there did not appear to be an overly large percentage of statements within choice when compared to the other three cognitions. Corrigan (1998) and Spreitzer (1995) indicated there was a significant relation between power and choice, or self-determination. For example, when

considering questions for this analysis some of the questions originally considered for the choice cognition loaded into the power process of employee involvement.

Many of the comments within the survey involve reporting structure which can impact choice. Often, employees believe that they are not empowered to self-determine their work or their career path. Within the context of choice, many employees—including managers—believed that the reporting structure was “top-heavy” or “too many managers,” which in their view hindered the empowerment process. Examples of comments written within the survey describing employee attitudes on choice included:

> We need to Enable 'out of the box' ideas to have a chance of becoming real. Too often process change, or even consideration is thwarted. Not all ideas have value, but our processes for evaluation are flawed.
>
> We have way too many layers of management. We can not get any work done because the middle layers get in our way. Three layers would be nice; VP/GM, Director, Supervisor. And no more co-leaders would be nice. One person can handle the value-stream. (this includes Engineering, Operations, Supplier Management, and Finance)
>
> [COMPANY]'s main problem is management's inability to embrace 'out of the box' thinking in a 'down' market. There seems to be no plan other than lay off talented employees to deliver shareholder value!
>
> 'People Empowerment' has become 'People Engagement' which now means: get everyone together and try to get them to come to our (management's) answer, if they don't, the heck with them

The issues of employees on the choice cognition are relevant to the discussion of employee empowerment and employee satisfaction. Self-determination or choice is a viable cognition. The comments within this portion of the analysis may help explain why there is a shift in the order of satisfaction between hourly and engineers when comparing employee empowerment, employee satisfaction, and intent to remain with COMPANY. The majority of comments categorized into this cognition were from the engineer job-type, which may indicate

this is an important facet in the relationship between empowerment and satisfaction. Nonetheless, the empowerment cognitions are viewed as additive in nature rather than multiplicative (Corrigan, 1998); therefore, the absence of this cognition within the quantitative model should not severely limit the effectiveness of that analysis.

Employee Satisfaction

Overall, the percentage of comments made within this category by all four job-types was 21.2 %, with engineers having the least comments at 17.4 %. There were a number of positive comments concerning employee satisfaction; however for the most part, the comments offered suggestions based on situations they perceived as neutral or negative, perhaps most notably in the engineering area. Typical comments within this category dealt with morale issues, job satisfaction, perceived worth of the employee by the company, and employee diversity. Further, in many of the comments there was a link between employee involvement, employee empowerment, and employee satisfaction such that some comments were coded in more than one category. Examples include:

> I have never worked anywhere where the morale is as low as it is here. There's no value to our contributions and no loyalty exhibited by people towards the Company. It's like working at the [COMPANY industry] version of Kmart.

> Job satisfaction must be realized through correct utilization of skills and the ability to make decisions as appropriate. Sufficient funds need to be allocated for training and skill upgrade and maintenance. Equalization of pay (elimination of pay gap) between new hires and veteran engineers and workers is crucial to success.

> Despite all the high-quality products, services, and process improvements that I've provided through the years, I feel totally unrecognized, underpaid, and under-retained. Until this changes, I will remain highly dissatisfied.

> [COMPANY] is a great company to work for. The management is very fair and encourages individual development for the most part. There are many co-workers who find it difficult to work in a delegated style of leadership - I am very comfortable with it - but I do hear a lot of talk from my co-workers that they would prefer a 'coaching' style of leadership where tasks are handed out and then management/leadership is more involved by following-up on the progress towards completion.
>
> Lack of appreciation for first line managers. We talk about morale for the hourly, but very little is done to address appreciation for what upper mgmt refers to as, 'the most critical & valued position in the factory'.

Additionally, there was an interesting difference in the comments with regards to job security and employee satisfaction. Job security comments related to exogenous conditions such as the economy were not included in employee satisfaction; however, job security comments related to conditions or causes within the company were included. Hourly employees had a number of job security comments that were related back to the actions of the company, and a large percentage of these comments placed the blame internally on corporate executives and management:

> How would you think we would answer these questions when layoffs are ongoing people with 25 plus years are laid off. Only management favorites are moved into other job titles to keep them from being laid off. And you tell us we are history. Morale [explicative deleted] here and isn't going to get better with the company attitude that we are disposable employees.
>
> I feel totally insecure about my job. I have been here for 23 years and I feel more insecure now than when I first hired into the company. I feel now my supervisors really don't care how we feel because they feel the same way we do. You asked one question if I had my way would I be working here in the next 12 months. I said yes but can the company say the same thing about me. I don't think so. So how am I suppose (sic) to feel about the company when they really don't care about me or the rest of the employees.
>
> [COMPANY] and a lot of other companies could give a [expletive deleted] less about its workers. It's all about company greed and shareholder value. They will continue to layoff. Offload and weaken the [union] until the USA is third world.
>
> It seems the more great ideas the employees come up with the company just gets rid of more employees as we find ways to better our processes. It's hard to keep morale up

> when half of our fellow employees have been laid off and don't know when the rest of us may get our notice.

Based on the content of the comments coded within the employee satisfaction category, it would appear that hourly employees and engineering employees are the least satisfied. This is especially true with hourly employee perception of the company and management being largely responsible for job security and engineers relating their satisfaction to various empowerment cognitions. Hourly comments were typically more negative and directed towards management, not in an empowering or involving way, but on frequent occasion the comments indicated a sense of resignation to the control managers were perceived to have over them. Salary nonmanagement employees have some of the same concerns as both hourly and engineer employees, but the content of their comments do not appear to be as negative.

It was interesting that engineers had the least amount of comments coded in this category as a percentage of total comments than any other job-type. The percentage of comments does not necessarily correlate to satisfaction or dissatisfaction; however, engineers were very vocal about their concerns with empowerment and this could have overshadowed their employee satisfaction concerns. Finally, management employees appear to be the most satisfied of the four job-types, although they share concerns on feeling valued by the company, potential skill dilution among technical workers, and a shared vision for all employees.

Quantitative Analysis

The first step in the quantitative analysis was to perform a factor analysis on the potential questions within the employee opinion survey. SPSS was used to perform this analysis. Over 33,600 participants responded to all of the 27 potential questions for this study, far exceeding the

minimum ratio of five to one as recommended by Hair, Anderson, Tatham, and Black (1998). Additionally, higher ratios reduce the opportunity of over-fitting data and deriving factors that are sample specific (Hair, Anderson, Tatham, & Black). The factor structure was derived with a principle components analysis. Components with Eigenvalues exceeding one were extracted and rotated using a Varimax rotation. This procedure resulted in a five-factor model that explained 65% of the variance. A representation of the five components, their Eigenvalues, and the percentage of the variance attributed to that component are illustrated in Table 11.

Within the factor analysis, specific questions were analyzed to determine their fit in the research questions. To simplify the analysis, abbreviations were used for each potential question. A legend of these abbreviations to the topic of each question is demonstrated in Tables 12a and 12b. The abbreviations were then placed in the matrix of factors to determine specifically which questions had high loading factors in each component.

Table 11.

Eigenvalues and explainable variance by components derived from factor analysis of questions selected

Component	1	2	3	4	5
Eigenvalue	11.59	1.87	1.28	1.09	1.03
Percent of variance explained	44.6	7.2	5.0	4.2	4.0

Table 12a.

Item abbreviations

Abbreviation	Item
Power1	Encouraged to take appropriate action without waiting for approval
Power2	Encouraged to work across organizational and functional boundaries
Power3	Authority to make decisions that improve the quality of work
Info1	Enough information to do job well
Info2	Effective information systems
Info3	COMPANY leadership gives a clear picture of business strategy
Info4	Executives at COMPANY clearly communicate long-term strategy
Know1	Given real opportunity to improve skills
Know2	Ability to obtain developmental experiences to do job well
Know3	Coaching and feedback about performance is received
Reward1	Feel appreciated by management
Reward2	Satisfied with recognition received for doing a good job
Reward3	Satisfied with rate of pay received for job
Comp1	Clear understanding of needs of customers
Comp2	Have skills and abilities to get the job done
Comp3	Effectively team and work with other groups and organizations

Table 12b.

Item abbreviations

Meaning1	Work makes good use of skills and abilities
Meaning2	Encouraged to come up with new and better ways of doing things
Meaning3	Conditions allow me to be about as productive as I can be
Impact1	Knowledge of work performance and impact on goals
Impact2	Held accountable for quality of products and services
Impact3	Look for ways to change and improve
Empower	Work gives me a personal feeling of accomplishment
Involve	Satisfaction in involvement in decisions that affect work
Remain	If my choice, I will be working for COMPANY 12 months from now
Satis1	Rate COMPANY to work for compared to other companies
Satis2	Taking everything into account, COMPANY is a great place to work

The matrix of questions and factors were analyzed to understand proper alignment to the research questions and hypotheses to be tested in this study. An analysis of the communalities for each question exceeded the .500 recommended by Hair, Anderson, Tatham, and Black (1998), who argued that a communality below .500 does not provide adequate explanation of the variance for the factor solution. Survey questions were loaded into the component with the highest factor, with the exception of the question concerning satisfaction for the amount of pay received (Reward3), which loaded into component four but was used in component five. This decision was made from a theoretical view as opposed to a statistical view, as the amount of pay

is an important part in the employee perception of rewards. The decision to move the Reward3 question into a component in which it did not load the highest was the only exception to the process. The communalities and loading factors are displayed in Tables 13a and 13b.

One disappointing outcome of using secondary data and not having control over the questions asked in the survey was discovered by this factor analysis. Questions preliminarily selected for the choice cognition within empowerment did not load into either a separate component or the empowerment component and no other potential questions fell within the definitions of choice. For this reason, $H6b_o$ "There is not a significant relationship between the level of choice in an employee's job and the level of employee empowerment" cannot be tested within the context of these questions.

Tables 14a and 14b represent how the survey questions load into the respective components. The first component, Involvement/Power, Knowledge, Rewards, accounts for 44.6 % of the variance. Nine survey questions loaded into this component. Four questions accounting for 7.2 % of the variance loaded into the Empowerment/Meaningfulness component. Three questions loaded into the Competence component, attributable to 5.0 % of the variance. Three questions loaded into the Satisfaction/Intent to remain component and accounted for 4.2 % of the variance. Finally, four questions loaded into the fifth component, Information, and was attributed to 4.0 % of the variance.

Table 13a.

Communalities and rotated component matrix

Question	Communality	Component 1	2	3	4	5
Power1	0.677	*.780*	.121	.214	.067	.058
Power2	0.964	*.777*	.090	.268	.047	.086
Power3	0.575	*.575*	.354	.376	.112	.139
Info1	0.572	.166	.263	.269	.140	*.317*
Info2	0.500	.077	.281	.226	.180	*.304*
Info3	0.819	.211	.234	.179	.205	*.703*
Info4	0.831	.152	.182	.165	.206	*.740*
Know1	0.527	*.511*	.337	.237	.234	.203
Know2	0.675	*.709*	.252	.247	.170	.137
Know3	0.667	*.695*	.228	.294	.154	.166
Reward1	0.710	*.767*	.245	.155	.188	.037
Reward2	0.62	*.640*	.260	.152	.307	.163
Reward3	0.579	.123	.065	.051	*.746*	.019
Comp1	0.657	.206	.261	*.705*	.091	.204
Comp2	0.614	.151	.130	*.624*	.069	.172
Comp3	0.651	.305	.171	*.714*	.127	.063

Note: highest loading factor for each item is italicized

Table 13b.

Communalities and rotated component matrix

Question	Communality	Component 1	2	3	4	5
Meaning1	0.649	.343	*.679*	.188	.181	.040
Meaning2	0.668	.525	*.543*	.236	.133	.152
Meaning3	0.648	.271	*.694*	.167	.180	.182
Impact1	0.546	.266	.209	*.545*	.081	.357
Impact2	0.527	.232	.222	*.624*	.069	.172
Impact3	0.606	.364	.238	*.624*	.073	.147
Involve	0.668	*.544*	.493	.202	.184	.233
Empower	0.664	.367	*.648*	.209	.236	.097
Remain	0.591	.160	.224	.149	*.698*	.073
Satis1	0.746	.180	.257	.166	*.719*	.320
Satis2	0.749	.221	.321	.193	*.676*	.321

Note: highest loading factor for each item is italicized

Table 14a.

Factor solution and loadings for the components selected in this study

Factor	Survey question item	Factor Loading
Involvement/ Power, Knowledge, Rewards (44.6% of variance)	Encouraged to take appropriate action without waiting for approval	.780
	Encouraged to work across organizational and functional boundaries	.777
	Authority to make decisions that improve the quality of work	.575
	Given real opportunity to improve skills	.511
	Ability to obtain developmental experiences to do job well	.709
	Coaching and feedback about performance is received	.695
	Feel appreciated by management	.767
	Satisfied with recognition received for doing a good job	.640
	Satisfaction in involvement in decisions that affect work	.544
Empowerment/ Meaningfulness (7.2% of variance)	Work makes good use of skills and abilities	.679
	Encouraged to come up with new and better ways of doing things	.543
	Conditions allow me to be about as productive as I can be	.694
	Work gives me a personal feeling of accomplishment	.648
Competence (5.0% of variance)	Clear understanding of needs of customers	.705
	Have skills and abilities to get the job done	.624
	Effectively team and work with other groups and organizations	.714

Table 14b.

Factor solution and loadings for the components selected in this study

Factor	Item	Factor Loading
Satisfaction/ Remain with Company (4.2% of variance)	If my choice, I will be working for COMPANY 12 months from now	.691
	Rate COMPANY to work for compared to other companies	.719
	Taking everything into account, COMPANY is a great place to work	.676
Information (4.0% of variance)	Enough information to do job well	.317
	Effective information systems	.304
	COMPANY leadership gives a clear picture of business strategy	.703
	Executives at COMPANY clearly communicate long-term strategy	.740

All components had questions that loaded well, with factors between .780 and .511, with one exception. The Information component was the only component used in this analysis that had loading factors for questions less than .500, with "Enough information to do job well" at .317 and "Effective information systems" at .304. Statistically the loading factors are acceptable, and theoretically the questions are also relevant when considering the definition of information as data regarding an employee doing their job well, being informed about what is expected in

their job, having the appropriate tools, and having the correct metrics to track the work group of an employee with respect to the goals of the company (Lawler, 1986).

Questions were separated out from the first component to address specific processes within employee involvement. Using the definitions provided in the literature, questions could be attributable to three separate processes: (a) power, (b) knowledge, and (c) rewards. The question involving pay (Reward3) was then added to the rewards process and SPSS was used to perform a Cronbach's alpha test to test reliability. Tables 15a and 15b demonstrate the alphas by process and cognition. The Cronbach's alpha for the four processes of involvement were: (a) Power .827, (b) Information .768, (c) Knowledge .852, and Rewards .689. The inclusion of the question concerning pay reduced the alpha value of the rewards process. The alphas for the three empowerment cognitions available to be tested in this study were: (a) Competence .770, (b) Impact .741, and (c) meaningfulness .811. With the exception of power, all alphas are greater than .700, which Nunnally and Bernstein (1994) suggested as the minimum alpha value to be considered reliable for group research. The .700 is only a suggested value, and the .689 value for rewards is close to the value and it is believed that the alpha value for these questions is still high enough to be useful in this analysis.

SPSS was then used to analyze the descriptive data on the categories. This information is provided in Table 16. Since the categories do not have the same number of questions, the values of the means are not easily related to each other. For this reason, the mean was divided by the number of questions for each category to facilitate comparison. When input into the spreadsheet, the values of the five-point Likert scale used in this analysis rated the most favorable responses,

Table 15a.

Cronbach's Alpha analysis on categories selected for the study

Category	Item	Alpha
Information		0.768
	Enough information to do job well	
	Effective information systems	
	COMPANY leadership gives a clear picture of business strategy	
	Executives at COMPANY clearly communicate long-term strategy	
Rewards		0.689
	Feel appreciated by management	
	Satisfied with recognition received for doing a good job	
	Satisfied with rate of pay received for job	
Power		0.827
	Encouraged to take appropriate action without waiting for approval	
	Encouraged to work across organizational and functional boundaries	
	Authority to make decisions that improve the quality of work	
Knowledge		0.852
	Given real opportunity to improve skills	
	Ability to obtain developmental experiences to do job well	
	Coaching and feedback about performance is received	

Table 15b.

Cronbach's Alpha analysis on categories selected for the study

Category	Item	Alpha
Meaning		0.811
	Work makes good use of skills and abilities	
	Encouraged to come up with new and better ways of doing things	
	Conditions allow me to be about as productive as I can be	
Impact		0.741
	Knowledge of work performance and impact on goals	
	Held accountable for quality of products and services	
	Look for ways to change and improve	
Competence		0.770
	Clear understanding of needs of customers	
	Have skills and abilities to get the job done	
	Effectively team and work with other groups and organizations	

such as "*Very Satisfied*" with a value of one, and the least favorable responses, such as "*Very Dissatisfied*" with a value of five. Thus, when comparing mean scores the lower values are the more favorable values. A mean value of 3.00 would indicate that the overall score of the sample population is neutral, while any score below 3.00 would indicate a more favorable feeling and greater than 3.00 would indicate a more unfavorable feeling. Based on this high-level

Table 16.

Descriptive information of items for analysis

Item	*n*	Number of Items	Min/ Max	Mean	Mean/ no. of items	Standard Deviation
Employee Involvement	33,609	13	13/65	33.87	2.61	9.277
Power	35,077	3	3/15	7.11	2.37	2.625
Information	34,601	4	4/20	11.23	2.81	3.218
Knowledge	35,124	3	3/15	7.85	2.62	2.720
Rewards	34,678	3	3/15	7.71	2.57	2.583
Employee Empowerment	34,422	9	9/45	21.60	2.40	6.403
Competence	35,021	3	3/15	6.84	2.28	2.304
Choice	No data	0	--	--	--	--
Meaningfulness	35,226	3	3/15	7.69	2.56	2.772
Impact	35,051	3	3/15	7.08	2.36	2.345
Intent to remain with the company	35,404	1	1/5	1.90	1.90	1.124
Employee Satisfaction	35,194	2	2/10	5.33	2.67	1.961

comparison of the means, most employees are interested in remaining with the company for the next 12 months (1.90). Additionally, they appear to be reasonably satisfied overall (2.67). None

of the employee involvement processes or employee empowerment cognitions is above 3.00, indicating an overall satisfaction level with the components.

Hypothesis Testing

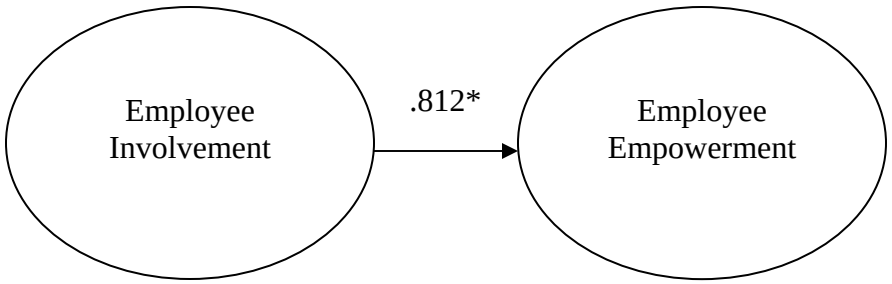
When determining the appropriate analysis for testing hypotheses, it was important to use techniques that are consistent with other similar studies. Correlation analysis was consistent with several pervious studies in employee involvement, employee satisfaction, and employee empowerment, including Spreitzer (1995), Corrigan (1998), Brossoit (2000), Daily and Bishop (2003), and Scott, Bishop, And Chen (2003). Correlation analysis using the Pearson product-moment correlation coefficient as a statistical measure was therefore utilized in hypotheses 1, 2, 3, 5a-d, and 6a-d.

Analysis of variance (ANOVA) is used when testing more than one group to determine a significant difference. Additionally, to make the analysis more relevant a post hoc test is typically conducted to understand the differences between each group. These tests are also considered appropriate tools and have been used in analyzing satisfaction among groups (Hartman, 2000). These tests were utilized for hypothesis 4a-c.

Hypothesis 1

Hypothesis 1 addressed the relationship between the level of employee involvement and the level of employee empowerment. The entire group of thirteen questions for employee involvement were summed and compared to the sum of the nine employee empowerment questions. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between employee involvement and employee empowerment was r =

.812, $p < .01$, indicating there is a significant relationship between employee involvement and employee empowerment. This relationship is illustrated in Figure 12. Since the relationship was theoretically significant in addition to being statistically significant, Hypothesis 1 ($H1_o$) was rejected and the alternative $H1_A$ was supported.



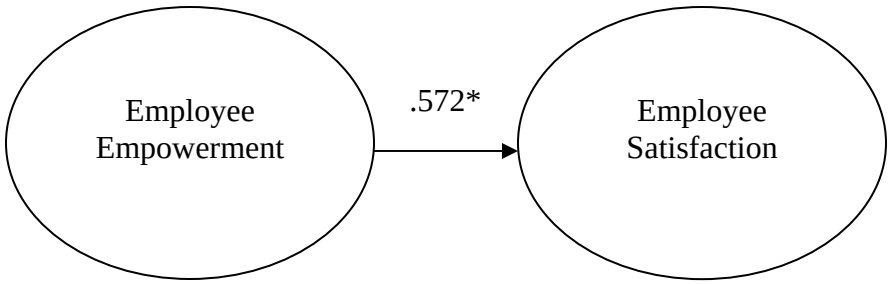
* - Significant 0.01 level (two-tailed)

Figure 12. The relationship between employee involvement and employee empowerment

Hypothesis 2

Hypothesis 2 stated that there was not a significant relationship between the level of employee empowerment and employee satisfaction. The entire group of nine questions for employee empowerment were summed and compared to the sum of the two employee satisfaction questions. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between employee involvement and employee empowerment was $r = .572$, $p < .01$, indicating there is a significant relationship between employee empowerment and employee satisfaction. This relationship is illustrated in Figure 13. While the Pearson

product-moment correlation coefficient was not as high as the relationship between employee involvement and employee empowerment, it was still theoretically significant. Because of the significance in the relationship between employee empowerment and employee satisfaction Hypothesis 2 ($H2_o$) was rejected and the alternative $H2_A$ was supported.



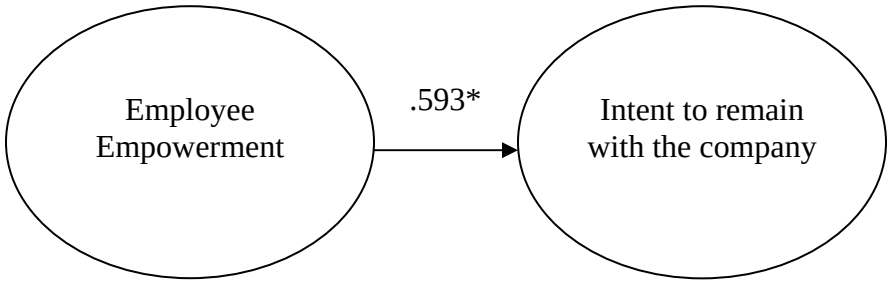
* - Significant 0.01 level (two-tailed)

Figure 13. The relationship between employee empowerment and employee satisfaction

Hypothesis 3

Hypothesis 3 stated that there was not a significant relationship between the level of employee satisfaction and employee intent to remain with the company. The two employee satisfaction questions were compared to the question concerning the employee intent to remain with the company. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between employee involvement and employee empowerment was $r = .593$, $p < .01$, indicating there is a significant relationship between employee satisfaction and the intent to remain with the company. This relationship is illustrated in Figure 14. The strength

of the relationship between employee satisfaction and the intent to remain with the company was stronger than the relationship between employee empowerment and employee satisfaction. It was not, however, as strong as the relationship between employee involvement and employee empowerment. Nonetheless, the relationship between employee satisfaction and the intent to remain with the company was both theoretically and statistically significant; therefore, Hypothesis 3 ($H3_o$) was rejected and the alternative $H3_A$ was supported.



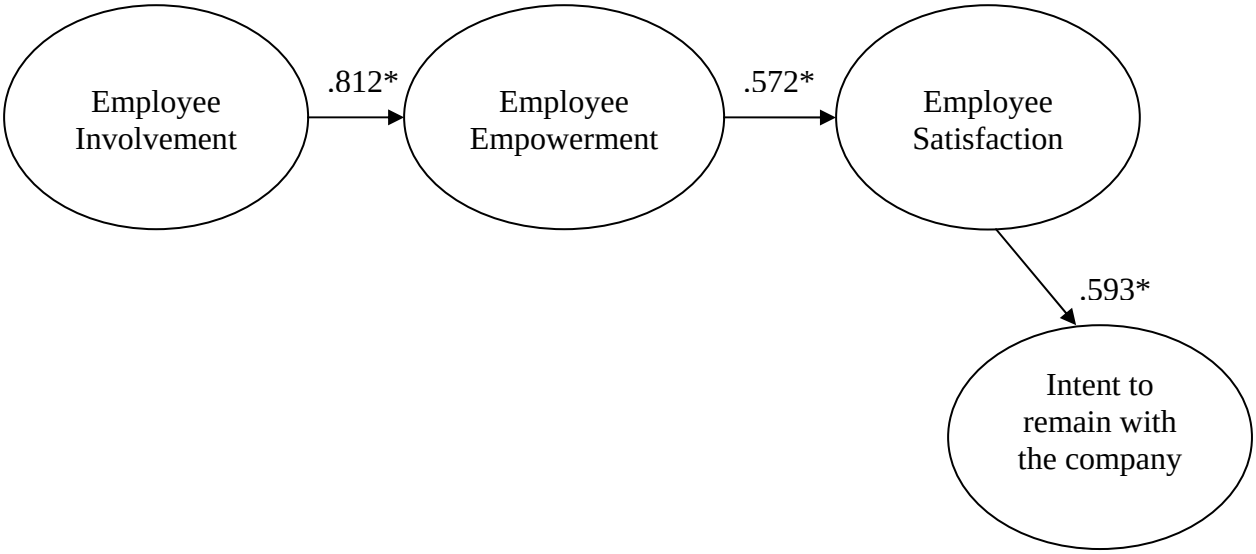
* - Significant 0.01 level (two-tailed)

Figure 14. The relationship between employee satisfaction and the intent to remain with the company

Summary of first three hypotheses

Within the first three hypotheses of this study the linear relationship between employee involvement, employee empowerment, employee satisfaction, and the intent to remain with the company was tested. In all three relationships the null hypothesis was rejected. The results of this study are consistent with previous research on these topics when investigated separately

(Brossoit, 2000; Corrigan, 1998; Daily & Bishop, 2003; Scott, Bishop, & Chen, 2003). The results of the first three tests of hypotheses are described in Figure 15.



* - Significant 0.01 level (two-tailed)

Figure 15. The overall relationship between employee involvement, employee empowerment, employee satisfaction and the intent to remain with the company

The product-moment correlation coefficient in this study found in testing Hypothesis 1 (.812) is greater than the coefficient (.469) found by Corrigan (1998) and the coefficient (.460) found by Daily and Bishop (2003). Despite the difference, the Corrigan coefficient and the Daily and Bishop coefficient were also statistically significant at the $p < .01$ level. The product-moment correlation coefficient found in testing Hypothesis 2 (.572) is similar to the coefficient

(.590) found by Brossoit (2000). Finally, the product-moment correlation coefficient found in testing Hypothesis 3 (.593) is similar but higher to the coefficient (-.490) found by Scott, Bishop, and Chen (2003). Note the Scott, Bishop, and Chen coefficient is a negative relationship as the intent to leave was tested versus the intent to remain.

Hypotheses 4a, 4b, and 4c

Hypotheses 4a, 4b, and 4c investigated the possible difference in feelings of employee involvement (4a), employee empowerment (4b) and employee satisfaction (4c) among the job-types: (a) hourly, (b) salary nonmanagement, (c) engineers, and (d) managers. Another group was included in the ANOVA, the non-coded employees, but their results were not within the scope of the analysis of these Hypotheses. For this reason, the degrees of freedom between groups were four instead of three if the non-coded group had not been included.

SPSS was used to perform an analysis of variance (ANOVA) between the job-types. In addition, SPSS was further used to perform a post hoc Bonferroni test to understand the levels of satisfaction significance between groups should there be a significant difference. The results of the ANOVA are listed in Table 17. The analysis indicated a significant difference in the levels of satisfaction among the job-types within each category: (a) employee involvement, (b) employee empowerment, and (c) employee satisfaction.

The Bonferroni test provides additional information when considering the differences between variables. Table 18 summarizes the results of the test across the four job-types on employee involvement, employee empowerment, and employee satisfaction. In both employee involvement and employee empowerment, managers are most satisfied, followed by salary

Table 17.

Analysis of variance between job-types for employee involvement, employee empowerment, employee satisfaction, and intent to remain with the company

Item		Sum of Squares	*df*	Mean Square	*F*	Sig.
Involvement	Between Groups	272292.103	4	68073.026	873.950*	.000
	Within Groups	2594087.922	33304	77.891		
	Total	2866380.025	33308			
Empowerment	Groups	154245.969	4	38561.492	1055.923*	.000
	Within Groups	1256882.229	34417	36.519		
	Total	141128.198	34421			
Satisfaction	Between Groups	4996.072	4	1249.018	337.142*	.000
	Within Groups	130254.373	35159	3.705		
	Total	135250.444	35163			

nonmanagement, engineers, and hourly workers. In employee satisfaction, managers and salary non-managers are still more satisfied; however, the order between engineers and hourly workers in switched. Additionally, the same ordinal relationship found in employee satisfaction is also found when performing a Bonferroni test on intent to remain with the company. All differences are significant at the .01 level.

Table 18.

Listing of levels of satisfaction between job-types for employee involvement, employee empowerment, and employee satisfaction based on Bonferroni test

Dependent Variable	Most Satisfied			Least Satisfied
Involvement	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Empowerment	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Satisfaction	Managers*	Salary Non-Mgmt*	Hourly*	Engineers*

* - significant at the 0.01 level

Descriptively, the means of job-types are listed by employee involvement process in Table 19. Managers are consistently more satisfied across all processes and overall employee involvement when comparing means. Viewing the relationships from an ordinal perspective, managers are followed in satisfaction by salary nonmanagement, engineers, and finally hourly employees.

With respect to Hypothesis 4a, there is no significant difference in the perception of employee involvement between job-type categories, the survey results segregated by job-types were compared against the thirteen questions comprising the four processes of employee involvement. The ANOVA procedure resulted in an F (4, 33304) = 873.950, $p < .01$. Further, the Bonferroni test indicated that managers were significantly more satisfied than salary

nonmanagement, who were significantly more satisfied than engineers, who were in turn significantly more satisfied than hourly employees.

Table 19.

Comparison of means between job-types for employee involvement

Item	Hourly	Salary Non-Mgmt	Engineers	Managers
Power	8.48	6.63	6.73	5.46
Information	12.07	10.84	11.83	9.40
Knowledge	8.96	7.36	7.77	6.63
Rewards	8.16	7.49	8.06	6.68
Involvement	37.77	32.34	34.39	28.18

Additionally, an analysis of variance was performed to determine if the relationships were viewed differently by job-types. SPSS was used for both an ANOVA test as well as a Bonferroni test on the specific employee involvement processes by job-type. Table 20 demonstrates the findings of the ANOVA.

The Bonferroni test results are given in Table 21. When separating the components by job-type, certain elements are not significantly different. Within the power process, salary nonmanagement and engineers are not statistically significantly different from each other at the 0.05 level in their opinions about power. Additionally, engineers and hourly employees are not

Table 20.

Analysis of variance between job-types for employee involvement

Item		Sum of Squares	*df*	Mean Square	*F*	Sig.
Power	Between Groups	32029.588	4	8007.397	1338.973*	.000
	Within Groups	209739.445	35072	5.980		
	Total	241769.033	35076			
Information	Between Groups	21456.831	4	5364.208	550.843*	.000
	Within Groups	336902.179	34596	9.738		
	Total	358359.010	34600			
Knowledge	Between Groups	20444.615	4	5111.154	749.507*	.000
	Within Groups	239488.909	35119	6.819		
	Total	259933.520	35123			
Rewards	Between Groups	6779.594	4	1694.899	261.704*	.000
	Within Groups	24556.106	34673	6.476		
	Total	231335.700	34677			
Involvement	Between Groups	272292.103	4	68073.026	873.950*	.000
	Within Groups	2594087.922	33304	77.891		
	Total	2866380.025	33308			

Table 21.

Listing of levels of satisfaction between job-types for employee involvement

Dependent Variable	Most Satisfied			Least Satisfied
Power	Managers*	Salary Non-Mgmt**	Engineers**	Hourly*
Information	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Knowledge	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Rewards	Managers*	Salary Non-Mgmt*	Engineers***	Hourly***
Involvement	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*

* - significant at the 0.01 level

** - in the Power process, the difference is not significant at the 0.05 level between Salary Non-Mgmt and Engineers; however, the difference between Managers and the other categories is significant at the 0.01 level, as well as Hourly to other categories is significant at the 0.01 level

*** - in the Rewards process, the difference is not significant at the 0.05 level between Engineers and Hourly; however, both of these job-types are significantly less satisfied at the 0.01 than the other two groups

statistically different from each other at the 0.05 level when considering rewards. All other job-type pairs are statistically significantly different from each other at the 0.01 level.

The ANOVA test at the total employee involvement level, the ANOVA at the process level, and the Bonferroni test at the total level all indicate that there is a significant difference between the job-types when considering employee involvement. However, based on the Bonferroni test at the employee involvement process level, there are some processes in which

there is no statistically significant difference between specific job-type pairs. For this reason, Hypothesis 4a ($H4a_o$) cannot be fully rejected and the alternative $H4a_A$ was cannot be fully supported.

Descriptively, the means of job-types are listed by employee empowerment cognitions in Table 22. Managers are consistently more satisfied across all processes and overall employee involvement when comparing means. Viewing the relationships from an ordinal perspective, managers are followed in satisfaction by salary nonmanagement, engineers, and finally hourly employees.

Table 22.

Comparison of means between job-types for employee empowerment

Item	Hourly	Salary Non-Mgmt	Engineers	Managers
Competence	7.82	6.49	6.61	5.65
Meaningfulness	8.55	7.31	7.85	6.35
Impact	8.12	6.69	7.17	5.41
Empowerment	24.50	20.50	21.64	17.41

Hypothesis 4b stated there is no significant difference in the perception of employee empowerment by job-type category. The survey results were segregated by job-types and compared against the nine questions from the three cognitions of employee empowerment

available for analysis. The ANOVA procedure resulted in an F (4, 34417) = 1055.923, $p < .01$. Additionally, the Bonferroni test indicated that managers were significantly more satisfied than salary nonmanagement, who were significantly more satisfied than engineers, who were in turn significantly more satisfied than hourly employees.

Additionally, an analysis of variance was performed to determine if the relationships were viewed differently by job-types. SPSS was used for both an ANOVA test as well as a Bonferroni test on the specific employee empowerment processes by job-type. Table 23 demonstrates the findings of the ANOVA.

The Bonferroni test indicates that there is a significant difference in the levels of satisfaction across all employee empowerment cognitions in addition to overall employee empowerment. From an ordinal perspective, managers have the highest levels of satisfaction across all cognitions and in overall employee empowerment, followed by salary nonmanagement, engineers, and hourly employees. Interestingly, this order is the same in all employee involvement processes and overall employee involvement. These relationships are listed in Table 24.

The ANOVA test at the total employee empowerment level, the ANOVA at the cognition level, the Bonferroni test at the total level and the Bonferroni test at the cognition level all indicate that there is a significant difference between the job-types when considering employee empowerment. For this reason, Hypothesis 4b ($H4b_o$) was rejected and the alternative $H4b_A$ was supported.

Table 23.

Analysis of variance between job-types for employee empowerment

Item		Sum of Squares	*df*	Mean Square	*F*	Sig.
Competence	Between Groups	16227.816	4	4056.954	837.593*	.000
	Within Groups	169602.971	35016	4.844		
	Total	185830.788				
Meaningfulness	Between Groups	15478.622	4	3869.656	534.177*	.000
	Within Groups	255146.257	35221	7.244		
	Total	270624.879	35225			
Impact	Between Groups	21625.082	4	5406.270	1107.494*	.000
	Within Groups	171078.318	35046	4.882		
	Total	192703.400	35050			
Empowerment	Groups	154245.969	4	38561.492	1055.923*	.000
	Within Groups	1256882.229	34417	36.519		
	Total	141128.198	34421			

Table 24.

Listing of levels of satisfaction between job-types for employee empowerment

Dependent Variable	Most Satisfied			Least Satisfied
Competence	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Meaningfulness	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Impact	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*
Empowerment	Managers*	Salary Non-Mgmt*	Engineers*	Hourly*

* - significant at the 0.01 level

Hypothesis 4c investigated if there was no significant difference in the perception of employee satisfaction by the different job-type categories. The survey results were segregated by job-types and compared against the two questions from the employee satisfaction component. The ANOVA procedure resulted in an F (4, 35159) = 337.142, $p < .01$. Additionally, the Bonferroni test indicated that managers were significantly more satisfied than salary nonmanagement, who were significantly more satisfied than hourly employees, who were in turn significantly more satisfied than engineers. The engineers and hourly employees switched ordinal position when compared to both employee involvement and employee empowerment. It is possible this is a causal effect of not having choice loaded in the analysis, or exogenous factors outside this model. Nonetheless, based on the ANOVA and the Bonferroni test, Hypothesis 4c ($H4c_o$) was rejected and the alternative $H4c_A$ was supported.

Hypotheses 5a, 5b, 5c, and 5d

The Hypothesis 5 group investigated the relationship between the four employee involvement processes and overall employee involvement. Procedurally, each separate process was tested against the remainder of the employee involvement processes to limit co-linearity. For example, when testing the power process against overall employee involvement, the three survey questions on power were eliminated from the overall employee involvement survey questions, leaving only the information, knowledge, and reward process survey questions. This procedure was repeated for all employee involvement processes.

Specifically, Hypothesis 5a stated there is no significant relationship between the level of information received by an employee and the level of employee involvement. SPSS was used to perform a correlation analysis. . The Pearson product-moment correlation coefficient between information and employee involvement was $r = .768$, $p < .01$, indicating a statistically significant relationship. Because of the significant correlation coefficient, Hypothesis 2 was rejected.

Hypothesis 5a stated there is not a significant relationship between the level of information received by an employee and the level of employee involvement. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between information and employee involvement was $r = .768$, $p < .01$, indicating there is a significant relationship between information and employee involvement. Because of the significant correlation coefficient, Hypothesis 5a ($H5a_o$) was rejected and the alternative $H5a_A$ was supported.

Hypothesis 5b indicated there is not a significant relationship between the level of knowledge of an employee and the level of employee involvement. SPSS was used to perform a

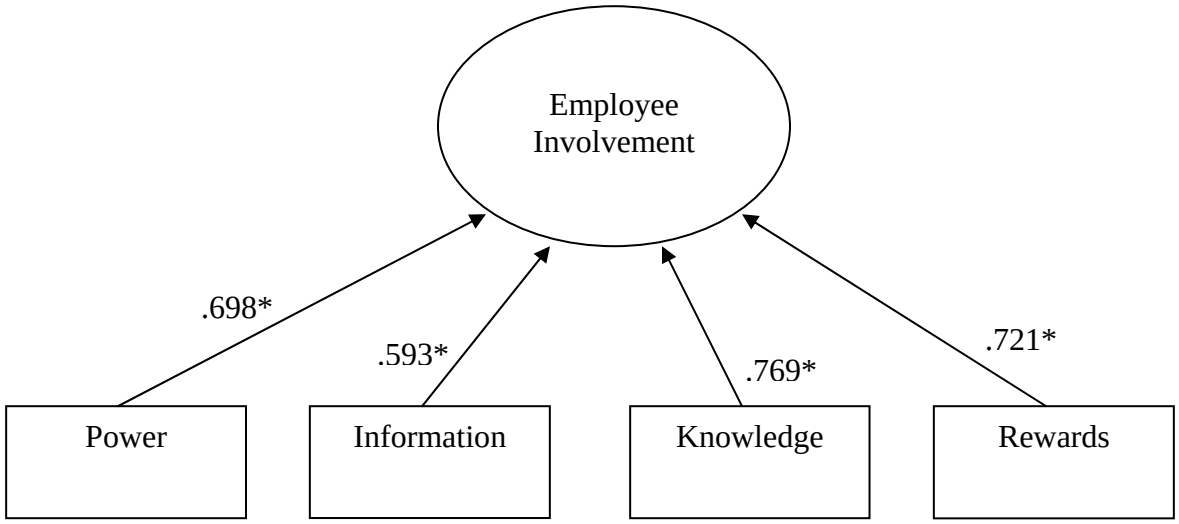
correlation analysis. The Pearson product-moment correlation coefficient between information and employee involvement was $r = .852$, $p < .01$, indicating there is a significant relationship between knowledge and employee involvement. Because of the significant correlation coefficient, Hypothesis 5b ($H5b_o$) was rejected and the alternative $H5b_A$ was supported..

Hypothesis 5c stated there is not a significant relationship between the level of information power of an employee and the level of employee involvement. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between information and employee involvement was $r = .827$, $p < .01$, indicating there is a significant relationship between power and employee involvement. Because of the significant correlation coefficient, Hypothesis 5c ($H5c_o$) was rejected and the alternative $H5c_A$ was supported.

Finally, Hypothesis 5d investigated the relationship between stated there is not a significant relationship between the level of rewards received by an employee and the level of employee involvement. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between information and employee involvement was $r = .689$, $p < .01$, indicating there is a significant relationship between rewards and employee involvement. Because of the significant correlation coefficient, Hypothesis 5d ($H5d_o$) was rejected and the alternative $H5d_A$ was supported. The relationship between all four sub-parts of Hypothesis 5 is illustrated in Figure 16.

The results of Hypothesis 5 are consistent with the Corrigan (1998) study. The coefficient for information (.593) is lower than the coefficient (.857) found by Corrigan. The coefficient for knowledge (.769) is similar to the coefficient (.716) in the Corrigan analysis. The coefficient for power (.698) is lower than the coefficient (.825) found by Corrigan. Finally, the

coefficient for rewards (.721) is lower than the coefficient (.857) found in the Corrigan study. All Pearson product-moment correlation coefficients in the Corrigan study were also statistically significant at the .01 level.



* - Significant 0.01 level (two-tailed)

Figure 16. The relationship between the four involvement processes and employee involvement.

Hypotheses 6a, 6b, 6c, and 6d

The Hypothesis 6 group investigated the relationship between the four employee empowerment cognitions and overall employee empowerment. As was performed in the analysis for Hypothesis 5, each separate cognition was tested against the remainder of the employee empowerment cognitions processes to limit co-linearity. For example, when testing the competence cognition against overall employee empowerment, the three survey questions on

competence were eliminated from the overall employee empowerment survey questions. This procedure was repeated for all employee involvement processes.

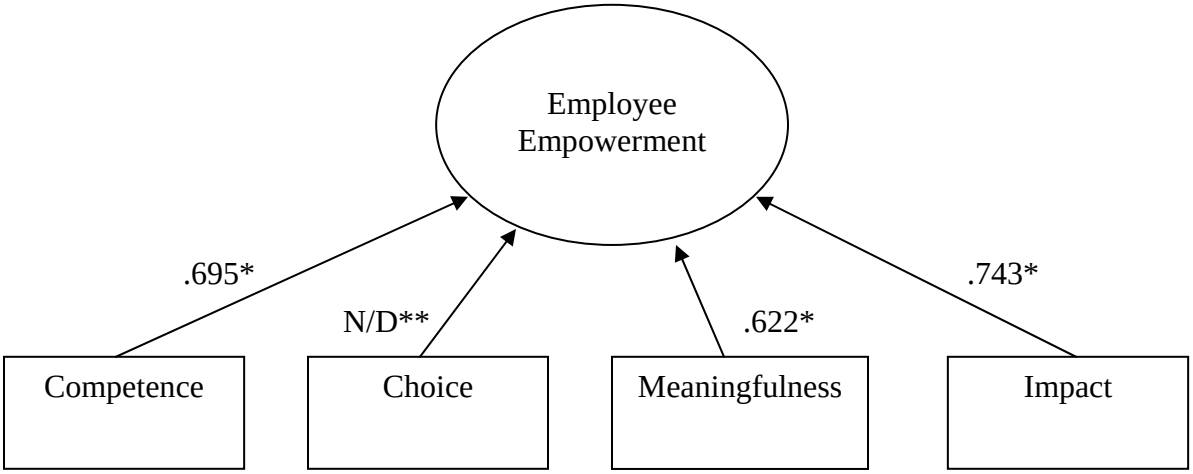
As mentioned previously, no questions for the employee empowerment cognition of choice were determined in the factor analysis. For this reason, Hypothesis 6b: there is not a significant relationship between the level of choice in an employee's job and the level of employee empowerment cannot be tested.

Specifically, Hypothesis 6a stated there is not a significant relationship between the level of meaning in an employee's job and the level of employee empowerment. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between information and employee involvement was $r = .811$, $p < .01$, indicating there is a significant relationship between the level of meaning and employee empowerment. Because of the significant correlation coefficient, Hypothesis 6a ($H6a_o$) was rejected and the alternative $H6a_A$ was supported.

Hypothesis 6c stated there is not a significant relationship between the level of impact in an employee's job and the level of employee empowerment. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between information and employee involvement was $r = .741$, $p < .01$, indicating there is a significant relationship between the level of impact and employee empowerment. Because of the significant correlation coefficient, Hypothesis 6c ($H6c_o$) was rejected and the alternative $H6c_A$ was supported.

Hypothesis 6d indicated there is not a significant relationship between the level of competence in an employee's job and the level of employee empowerment. SPSS was used to perform a correlation analysis. The Pearson product-moment correlation coefficient between

information and employee involvement was $r = .770$, $p < .01$, indicating there is a significant relationship between competence and employee empowerment. Because of the significant correlation coefficient, Hypothesis 6d ($H6d_o$) was rejected and the alternative $H6d_A$ was supported. The relationship between the sub-parts of Hypothesis 6 is illustrated in Figure 17.



* - Significant 0.01 level (two-tailed)

N/D** - No data were available for this cognition

Figure 17. The relationship between the four cognitions of empowerment and employee empowerment

The results of Hypothesis 6 are consistent with other studies including Brossoit (2000), Corrigan (1998), and Spreitzer (1995). The coefficient for meaningfulness (.811) is similar to the coefficient (.813) found by Corrigan, greater than the coefficient (.720) found by Spreitzer, and greater than the coefficient (.600) of the Brossoit study. The coefficient for impact (.741) is similar to the coefficient (.797) in the Corrigan analysis, less than the coefficient (.920) found by Spreitzer, and less than the coefficient (.860) in the Brossoit study. Last, the coefficient for competence (.770) is greater than the coefficient (.644) found in the Corrigan study, greater than the coefficient (.580) found by Spreitzer, and greater than the coefficient (.560) from the Brossoit study. As was the case in this analysis, all Pearson product-moment correlation coefficients in the Corrigan study, the Spreitzer study, and the Brossoit study were statistically significant at the .01 level. The lack of survey questions for the choice cognition could have had an impact on the correlations; nonetheless, the findings are similar to the previous studies from the perspective that all relationships were found to be significant.

Summary

A qualitative and quantitative approach to survey data collected at a division of a Fortune 100 manufacturing in 2003 was taken to understand the relationships between employee involvement, employee empowerment, employee satisfaction, and the intent to remain at the job. Further, involvement, empowerment, and satisfaction were examined among four specific job-types within the organization: (a) managers, (b) salary nonmanagement, (c) engineers, and (d) hourly employees.

Significant relationships were found between employee involvement to employee empowerment, employee empowerment to employee satisfaction, and employee satisfaction to

the intent to remain with the company. Differences were found between the levels of satisfaction among the four job-types when considering employee empowerment and employee satisfaction; however, the results regarding employee involvement were mixed. The four processes described by Lawler (1986) of employee involvement were found to be significantly related to employee involvement. Only three of the four cognitions defined by Thomas and Velthouse (1990) were able to be tested within the constraints of this analysis; however, all three of the cognitions tested were found to significantly relate to employee empowerment. These quantitative analyses are described in Tables 25a and 25b. Additionally, a representation of the full model tested with the respective Pearson product-moment correlation coefficients are illustrated in Figure 18.

The qualitative approach to this study involved the coding of over 19,000 comments from employees participating in the survey. One a job-type was established, the comments were segregated by major category within the scope of this analysis: (a) employee involvement, (b) employee empowerment, (c) employee satisfaction, and two other categories—job security/exogenous and management/other. 65% of the comments from the survey were coded into the three relevant categories.

Information and rewards were key elements within employee involvement, especially with salary nonmanagement, engineers, and hourly workers. The comments supplied by managers appeared to be more positive than the other three job-types. The competence cognition within employee empowerment was of particular interest to engineers, who felt management policies were diluting the skills of their job-type. Managers and salary nonmanagement also expressed this concern, but not to the same extent or to the same level as the engineers. Again,

Table 25a.

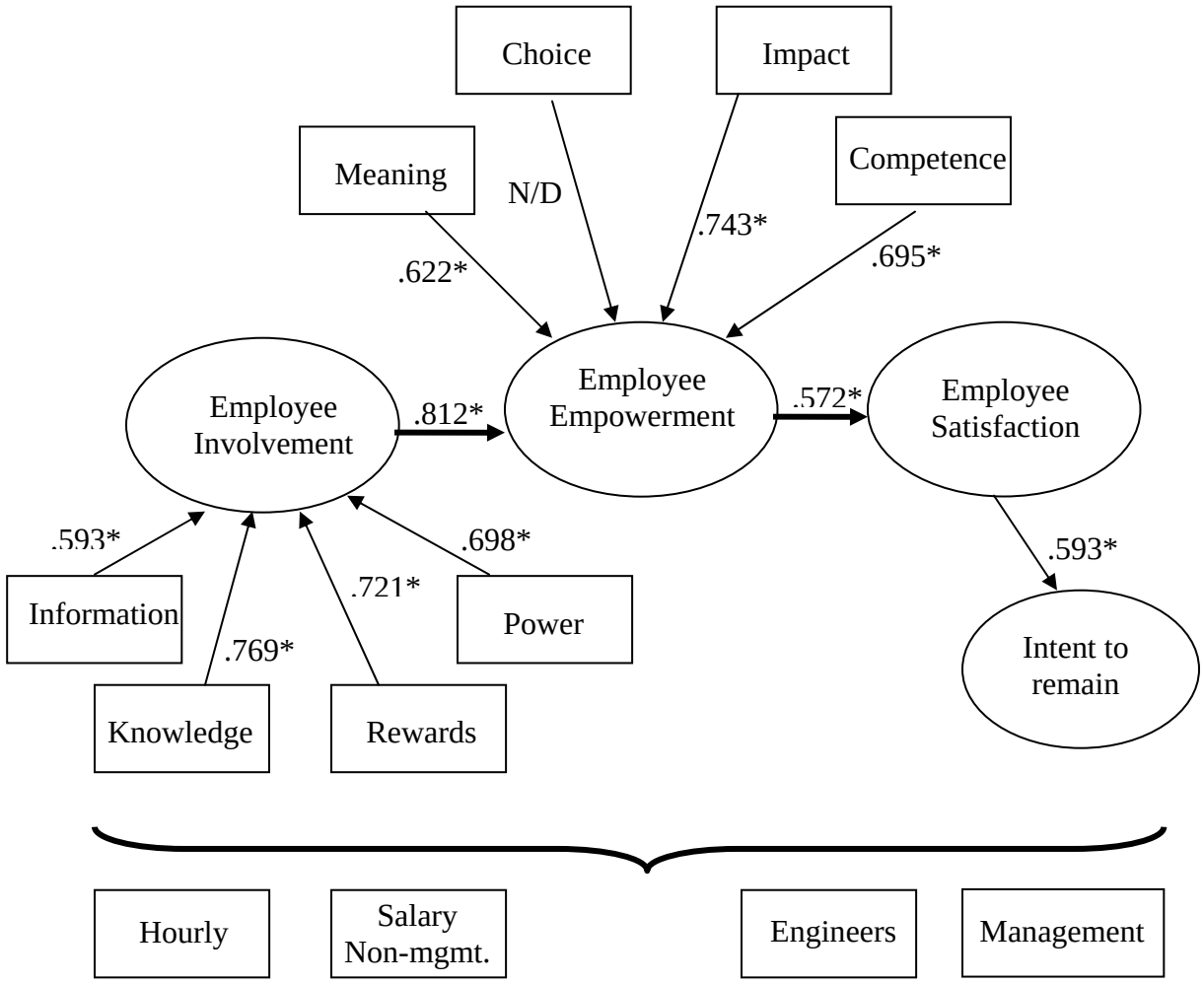
Summary of findings from this study

Hypothesis tested	Results
There is not a significant relationship between the level of employee involvement and the level of employee empowerment	A significant relationship $r = .812$, $p < .01$ was found between employee involvement and employee empowerment
There is not a significant relationship between the level of employee empowerment and the level of employee satisfaction.	A significant relationship $r = .572$, $p < .01$ was found between employee empowerment and employee satisfaction
There is no significant relationship between the level of employee satisfaction and the level of intention to remain with the company	A significant relationship $r = .593$, $p < .01$ was found between employee satisfaction and the intent to remain
There is no significant difference in the perception of employee involvement by the different job-type categories	A significant difference $F = 873.950$, $p < .01$ was found between job-types; however, post hoc test on specific processes were inconclusive
There is no significant difference in the perception of employee empowerment by the different job-type categories	A significant difference $F = 1055.923$, $p < .01$ was found between job-types; post hoc and ANOVA performed on cognitions also support conclusion
There is no significant difference in the perception of employee satisfaction by the different job-type categories	A significant difference $F = 337.142$, $p < .01$ was found between job-types
There is no significant relationship between the level of information received by an employee and the level of employee involvement	A significant relationship $r = .768$. $p < .01$ was found between information and employee involvement

Table 25b.

Summary of findings from this study

Hypothesis tested	Results
There is no significant relationship between the level of knowledge of an employee and the level of employee involvement	A significant relationship $r = .852$ $p < .01$ was found between knowledge and employee involvement
There is no significant relationship between the level of power of an employee and the level of employee involvement	A significant relationship $r = .827$ $p < .01$ was found between power and employee involvement
There is no significant relationship between the level of information received by an employee and the level of employee involvement	A significant relationship $r = .768$, $p < .01$ was found between information and employee involvement
There is no significant relationship between the level of meaning in an employee's job and the level of employee empowerment	A significant relationship $r = .811$, $p < .01$ was found between meaningfulness and employee empowerment
There is no significant relationship between the level of choice in an employee's job and the level of employee empowerment	No questions for this cognition were found through the factor analysis; this hypothesis was not tested
There is no significant relationship between the level of impact in an employee's job and the level of employee empowerment	A significant relationship $r = .741$, $p < .01$ was found between impact and employee empowerment
There is no significant relationship between the level of competence in an employee's job and the level of employee empowerment	A significant relationship $r = .770$, $p < .01$ was found between competence and employee empowerment



* - significant at the .01 level (two-tailed)

N/D – No data available

Figure 18. The Pearson product-moment correlation coefficients found in the present study

manager comments appeared to be less negative than salary nonmanagement, engineers, and hourly employees. Overall satisfaction again had managers with the least negative responses, and appeared to be generally more satisfied than salary nonmanagement, engineers, and hourly employees. These perceptions are listed in Table 26.

Table 26.

Satisfaction levels of employees as interpreted through qualitative analysis

Category	Most Satisfied			Least Satisfied
Employee involvement	Managers	Salary non-mgmt	Engineers	Hourly
Employee empowerment	Managers	Salary non-mgmt	Hourly*	Engineers*
Employee satisfaction	Managers	Salary non-mgmt	Engineers*	Hourly*

* - The results of the qualitative analysis are not consistent with the results of the quantitative analysis in these areas. In both cases the order is switched.

When comparing the ordinal data between qualitative and quantitative information, a change in the order appears in both employee empowerment and employee satisfaction between engineers and hourly workers. ANOVA and Bonferroni tests indicate engineers are more satisfied than hourly workers in employee empowerment and that hourly workers are more satisfied than engineers in overall employee satisfaction. Comments on employee empowerment would suggest the concern in the competence cognition has an important negative impact on satisfaction, whereas quantitative data do not support this. Further, the trust issues and feelings

of hopelessness among some hourly employee comments in the employee satisfaction area would suggest less overall satisfaction than engineers. This does not suggest one is more correct than the other; rather, it indicates there are important concerns that may not be able to be expressed as well in either words or Likert scales. Nonetheless, across all categories, engineers and hourly workers are consistently less satisfied than both managers and salary nonmanagement employees.

CHAPTER 5. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

This study addressed several issues in the work environment as they relate to an international business unit of a Fortune 100 manufacturing company. Previous studies involved analysis on components of this research and in different business settings. In reviewing other studies for this analysis, there appeared to be an absence of discussion when describing the relationships between employee involvement, employee empowerment, employee satisfaction, and the intent to remain with the company in a large company with several specific job-types.

Specifically, the purpose of this study was to determine the affects of employee involvement on employee empowerment, employee empowerment on employee satisfaction, and employee satisfaction on the intent to remain at the company. Further—and perhaps more importantly—the study also determined the difference between the opinions four separate job types had on employee involvement, employee empowerment, and employee satisfaction. The four job-types tested in this study were: (a) managers, (b) salary nonmanagement, (c) engineers, and (d) hourly employees. An examination of the four processes of involvement identified by Lawler (1986) was tested against overall employee involvement. Finally, the cognitions of empowerment described by Thomas and Velthouse (1990) were tested against overall empowerment. One of the four cognitions, choice, was not available to be examined because the questions from the COMPANY employee opinion survey did not represent this facet. For this reason, one sub-hypothesis was not tested in the study.

Data used for the study was selected from an employee opinion survey conducted between May 12, 2003 and June 6, 2003 by an international division of a Fortune 100 manufacturing company. Employee participation was on company time and voluntary;

employees were invited to participate through various methods, including interoffice correspondence and management coaching. The survey being used by the specific business unit examined in this analysis consists of fifty questions, although only twenty-seven were determined to be within the scope of this analysis.

35,614 participants responded to the employee survey, accounting for approximately 69% of the business unit population. In addition to the quantitative portion of the survey, an open-ended question was asked at the end of the survey. Over 19,600 responses were given to this question: "In your view, what are the two or three most important issues that need to be addressed in your operating group?" 55% of the respondents filling out the quantitative portion of the survey also included written comments. Both percentages were deemed to be acceptable representations of the population of this company for adequate analysis.

Employees completing the survey were also asked to identify their job-type by a code given to them by the company, program/business unit, function, and location. Only job-type demographic information was relevant to this study; therefore, other information was not included in this study. From these data, both qualitative and quantitative analyses were performed.

Using the employee involvement processes identified by Lawler (1986) and the employee empowerment cognitions defined Thomas and Velthouse (1990) specific questions from the survey were identified and combined to differentiate these characteristics within the constraints of the existing survey questions. Statistical techniques were used to determine validity and reliability of the questions. From these analyses, thirteen questions were selected for employee involvement, nine questions were selected for employee empowerment, two questions were

selected for employee satisfaction, and one question was selected for the intent to remain with the company.

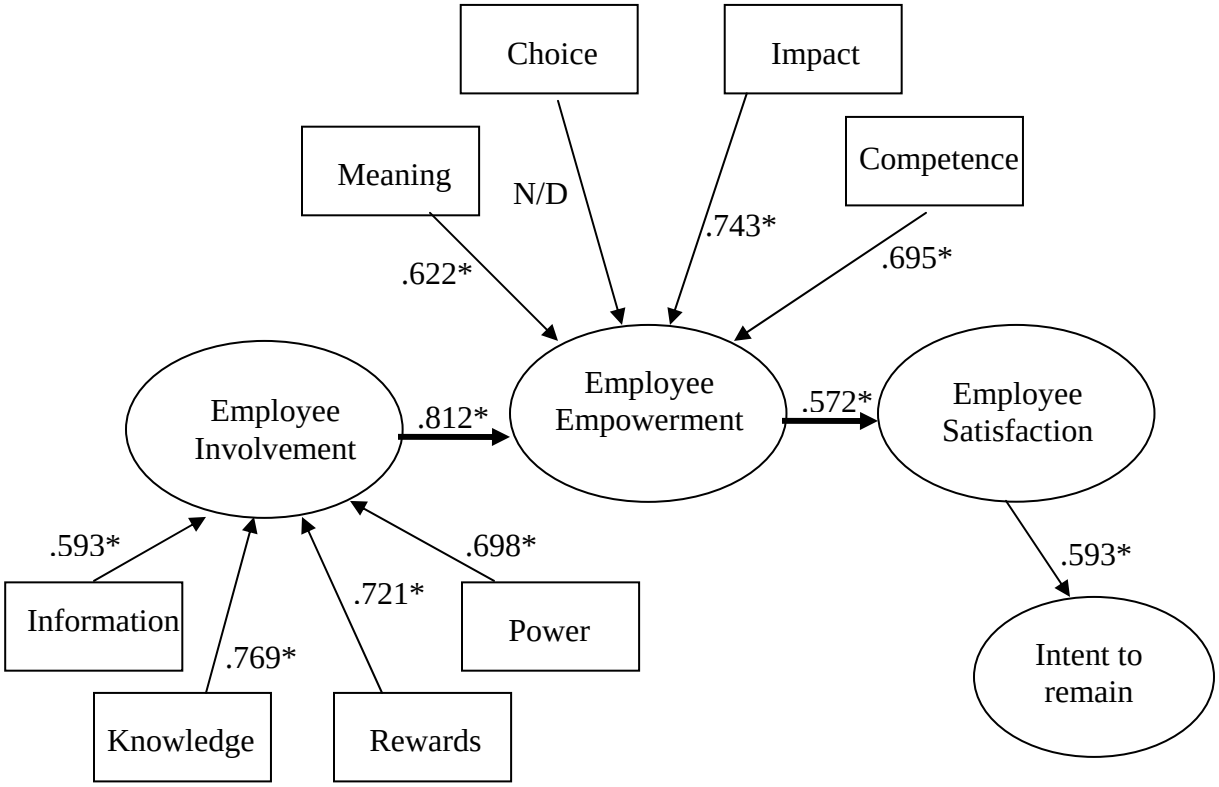
Results

Overview

One of the more significant contributions made within the present study is the combination of all relationships as they pertain to employee involvement, employee empowerment, and employee satisfaction, and the intent to remain with the company in a large manufacturing setting. Previous studies have either tested components of this relationship or tested the relationships in other business environments. The present study found a moderate to strong relationship throughout the model in the first three hypotheses tested. A graphical representation of this relationship is demonstrated in Figure 19.

Qualitative results

The comments received through the survey were segregated by job-type and then coded into categories: (a) employee involvement, (b) employee empowerment, (c) employee satisfaction, and two other categories (d) management/other and (e) job security/exogenous. 64.7% of the comments were coded into the three categories relevant to this study. Several of the comments contained multiple items; therefore, the final number of comments grew from 19,600 to over 24,947. Generally, the comments from managers were less negative than the other three job-types, followed by salary nonmanagement. Depending on the topic, either engineers or hourly employees appeared to be the least satisfied.



* - significant at the .01 level (two-tailed)

Figure 19. The correlations tested and found within the framework of this study.

Within employee involvement, several comments involved the use of information. All employees were concerned with communication, use and accuracy of metrics, and the relationship between information being used to make decisions and the company direction. The rewards process was also discussed by many employees, but especially the non-managers. Many employees were concerned about the linkage between pay and performance, and specifically

about the COMPANY employee incentive plan that is not available for employees represented by a union.

Engineers were the most vocal job-type regarding employee empowerment. The most common concern involved the competence cognition of employee empowerment. Many engineer employees felt there was a combination of circumstances that made the loss of essential skills a significant risk on employees and the company. Managers and salary nonmanagement employees also shared this concern but not to the same degree. Hourly employees had minimal comment on this issue. All job-types specified flattening the management structure as a potential solution to enhance empowerment. Additionally, there were several comments linking employee involvement and employee empowerment.

Morale, trust, and diversity issues were prevalent within employee satisfaction. Again, managers appeared to have less negative comments than the other three job-types, followed by engineers and hourly employees. Many of the comments from hourly employees were passionate about trust and the company. All job-types considered morale to be a large issue, and diversity was mentioned among several employees. A relationship between employee empowerment and employee satisfaction was made on many comments.

Management/Other and Job security/exogenous accounted for 35.3% of the comments. The distinction that segregated these categories from the other three was the management/other comments involved concerns outside the scope of the three components tested within the study. For instance, if job security was related to the economy or other conditions outside the direct control of the company, they were placed in this category. If, however, the job security comment was related to actions perceived by the employee to be within the control of the company, they

would be coded in one of the three categories within this study based on the content of the comment. Management/other comments were coded in the same way.

Quantitative results

Employee involvement and its relationship to employee empowerment. Using the group of questions for employee involvement and for employee empowerment, a correlation analysis was performed between the two components and a significant relationship ($r = .812$, $p < .01$) was found between employee involvement and employee empowerment. This relationship is consistent with other studies performed in different job-settings, such as smaller manufacturing firms and service industries (Bowen & Lawler, 1995; Corrigan, 1998; Daily & Bishop, 2003; Pun, Chin, & Gill, 2001; Spreitzer, 1995).

Employee empowerment and its relationship to employee satisfaction. Using the group of questions for employee empowerment and the two questions identified for employee satisfaction, a correlation analysis was performed between the two components and a significant relationship ($r = .572$, $p < .01$) was found between employee empowerment and employee satisfaction. This relationship was consistent with other studies previously conducted in different settings (Bandura, 1986; Hackman & Oldham, 1980; Spector, 1986; Spreitzer, 1995; Ugboro & Obeng, 2000).

Employee satisfaction and its relationship to the intent to remain with the company. Using the two questions for employee satisfaction and the question for intent to remain with the company, a correlation analysis was performed between the two components and a significant relationship ($r = .593$, $p < .01$) was found between employee satisfaction and the intent to remain

with the company. This relationship was consistent with previous analyses in this area (Carsten & Spector, 1987; Currivan, 1999; Eagly, 1965; Lawler, 1992; Lawler & Mueller, 1996; Scott, Bishop, & Chen, 2003).

Comparison of the four job-type categories with respect to employee involvement, employee empowerment, and employee satisfaction. An analysis of variance was performed to test the difference between managers, salary nonmanagement, engineers, and hourly employees on their satisfaction of employee involvement. The thirteen questions found to represent employee involvement were used for this analysis. A significant difference was found between the four job-types (F (4, 33304) = 873.950. $p < .01$). A further test was performed to understand the differences between the groups. A significant difference was found between all job-types with respect to employee involvement, with managers being the most satisfied (M = 28.18, SD = 8.051), followed by salary nonmanagement (M = 32.34, SD = 8.577), engineers, (M = 34.39, SD = 8.275), and hourly employees (M = 37.77, SD = 9.636). When the same test was performed by employee involvement process, a significant difference in the satisfaction was found among all processes and job-types with the exception of (a) power, where there was not a significant difference between salary nonmanagement and engineers, and (b) rewards, where there was not a significant difference between engineers and hourly employees.

An analysis of variance was performed to test the difference between managers, salary nonmanagement, engineers, and hourly employees on their satisfaction of employee empowerment. The nine questions found to represent the available cognitions of employee empowerment were used for this analysis. A significant difference was found between the four job-types (F (4, 34417) = 1055.923, $p < .01$). Additionally, a post hoc test was performed to

understand the differences between the groups. A significant difference was found between all job-types with respect to employee empowerment, with managers being the most satisfied (M = 17.41, SD = 4.895), followed by salary nonmanagement (M = 20.50, SD = 5.714), engineers, (M = 21.64, SD = 5.673), and hourly employees (M = 24.50, SD = 6.861). When the same test was performed by employee involvement process, a significant difference in the satisfaction was found among all processes and job-types.

An analysis of variance was performed to test the difference between managers, salary nonmanagement, engineers, and hourly employees on their satisfaction of employee satisfaction. The two questions found to represent employee satisfaction were used for this analysis. A significant difference was found between the four job-types (F (4, 35159) = 337.142, p < .01). Additionally, a post hoc test was performed to understand the differences between the groups. A significant difference was found between all job-types with respect to employee involvement, with managers being the most satisfied (M = 2.15, SD = 0.95), followed by salary nonmanagement (M = 2.49, SD = 1.01), hourly employees (M = 2.78, SD = 1.13), and engineers, (M = 2.83, SD = 0.96). When the same test was performed by employee involvement process, a significant difference in the satisfaction was found among all processes and job-types.

Interestingly, the order of satisfaction among groups varied from both employee involvement and employee empowerment. For employee involvement and employee empowerment, the order of satisfaction was: (a) managers, (b) salary nonmanagement, (c) engineers, and (d) hourly employees; for employee satisfaction, the order of satisfaction was: (a) managers, (b) salary nonmanagement, (c) hourly employees, and (d) engineers.

Comparison of the four involvement processes and their relationship to employee involvement. Correlation analyses were used to understand the relationship between the four employee involvement processes as defined by Lawler (1986) and employee involvement. Significant relationships were found between employee involvement and all four processes: (a) information ($r = .593$, $p < .01$), (b) knowledge ($r = .769$, $p < .01$), (c) power ($r = .698$, $p < .01$), and (d) rewards ($r = .721$, $p < .01$). These results were consistent with a previous study on this relationship (Corrigan, 1998).

Comparison of the four empowerment cognitions and their relationship to employee empowerment. Correlation analyses were used to understand the relationship between the three employee empowerment processes as defined by Thomas and Velthouse (1990) and employee empowerment. One cognition—choice—was not available for analysis because there were no questions within the survey instrument that adequately described this cognition. Significant relationships were found between employee empowerment and the three available cognitions: (a) meaningfulness ($r = .622$, $p < .01$), (b) competence ($r = .695$, $p < .01$), and (c) impact ($r = .743$, $p < .01$). These results were consistent with previous studies on this relationship (Brossoit, 2000; Corrigan, 1998: Spreitzer, 1995).

Discussion

Employee involvement

The present study concluded the four processes of employee involvement were significantly related to employee involvement. Information and rewards had a considerable amount of comments from employees; however, knowledge ($r = .769$, $p < .01$) had the strongest

relationship to employee involvement. With the impact of the economy, several thousand employees were laid off from COMPANY. In most instances, especially in those job-types represented by a union, there is a relationship between seniority and the employee to be retained. More senior employees have more experience and training on the job than junior employees; therefore, the relationship between knowledge and employee involvement could be affected by the current business conditions of the company. This is not to dismiss the importance of knowledge to employee involvement but it may help explain the strong relationship at COMPANY.

While it was significant, information had the least relation ($r = .593$, $p < .01$) to employee involvement of the four processes. Reviewing the comments across all job-types, information was an essential component of employee involvement. There were compelling concerns on the velocity, the vertical integration, and the accuracy of information within the company. A potential explanation for the low relationship between the two items is the negative experiences perceived by the employees with regard to the information process. The company could explore the information processes to understand and discover potential ways to improve the employee perception and by these actions could increase employee involvement.

Rewards ($r = .721$, $p < .01$) was strongly associated with employee involvement. Employee comments indicated a need to feel appreciated by their management, employee benefits, and an overwhelming desire to participate in pay for performance. The CEIP is not available to union represented employees. The perception among those not able to participate in CEIP was that they should be included in the participation of this incentive plan. There was no indication that the employees would be willing to accept some risk for this potential reward.

Overall, the compensation level among employees is above average; therefore, some concession would most likely have to be made by the unions and their represented employees with respect to guaranteed benefits in order to participate in a pay for performance plan. Other forms of recognition, as well as the satisfaction of most employee benefits were most likely the key facets for the strong correlation.

It should be noted that pay as a source of employee satisfaction has often been dismissed within this company because of quantitative data indicating a low relationship between it and employee satisfaction. Pay is often dismissed as a motivator by managers because of this perception. Based on the comments from the open-ended question, a potential reason there is not a strong relationship between pay and employee satisfaction in quantitative data is that many employees do not relate pay to performance. If employees believed there was a relationship between pay and performance, involvement would increase, affecting empowerment and eventually employee satisfaction.

Generally speaking, the questions found through the psychometric factor analysis for employee involvement were stronger than the questions perceived to relate to employee empowerment for this study. The employee empowerment questions were especially limited in the respect that no choice cognition questions were found within the COMPANY survey. It is possible that the relationship between employee involvement and employee satisfaction—especially within the large manufacturing environment—may warrant additional investigation outside the scope of the proposed model.

The relationship between employee involvement and employee empowerment

The strongest relationship in all those tested within the present study was the correlation between employee involvement and employee empowerment. While this is consistent with previous analyses, the degree of strength is higher than other studies analyzed prior to this research. Within COMPANY, there are efforts to increase the levels of participation among all employees, described as "employee engagement." Employee engagement uses many of the processes of involvement as enablers to enlist employees, which is considered to be more of a cognitive outcome. The combination of these concepts within the employee engagement process could explain the high degree of relation between employee involvement and employee empowerment.

COMPANY is not unique in this combination of terms, as several studies interchange the use employee involvement and employee empowerment (Collins, 1994; Denton, 1994; Lawler & Mohrman, 1992; Ogden, 1992; Plunkett & Fournier, 1991; Wagner, 1994). Nonetheless, a distinction does exist within the context of this study, with the fundamental delineation being a psychological one and is in agreement with the distinction Psoinos and Smithson (2002) made:

> The major difference between these concepts is related to the "transfer" of decision-making authority. Whereas in both involvement and participation, management retains control, in empowerment employees have—at least to some degree—authority to make and implement heir own decisions. (p. 133)

Using this description, and within the context of the present study, employee involvement is an important enabler to employee empowerment, and would be a facilitator for employee engagement at COMPANY.

Employee empowerment

As was the case with employee involvement, managers were the most satisfied job-type followed by salary nonmanagement, engineers, and hourly workers. Through all cognitions tested quantitatively and from the qualitative comments it was evident that managers had a greater sense of empowerment. Due in part to the economic downturn, many of the salary nonmanagement employees coded in this survey are former managers. This condition could influence the opinions on the survey; some may feel less empowered because of the loss of position. This perception does not appear to be prevalent, however, since salary nonmanagement were more satisfied than either engineers or hourly employees. Salary nonmanagement employees at COMPANY are given a high amount of autonomy, which partially explains the favorable responses in the survey.

Of the cognitions tested in this study, impact had the strongest correlation ($r = .743$, $p < .01$). Within the four job-types, only managers had impact as the most satisfied cognition. The other three job-types were most satisfied with competence. Many of the comments, especially among the technical workforce, were on the topic of competence, which was also strongly related to empowerment ($r = .695$, $p < .01$). The ability to attract and retain skilled workers was a consistent comment among engineers. Managers and salary nonmanagement workers were interested in this, but not to the same extent. There was little discussion among the hourly employees on this topic. Most of their concern about job security was more related to the loss of American jobs as opposed to the effect on the company.

The loss of a choice cognition in the quantitative analysis was disappointing. The results of the study may have been altered; however, Spreitzer (1995) contended that the four cognitions

of employee empowerment are additive versus multiplicative. Because of this relationship, its exclusion did not impact the study to the extent a loss of an employee involvement process since Lawler (1986) argued their relationship is multiplicative. The comments from the open-ended question did highlight some salient points within this cognition. Organizational structure was a comment that was mentioned across all job-types and many of these ideas fit within the choice cognition. Choice, or self-determination as described by Spreitzer (1995), was perceived to be hindered through the current management reporting structure by nonmanagement employees. It was somewhat surprising that many managers concurred with this comment, although their comments did not include their level of management as part of the problem. Most managers were concerned with what they felt was an excessive amount of executive management, particularly in conjunction with the perception upper management had not reduced proportionately with the other job-types during the economic downturn. It would be interesting to see if this comment would exist in better business conditions.

The relationship between employee empowerment and employee satisfaction

This study found that employee empowerment is related to employee satisfaction (r = .572, $p < .01$), which is consistent with the findings of previous analyses (Corrigan, 1998; Spreitzer, 1995). While significant, the relationship was not as strong as the relationship between employee involvement and employee empowerment. It would appear from these data that employee satisfaction is impacted by factors outside this model to a larger extent than from employee empowerment; however, this does not diminish the importance of employee empowerment. Employee satisfaction can be improved through the proper assimilation of

empowerment, especially when considering the four separate cognitions as a tool to effectively identify areas for enhancement. Particular attention could be paid to the separate cognitions with respect to the job-types. Knowing which specific category of empowerment is important to employees can increase empowerment, which would positively affect employee satisfaction.

Employee satisfaction

The present study found that managers are more satisfied than the other three job-types. As was the case with employee involvement and employee empowerment, engineers and hourly employees were the least satisfied. The order of this satisfaction was changed, however, with hourly employees being more satisfied than engineers in overall employee satisfaction. This shift highlights the effect of facets exogenous to this model on employee satisfaction. One would expect to see the same ordinal relationship of satisfaction from employee empowerment if the relationship was the primary contributor.

These findings agreed with comments made by Motowidlo (1996), who argued there were three factors that could describe a large proportion of employee satisfaction: (a) the immediate work environment, (b) the social environment, and (c) the organizational environment. The immediate work environment and the organizational environment can be affected by employee empowerment and employee involvement.

The relationship between employee satisfaction and the intent to remain with the company

The intent to remain with the company is related to employee satisfaction, however, as is the case with the relationship between employee empowerment and employee satisfaction,

factors outside this model have more of determination. The economy, especially during the time in which this survey was conducted, could have been the more significant factor. This is consistent with other analyses (Carsten & Spector, 1987; Muchinsky & Morrow 1980; Muchinsky & Tuttle, 1979). For example, of the three determinants for turnover as described by Muchinsky and Morrow, (a) economic opportunity factors, (b) individual factors, and (c) work-related factors, only work related factors are considered in the present study. Muchinsky and Morrow concluded that economic opportunity factors, which included local and national unemployment conditions, had the strongest impact on the intent to leave. Employee satisfaction was found to be an antecedent to leaving, but the effect was not as strong as economic conditions. This study would agree with the findings of previous studies; employee satisfaction has a significant relationship to the intent to remain with the company, but it does not appear to be the most significant.

Limitations of the Present Study

As with any research, there are limitations that should be considered. First, this study was based on information collected at one point in time. A more representative view of the company culture and the attitudes surrounding the subject areas perhaps could have been better explained with a longitudinal approach. These data are available, as the company conducts the survey on an annual basis and many organizations within the company conduct internal "pulse" surveys on a more frequent basis, often quarterly. A portion of the questions may not be available from year to year as the company survey committee makes changes to the questions to examine specific topics.

Second, the results are based on data collected from a single business group of a single company. This may be less of a concern since the total population of the business group exceeds 50,000 employees and is an international Fortune 100 company. Further, while the employees are located across several sites in various regions of North America there remains a common link to a relatively homogeneous group of products that may bias the opinions of the participants. This bias could make the conclusions less portable to other types of companies in other types of business.

Third, while employees were informed the results of their surveys would be confidential and could not be traced back to the individual, several employees commented in the open-ended question that they believed there was not anonymity in the results of the survey. It is possible that other employees had the same perception and chose to alter their submittals. This could have falsely increased the levels of satisfaction among employees.

Fourth, the company indicated that participation in the survey was voluntary; however, there were a few comments in the open-ended question that stated that they were being forced by their manager to complete the survey in a work-group meeting. This potentially could have biased the results either negatively because of the feeling of not having free-will over participation, or positively if the manager was observing the employee complete the survey. Based on the small number of comments on this subject, it is not assumed that this practice is prevalent in the company.

Fifth, the effect of events in September 2001 had a significant impact to the industry in which COMPANY operates. A large percentage of layoffs occurred between 2001 and 2003, and the economic outlook was not optimistic at the time of this survey. Because of the relative

condition of this business compared to other businesses, the survey results could be more negative than other companies, reducing the potential for portability for these results.

Sixth, the survey questions used in this study are similar yet different than most studies focusing on employee involvement, employee empowerment, or employee satisfaction. The reliability and validity of the questions were determined to be acceptable within the context of this population. Nonetheless, the results could be less portable to other companies or other populations because of this difference.

Suggested Areas for Further Research

There are several directions for future research indicated in the present study. One important direction would be to explore the attitudes surrounding pay for performance among union employees to understand their willingness to trade guarantees for the potential rewards by sharing risk. Examining the difference in employee involvement and perception of employee involvement associated between employees that have pay for performance policies and those who do not would be interesting. This could help answer the puzzling relationship between pay and employee satisfaction at COMPANY.

Another possible direction would be to further analyze the relationship between management structure and the perception of employee empowerment. Since all job-types commented on this issue, it would be interesting to test this by job-type as a variable. Additionally, analysis on the impact of management layers to empowerment and the subsequent change in the relationship between empowerment to overall employee satisfaction would be an intriguing path. Concentrating on difference between job-types with special consideration for

technical workers would be a further focus of this type of analysis, especially given the comments from engineers regarding empowerment in this study.

Comparing the same population over a series of years in a longitudinal study would be another direction for further research. Questions regarding attitudes that could be strongly influenced by exogenous conditions such as the economy could be investigated. Cause and effect comparisons between initiatives put in place by COMPANY and employee satisfaction could be made to better understand their benefit.

The relationship between employee involvement and employee satisfaction in the large manufacturing environment could be another direction for further research. In businesses—such as the one examined in the present study—focused on processes and procedures, the psychological empowerment component may act as a filter versus an enabler to the conduit between these two facets. The correlation between employee involvement without the intermediate step of employee empowerment and employee satisfaction is worth investigation. Additionally, with the problematic distinction between structural empowerment and psychological empowerment, there may be conditions where the cognitions of employee empowerment may reduce the benefits of employee involvement with respect to employee satisfaction as opposed to enhancing the effect. This direct relationship is worth investigating, especially in cultures that are more systematic and procedurally oriented.

Finally, future research could be conducted on the groups of questions established within this study for employee involvement could be used outside COMPANY. Studies with other organizations in various business settings could be analyzed to determine if the relationships are

similar to those found within the company. Further, testing the significance of difference between job-types would be appealing.

Practical Implications and Conclusions

The concepts of employee involvement, employee empowerment, and employee satisfaction have been of interest to corporations throughout the world in an effort to discover relationships for exploitation. This study provides further evidence that employee involvement is related to employee empowerment, which is related to employee satisfaction and sequentially to the intent to remain with the company. It documents the importance including in the discussion the processes of employee involvement as well as the cognitions of employee empowerment, specifying which processes and cognitions have the most importance. Different processes and cognitions have more relevance depending on the job-type, especially when reviewing the qualitative data.

Employee involvement is dependent on the perception of all four processes. Previous research indicated the strongest relationship is with power, but this study concluded that information and rewards are equally as important. Employees felt the lack of clear communication and inaccurate data were inhibitors to employee involvement. Additionally, incentive plans and pay for performance were strongly related to the potential success of involvement. For a company to be successful, a harmony between the four processes must exist.

The present study also provides support for the strong relationship between employee involvement and employee empowerment. Further, empowerment should be decomposed into its cognitions for better definition and implementation. The data also revealed through the

comments from the open-ended questions that psychological empowerment can produce better results than structural empowerment, as the actual passion and emotion of the employees is essential in the success of this component. Many employees, including managers, still perceive empowerment from a structural perspective, and until a transition is made to psychological empowerment the full benefits cannot be achieved.

Employee involvement may be a more powerful enabler than through the integration with employee empowerment in some cases. This could be especially true in businesses that are process and procedural oriented. The power of employee involvement in relation to employee satisfaction and the intent to remain at the company should therefore not be discounted.

Empowerment and satisfaction are related and companies can realize benefits through implementing procedures that augment this linkage. This is especially true if retention of employees is important to the company. The root of employee satisfaction and the intent to remain with the company is the first stage of the process: employee involvement. Organizations who manage their efforts with respect to the four processes of employee involvement, perhaps through a balanced scorecard approach, should achieve more favorable results in employee satisfaction

REFERENCES

Abbott, J. (2002). Does employee satisfaction matter? A study to determine whether low employee morale affects customer satisfaction and profits in the business-to-business sector. *Journal of Communication Management, 4*, 333-339.

Adams, J. (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology, 68*, 422-436.

Allen-Meares, P. (1995). Applications of qualitative research: let the work begin. *Social Work Research, 1*, 5-7.

Al-Mashari, M. & Zairi, M. (2000). Revisiting BPR: a holistic review of practice and development. *Business Process Management Journal, 6*, 10-12.

Applebaum, E. & Batt, R. (1992). *The new American workplace*. Ithaca, NY: ILR Press.

Arora, R. (2003). Integrating KM to create a learning organization as Tata Steel. *KM Review, 4*, 10-11.

Ashforth, B. (1989) The experience of powerlessness in organizations. *Organizational Behavior and Human Decision Processes, 43*, 207-242.

Atchison, T. & Lefferts, E. (1972). The prediction of turnover using Herzberg's job satisfaction technique. *Personnel Psychology, 25*, 53-64.

Bacharach, S. & Lawler, E. (1980). *Power and politics in organizations*. San Francisco: Jossey-Bass.

Backeberg, P. (1995). The effects of level of training on employee perceived empowerment, commitment, and job performance. The University of Nevada, Las Vegas. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 1403062)

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*, 1175-1184.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Barbee, C. & Bott, V. (1991). Customer treatment as a mirror of employee treatment. *Advanced Management Journal, 1*, 27.

Bass, B. (1960). *Leadership, psychology, and organizational behavior*. New York: Harper & Row.

Bayfield, H. & Crockett, W. (1955). Employee attitudes and employee performance. *Psychological Bulletin, September*, 415-422.

Beach, L.& Mitchell, T. (1990). Image theory: A behavioral theory of decision making in organizations. In B. Staw & L. Cummings (Eds.), *Research in organizational behavior*. JAI Press, Inc.

Beer, V. (1991). Guerrilla tactics for employee empowerment. *Performance Improvement Quarterly, 4*, 62-70.

Belasco, J. & Stayer, R. (1994). Why empowerment doesn't empower: The bankruptcy of current paradigms. *Business Horizons, 2*, 29-42.

Bell, N. & Staw, B. (1989*).* People as sculptors versus sculpture. In Arthur, M., Hall, D., & Lawrence B. (Eds.) *Handbook of career theory*: 232-251. New York: Cambridge University Press.

Bennis, W. (1989). *Why leaders can't lead*. San Francisco: Harper & Row.

Bennis, W. & Nanus, B. (1985) *Leaders: The strategies of taking charge*. New York: Harper & Row.

Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.

Block, P. (1987). *The empowered manager*. San Francisco: Jossey-Bass.

Bluedorn, A. (1982). A unified model of turnover from organizations. *Human Relations, 2,* 135-153.

Bluestein, B. & Bluestein, I. (1992). *Negotiating the future: A labor perspective on American business*. New York: Basic Books.

Bowen, D. & Lawler, E. (1992). The empowerment of service workers: What, why, how and when. *Sloan Management Review, Spring*, 31-39.

Bowen, D. & Lawler, E. (1995). Empowering service employees. *Sloan Management Review, Summer*, 73-84.

Brief, A. & Aldag, R. (1981). The "self" in work organizations: A conceptual review. *Academy of Management Review, 1*, 75-88.

Brief, A. & Nord, W. (1990). *Meanings of occupational work*. Lexington, KY: Lexington Books.

Brockner, J. (1988). The effects of work layoffs on survivors: Research, theory, and practice. *Research in Organizational Behavior, 10*, 213-256.

Brossoit, K. (2000). Understanding employee empowerment in the workplace: Exploring the relationships between transformational leadership, employee perceptions of empowerment, and key work outcomes. Claremont Graduate University. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9984244)

Burger, J. (1992). *Desire for control: Personality, social and clinical perspectives.* New York: Plenum Press.

Burger, J. M. & Cooper, H. M. (1979). The desirability of control. *Motivation and Emotion, 3*, 381-393.

Burke, W. (1986). *Leadership as empowering others*. In Srivastva, S. (Ed.) Executive Power, 51-77. San Francisco: Jossey-Bass.

Busing, A. & Bissels, T. (1998). Different forms of work satisfaction: Concept and qualitative approach. *European Psychologist, 3*, 209-218.

Campbell, D. (2000). The proactive employee: Managing workplace initiative. The *Academy of Management Executive, 3*, 52-66.

Cappelli, P. & Sherer, P. (1988). Satisfaction, market wages, & labor relations: An airline study. *Industrial Relations, 1*, 56-73.

Carsten, J. & Spector, P. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of Applied Psychology, 3*, 374-381.

Church, A. & Waclawski, J. (1996). The effects of personality orientation and executive behavior on subordinate perceptions of workgroup enablement. *The International Journal of Organizational Analysis, 1*, 20-51.

Clark, A. & Oswald, A. (1996). Satisfaction and comparison income. *Journal of Public Economics, 3*, 359-381.

Cohen, S., Ledford, G., & Spreitzer, G. (1996). A predictive model of self-managing work team effectiveness. *Human Relations, 5*, 643-676.

Cohen-Rosenthal, E. & Burton, C. (1993). Mutual Gains: A guide to union-management cooperation (2nd ed.). Ithaca, NY: ILR Press.

Collins, D. (1994). The disempowering logic of empowerment. *Empowerment in Organizations, 2*, 1-18.

Conger, J. (1989). Leadership: The art of empowering others. *Academy of Management Executive, 1*, 17-24.

Conger, J. & Kanungo, R. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review, 13*, 471-482.

Cooper, D. & Schindler, P. (2001). *Business Research Methods* (7th ed.). New York: McGraw-Hill Irwin.

Cordery, J., Mueller, W., & Smith, L. (1991). Attitudinal and behavioral effects of autonomous group working: A longitudinal field study. *Academy of Management Journal*, 34, 464-476.

Corrigan, M. (1998). Employee involvement, psychological empowerment, and job performance in an applied setting. California School of Professional Psychology, San Diego. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9820081)

Corsun, D. & Enz, C. (1999). Predicting psychological empowerment among service workers: The effect of support-based relationships. *Human Relations, 2*, 205-224.

Cotton, J. (1993). *Employee involvement: Methods for improving performance and work attitudes*. Newbury Park, CA.: Sage Publications.

Cotton, J., Vollrath, D., Froggatt, K., Lengnick-Hall, M., & Jennings, K. (1988). Employee participation: Divers forms and different outcomes. *Academy of Management Review, 1*, 8-22.

Covey, S. (1999). Trust and transformation. *Incentive, 11*, 10-11.

Coye, R. & Belohlav, J. (1995). An exploratory analysis of employee participation. *Group & Organization Management, 20*, 4-17.

Crosby, P. (1992). *Quality is free: The art of making quality certain*. Mentor Books.

Crowther, J. (1957). Absence and turnover in the division of one company, 1950-1955. *Occupational Psychology, 31*, 256-269.

Crozier, M. (1964). *The bureaucratic phenomenon*. Chicago: University of Chicago Press.

Cummings, T. & Worley, C. (1993*). Organization development and change* (5th ed.). St. Paul, MN: West.

Currivan, D. (1999). The causal order of job satisfaction and organizational commitment in models of employee turnover. *Human Resource Management Review, 4*, 495-524.

Dahl, R. (1957). The concept of power. *Behavioral Science, 2*, 201-215.

Daily, B. & Bishop, J. (2003). TQM workforce factors and employee involvement: The pivotal role of teamwork. *Journal of Managerial Issues, 4*, 393-412.

deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.

Deci, E. (1975). *Intrinsic motivation*. New York: Plenum.

Deci, E.., Connell, J. & Ryan, R. (1989). Self-determination in a work organization. *Applied Psychology, 74*, 580-590.

Deci, E. & Ryan, R. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E. & Ryan, R. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology, 6*, 1024-1037.

Deming, W. (1986). *Out of the crisis*. Cambridge, MA: MIT Press.

Denton, D. (1994). Empowerment through involvement and participation: Ford's development and training program. *Empowerment in Organizations, 2*, 22-31.

Drucker, P. (1988). The coming of the new organization. *Harvard Business Review, January-February*, 45-53.

Eagly, R. 91965). Market power as an intervening mechanism in Phillips curve analysis. *Economica, 32*, 48-64.

Eisenberger, R., Huntington, R., Hutchinson, S. & Sowa, D. (1986). Perceived organizational support. *Psychology, 71*, 500-507.

Eisenberger, R., Rhoades, L., & Cameron, J. (1999). Does pay for performance increase or decrease perceived self-determination and intrinsic motivation? *Journal of Personality & Social Psychology, 5*, 1026-1040.

Ellickson, M. (2002). Determinants of job satisfaction of municipal government employees. *Public Personnel Management, 3*, 343-358.

Eskildsen, J. & Dahlgaard, J. (2000). A causal model for employee satisfaction. *Total Quality Management, 8*, 1081-1094.

Evans, J. & Lindsay, W. (1996). *The management and control of quality*. St. Paul: West Publishing Company.

Eylon, D. & Bamberger, P (2000). Empowerment cognitions and empowerment acts: Recognizing the importance of gender. *Group & Organization Management, 4*, 354-372.

Fairholm, G. (1998). *Perspectives on leadership: From the science of management to its spiritual heart.* Westport, CT: Quorum Books.

Ford, R. & Fottler, M. (1995). Empowerment: A matter of degree. *Academy of Management Executive, 3*, 21-31.

Fosam, E., Grimsley, M., & Wisher, S. (1998). Exploring models for employee satisfaction—with particular reference to a police force. *Total Quality Management, 9,* 235-247.

Foy, N. (1994). *Empowering people at work.* London: Gower.

Freeman, R. (1978). Job satisfaction as an economic variable. *American Economic Review, 2*, 135-141.

Freedman, S. & Phillips, J. (1985). The effects of situational performance constraints on intrinsic motivation and satisfaction: The role of perceived competence and self-determination. *Processes, 35*, 397-416.

French, W. (1974). *The personnel management process: human resource administration* (3rd ed.). Boston: Houghton Mifflin.

Fried, Y. (1991). Meta-analytic comparison of the job diagnostic survey and job characteristics inventory as correlates of work satisfaction and performance. *Journal of Applied Psychology, 76*, 690-697.

Fried, Y. & Farris, G. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology, 40*, 287-322.

Gagne, M. & Senecal, C. (1997). Proximal job characteristics, feelings of empowerment, and intrinsic motivation. *Journal of Applied Social Psychology, 14*, 1222-1240.

Gandz, J. & Bird, F. (1996). The ethics of empowerment. *Journal of Business Ethics, 15*, 383-392.

Gehart, B. (1987). How important are dispositional factors as determinants of job satisfaction? Implications for job design and other personnel programs. *Journal of Applied Psychology, 3*, 366-373.

Gibson, J., Ivancevich, J., & Donnelly, J. (1988). *Organizations: Behavior, structure, processes* (6th ed.) Homewood, IL: Irwin.

Gist, M. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of Management Review, 3*, 472-485.

Gist, M. & Mitchell, T. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review, 2*, 183-211.

Granger, C. (2001). Comparing methodologies used by statisticians and economists for research and modeling. *Journal of Socio-Economics, 1*, 7-14.

Griffeth, R. (1985). Moderation of the affects of job enrichment by participation: A longitudinal field experiment. *Organizational Behavior and Human Decision Processes, 35*, 73-93.

Hackman, J. & Oldham, G. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*, 250-279.

Hackman, J. & Oldham, G. (1980). *Work design*. Wellesley, MA: Addison-Wesley.

Hackman, J., Oldham, G., Janson, R., & Purdy, K. (1975). New strategies for enrichment. *California Management Review, 4*, 65-75.

Hackman, J. & Suttle, J. (Eds.) (1977). *Improving life at work*. Santa Monica, CA: Goodyear.

Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate Data Analysis (5th ed).* Upper Saddle River, NJ: Prentice Hall.

Harackiewicz, J., Manderlink, G. & Sansone, C. (1984). Rewarding pinball wizardry: Effects of evaluation and cue value on intrinsic interest. *Psychology, 47*, 287-300.

Harackiewicz, J. & Sansone, C. (1991). Goals and intrinsic motivation: You can get there from here. In Maehr, M. & Pintrich, P. (Eds.), *Advances in motivation and achievement: Goals and self regulatory processes*(Vol. 7, 21-49). Greenwich, CT: JAI Press.

Harmon, J., Scotti, D., Behson, S., Farias, G., Petzel, R., Neuman, J., & Keashly, L. (2003). Effects on high-involvement work systems on employee satisfaction and service costs in veterans healthcare. *Journal of Healthcare Management, 6,* 393-406.

Harrell, A. & Stahl, M. (1986). Additive information processing and the relationship between expectancy of success and motivational force. *Academy of Management Journal, 29,* 424-433.

Harris, T. (1992). Toward effective employee involvement: An analysis of parallel and self-managing teams. *Journal of Applied Business Research, 1,* 25-33.

Hart, P. (1999). Predicting employee life satisfaction: A coherent model of personality, work and nonwork experiences, and domain satisfactions. *Journal of Applied Psychology, 4,* 564-584.

Harter, J. & Schmidt, F. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 2,* 268-279.

Hartman, M. (2000). *The influence of practice organization form and payment sources on the job stress and satisfaction of dentists*. University of Sarasota. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9963932)

Hechler, P. & Wiener, Y. (1974). Chronic self-esteem as a moderator of performance consequences of expected pay. *Organizational Behavior & Human Performance, 1,* 9-10.

Herrenkohl, R., Judson, B., & Heffner, J. (1999). Defining and measuring employee empowerment. *Journal of Applied Behavioral Science, 3,* 373-389.

Herzberg, F. (1966). *Work and the nature of man*. Cleveland: World.

Herzberg, F. Mausner, B. Peterson, R., & Capwell, D. (1957). *Job attitudes: Review of research and opinion*. Pittsburgh, PA: Psychological Service of Pittsburgh.

Hinnings, C., Hickson, D., Pennings, J., & Schneck, R. (1974). Conditions of intra-organizational power. *Administrative Science Quarterly, 14,* 378-397.

Hirst, M. (1992). Creating a service driven culture globally. *International Journal of Contemporary Hospitality Management, 1,* 35-39.

Hoppock, R. (1935). *Job Satisfaction.* New York: Harper and Row.

House, R. (1977). Power and personality in complex organizations. *Research in Organizational Behavior, 10,* 305-357.

Howard, L. & Foster, S. (1999). The influence of human resource practices on empowerment and employee perceptions of management commitment to quality. *Journal of Quality Management, 1*, 5-22.

Hua, H., Chin, K., Sun, H., & Xu, Y. (2000). An empirical study on quality management practices in Shanghai manufacturing industries. *Total Quality Management, 8,* 1111-1122.

Huberman, A. & Miles, M. (1983). Drawing valid meaning from qualitative data: Some techniques of data reduction and display. *Quality and Quantity, 17*, 281-339

Hulin, C., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychology Bulletin, 97*, 233-250.

Iaffaldano, M. & Muchinsky, P. (1985). Job satisfaction and job performance: A meta analysis. *Psychological Bulletin, 2*, 251-273.

Iverson, R. (1992). Employee intent to stay: An empirical test of a revision of the Price and Mueller model. Unpublished doctoral dissertation, The University of Iowa.

Jaffe, D. & Scott, C. (1991). *Empowerment*. Menlo Park: Crisp Publications.

Jaffe, D., Scott, C. & Tobe, G. (1994). *Rekindling commitment*. San Francisco: Jossey-Bass.

Jung, K, Dalessio, A., Johnson, S. (1986). Stability of the factor structure of the job descriptive index. *Academy of Management Journal, 3*, 609-616.

Juran, J. (1989) *Juran on leadership for quality: An executive handbook*. New York: Free Press.

Kahn, R. (1960). Productivity and job satisfaction. *Personnel Psychology, Autumn*, 275-287.

Kanji, G. & Sa, P. (2002). Kanji's business scorecard. *Total Quality Management, 1*, 13-27.

Kanter, R. (1979). Power and failures in management circuits. *Harvard Business Review, 4*, 65-75.

Kanter, R. (1983). *The changemasters*. New York: Basic Books.

Kanter, R. (1989). The new managerial work. *Harvard Business Review, 66,* 85-92.

Kanungo, R. (1992). Alienation and empowerment: Some ethical imperatives in business. *Journal of Business Ethics, 11*, 77-86.

Kanungo, R. & Mendonca, M. (1996). *Ethical dimensions of leadership*. Thousand Oaks, CA: Sage Publications.

Kaplan, R. & Norton, D. (1992). The balanced scorecard—measures that drive performance. *Harvard Business Review, 1*, 71-79.

Kaplan, R. & Norton, D. (1993). Putting the balanced scorecard to work. *Harvard Business Review, 5*, 134-140.

Kaplan, R. & Norton, D. (1996a). Using the balanced scorecard as a strategic management system. *Harvard Business Review, 1*, 75-85.

Kaplan, R. & Norton, D. (1996b). Linking the balanced scorecard to strategy. *California Management Review, 1*, 53-79.

Kaplan, R. & Norton, D. (2000). Having trouble with your strategy? Then map it. *Harvard Business Review, 5*, 167-176.

Kaplan, R. & Norton, D. (2001a). Transforming the balanced scorecard from performance management to strategic management: Part I. *Accounting Horizons, 1*, 87-104.

Kaplan, R. & Norton, D. (2001b). Transforming the balanced scorecard from performance management to strategic management: Part II. *Accounting Horizons, 2*, 14-16.

Kaye, B. & Jordan-Evans, S. (2001). Retaining key employees. *Public Management, 1*, 6-11.

Kirkman, B. & Rosen, B. (2000). Powering up teams. *Organizational Dynamics, 3*, 48-66.

Kizilos, P. (1990). Crazy about empowerment? *Training, 12*, 47-56.

Koberg, C., Boss, R., Senjem, J., & Goodman, E. (1999). Antecedents and outcomes of empowerment. *Group & Organization Management, 1*, 71-79.

Kotter, J. (1979). *Power in management*. New York: Amacom.

Koustelios, A. & Bagiatis, K. (1997). The employee satisfaction inventory (ESI): development of a scale to measure satisfaction of Greek employees. *Educational & Psychological Measurement, 3*, 469-476.

Kouzes, J. & Posner, B. (1987). *The leadership challenge*. San Francisco: Jossey-Bass.

Koys, D. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology, 54*, 101-114.

Kraiger, K. Billings, R., & Isen, A. (1989). The influence of positive affective states on task perceptions and satisfaction. *Organizational Behavior and Human Decision Processes, 44*, 12-25.

Kraimer, M., Seibert, S., & Liden, R. (1999). Psychological empowerment as a multidimensional construct: A test of construct validity. *Educational and Psychological Measurement, 1*, 127-142.

Lashley, C. (1999). Employee empowerment in services: a framework for analysis. *Personnel Review, 3*, 169-191.

Lawler, E. (1986). *High involvement management*. San Francisco: Jossey-Bass.

Lawler, E. (1992). *The ultimate advantage*. San Francisco: Jossey-Bass.

Lawler, E. & Ledford, G. (1981). Productivity and the quality of work life. *National Productivity Review, 2*, 23-36.

Lawler, E., & Mohrman, S., (1992). *Employee involvement and total quality management: Practices and results in Fortune 1000 companies*. San Francisco: Jossey-Bass.

Lawler, E., Mohrman, S., & Ledford, G. (1995). *Creating high performance organizations: Practices and results of employee involvement and total quality management in Fortune 1000 companies.* San Francisco: Jossey-Bass.

Leana, C., Locke, E., & Schweiger, D. (1990). Fact and fiction in analyzing research on participative decision-making: A critique of Cotton, Vollrath, Froggatt, Lengnick-Hall, and Jennings. *Academy of Management Review, 15*, 137-146.

Leauby, B. & Wentzel, K. (2002). Know the score: The balanced scorecard approach to strategically assist clients. *CPA Journal, 1*, 28-32.

Liden, R. & Arad, S. (1996). A power perspective of empowerment and work groups: Implications for human resources management research. *Research in Personnel and Human Resource Management, 14*, 205-251.

Light, J. (1992). A comparison of attitudes on motivators among workers. Unpublished master's thesis, The Wichita State University.

Likert, R. (1961). *New patterns of management*. New York: McGraw-Hill

Lipe, M. & Salterio, S. (2000). The balanced scorecard: judgmental effects of common and unique performance measures. *Accounting Review, 3*, 283-298.

Lloyd, C. & Newell, H. (2001). Capture and transfer: improving performance of the pharmaceutical sales rep. *International Journal of Human Resource Management, 3*, 464-483.

Locke, E. (1976). Personal attitudes and motivation. *Annual Review of Psychology, 26*, 457-480.

Locke, E. & Schweiger, D. (1979). Participation in decision-making: One more look. *Research in Organizational Behavior, 1*, 265-339.

Luthans, F. (1989). *Organizational behavior* (5th ed.). New York: McGraw-Hill.

Manz, C. & Sims, H. (1987). External leadership of self-managed work teams. *Administrative Science Quarterly, 32*, 106-128.

Marchington, M., Goodman, J., Wilkinson, A., & Ackers, P. (1992). New developments in employee involvement department of employment. *Research Series No. 2*, Sheffield: HMSO.

Martensen, A. & Gronholdt, L. (2001). Using employee satisfaction measurement to improves people management: An adaptation of Kano's quality types. *Total Quality Management, 7&8*, 949-957.

Martinko, M. & Gardner, W. (1982). Learned helplessness: An alternative explanation for performance deficits. *Academy of Management Review, 2*, 195-204.

Mathieu, J., Martineau, J., & Tannenbaum, S. (1993). Individual and situational influences on the development of self-efficacy: Implications for training effectiveness. *Personnel Psychology, 1*, 124-147.

May, R. (1969). *Love and will*. New York: Dell.

Menon, S. (2001). Employee empowerment: An integrative psychological approach. *Applied Psychology, 1*, 153-180.

Miller, R. & Prichard, F. (1992). Factors associated with workers' inclination to participate in an employee involvement program. *Group & Organization Management, 17*, 414-430.

Mobley, W. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*, 237-240.

Mobley, W., Griffeth, R., Hand, H., & Meglino, B. (1979). review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86,* 493-522.

Mohrman, S., Lawler, E., & Ledford, G. (1996). Do employee involvement and TQM programs work? *Journal for Quality & Participation, 1,* 6-10.

Motowidlo, S. (1996). Orientation toward the job and organization. In K.R. Murphy (ed.) *Individual differences and behavior in organizations,* 175-208. San Francisco: Jossey-Bass.

Mottaz, C. (1988). Determinants of organizational commitment. *Human Relations, 6,* 467-482.

Mowday, R., Porter, L., Steers, R. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover.* New York: Academic Press.

Moye, M. (2003). The relationship of employee empowerment and commitment to the organization to interpersonal- and system-level trust. The University of Iowa. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 3087647)

Muchinsky, P., & Morrow, P. (1980). A multidisciplinary model of voluntary employee turnover. *Journal of Vocational Behavior, 17,* 263-290.

Muchinsky, P. & Tuttle, M. (1979). Employee turnover: An empirical and methodological assessment. *Journal of Vocational Behavior, 14,* 43-77.

Mueller, C. Boyer, E., Price, J., & Iverson, R. (1994). Employee attachment and noncoercive conditions of work: The case of dental hygienists. *Work and Occupations, 21,* 179-212.

Mueller, C. & Lawler, E. (1996). *Commitment to different foci: The case of nested organizational units.* Iowa City: The University of Iowa Press.

Mueller, C., Wallace, J., & Price, J. (1992). Employee commitment: Resolving some issues. *Work and Occupations, 19,* 211-236.

Neilsen, E. (1986). Empowerment strategies: Balancing authority and responsibility. In Srivastva, S. (Ed.) *Executive Power,* 78-110. San Francisco: Jossey-Bass.

Newton, T. & Keenan, T. (1991). Further analyses of the dispositional argument in organizational behavior. *Journal of Applied Psychology, 6,* 781-787.

Nunnally, J. & Bernstein, I. (1994). *Psychometric Theory* (3rd ed.). New York: McGraw-Hill.

Nyham, R. (2000). Changing the paradigm: Trust and its role in public sector organizations. *American Review of Public Administration, 1*, 87-109.

O'Brien, G. (1978). The evidence for industrial democracy. In Adelaide (Ed.) *Proceedings of the International Conference on Industrial Democracy*, 192.

O'Connell, J. (1999). The employer/employee relationship: Identifying type and level of employee involvement and the relationship to extra-role behavior and intent to remain. The University of Rhode Island. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9945219)

Ogden, S. (1992). The limits to employee involvement: Profit sharing and disclosure of information. *Journal of Management Studies, 2*, 229-248.

Oldham, G. (1976). The motivational strategies used by supervisors relationships to effectiveness indicators. *Organizational Behavior and Human Performance, 16*, 66-86.

Osborne, J. (2002). Components of empowerment and how they differentially relate to employee job satisfaction, organizational commitment, and intent to leave the job. Vanderbilt University. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 3061216)

Overskeid, G. & Svartdal, F. (1998). Effect of reward on subjective autonomy and interest when initial interest is low. *Psychological Record, 46*, 319-331.

Ozer, E. & Bandura, A. (1990). Mechanisms governing empowerment effects: A self-efficacy analysis. *Journal of Personality and Social Psychology, 3*, 472-486.

Palo, S. (2003). Measuring effectiveness of TQM training: An Indian study. *International Journal of Training & Development, 3*, 203-216.

Parsons, T. & Smelser, N. (1956). *Economy and society*. New York: Free Press.

Pasmore, W., Francis, C., Haldeman, J., & Shani, A. (1982). Sociotechnical systems: A North American reflection on empirical studies of the seventies. *Human Relations, 12*, 1179-1204.

Pfeffer, J. (1981). *Power in organizations*. Marshfield, MA: Pitman.

Pickard, J. (1993). The real meaning of empowerment. *Personnel Management, 11*, 28-34.

Plunkett, L. & Fournier, R. (1991). *Participative management: Implementing empowerment.* New York: Wiley.

Poppenpoel, M, Myburgh, C. & Van Der Linde, C. (2001). *Qualitative research strategies as prerequisite for quantitative strategies. Education, 2*, 408-413.

Porter, L. & Lawler, E. (1968). *Managerial attitudes and performance.* Homewood, IL: Irwin-Dorsey.

Porter, L. & Steers, R. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. *Psychological Bulletin, 80*, 151-176.

Potterfield, T. (1997). Democracy or delusion? A critical examination of employee empowerment. Saybrook Institute. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9816338)

Premack, S. (1984). Prediction of employee unionization from knowledge of job satisfaction a meta-analytic investigation. *Academy of Management Proceedings*, 279-284.

Price, J. (1977). *The study of turnover*. Ames, IA: Iowa State University Press.

Price, J. & Mueller, C. (1981). A causal model of turnover for nurses. *Academy of Management Journal, 24*, 543-563.

Price, J. & Mueller, C. (1986). *Handbook of organizational measurement*. Cambridge, MA: Ballinger.

Prybil, L. (1973). Job satisfaction in relation to job performance and occupational level. *Personnel Journal, February*, 94-100.

Psoinos, A. & Smithson, S. (2002). Employee empowerment in manufacturing: a study of organizations in the UK. *New Technology, Work and Employment, 2*, 132-148.

Pun, K., Chin, K., & Gill, R. (2001). Determinants of employee involvement practices in manufacturing enterprises. *Total Quality Management, 1*, 95-109.

Quinn, J. (1992). *Intelligence enterprise*. New York: Free Press.

Quinn, R. & Spreitzer, G. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics, 2*, 37-39.

Randolph, W. (1995). Navigating the journey to empowerment. *Organizational Dynamics, 4*, 19-32.

Ren, Y. (2001). Employee satisfaction and firm performance: An analysis of commercial bank branches. The University of Minnesota. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 3032002)

Riggio, R. (1990). *Introduction to industrial organization psychology*. Glenview, IL: Scott, Foresman, & Company.

Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research. In Huberman, A. & Miles, M. (Eds.), *The qualitative researcher's companion*. Thousand Oaks, CA: Sage.

Robbins, S., Low, P., & Mourell, M. (1986). *Managing human resources*. Englewood Cliffs, NJ: Prentice-Hall.

Rosen, I. (2000). Correlates of employee involvement: Quality of work life and locus of control orientation. California School of Professional Psychology. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9962179)

Rosenfield, D., Folger, R. & Adelman, H. (1980). When rewards reflect competence: A qualification of the overjustification effect. *Psychology*, 39, 368-376.

Rothbaum, F., Weisz, J., & Snyder, S. (1982). Changing the world and changing the self: A two process model of perceived control. *Journal of Personality and Social Psychology, 42*, 5-37.

Rotter, J. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80*, 1-45.

Rulle, M. (1999). Employee perceptions of the meaning of empowerment: an exploratory field study. The George Washington University. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9932079)

Rusbult, C. & Farrell, D. (1983). A longitudinal test of the investment model: The impact on job satisfaction, job commitment, and turnover. *Journal of Applied Psychology, 3*, 429-438.

Ryan, A., Schmit, M., & Johnson, R. (1996). Attitudes and effectiveness: Examining relations at an organizational level. *Personnel Psychology, 49*, 853-882.

Sadler, D. (1981). Intuitive data processing as a potential source of bias in naturalistic evaluations. In Huberman, A. & Miles, M. (Eds.) *The qualitative researcher's companion* (123-136) Thousand Oaks, CA: Sage.

St. Clair, L. & Quinn, R. (1997). Progress without precision: The value of ambiguity as a tool for learning about organizational phenomena. In Passmore, W. & Woodman, R. (Eds.) *Research in organizational change and development, 10*, 105-129. Greenwich, CT: JAI Press.

Sansone, C. & Harackiewicz, J. (1998). "Reality" is complicated. *American Psychologist, 53,* 673-674.

Savery, L. (1982). Dissonance factor: How does it affect organizational effectiveness? *Human Resource Management Australia,* 48-53.

Savery, L. (1989). The influence of job factors on employee satisfaction. *Journal of Managerial Psychology, 1,* 27-31.

Scandura, T. & Williams, E. (2000). Research methodology in management: Current practices, trends, and implications for future research. *Academy of Management Journal, 6,* 1248-1264.

Scarselletta, M. (1999). Between tradition and innovation: The cultural contradictions of employee involvement. Cornell University. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9941210)

Schlenker, B. (1985). *Identity and self-identification: In the self and social life*. New York: McGraw Hill.

Scott, D., Bishop, J., & Chen, X. (2003). An examination of the relationship of employee involvement with job satisfaction, employee cooperation, and intention to quit in U.S. invested enterprise in China. *International Journal of Organizational Analysis, 1,* 3-19.

Sefton, L. (1999). Does increased employee participation affect job satisfaction, communication satisfaction, and organizational commitment? A quantitative study incorporating the views of both management and nonmanagement. Southern Illinois University. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9961108)

Selladurai, R. (2002). An organizational profitability, productivity, performance (PPP) model: Beyond TQM and BPR. *Total Quality Management, 13*, 613-619.

Semler, R. (1994). Why my former employees still work for me. *Harvard Business Review, 1,* 64-74.

Senge, P. (1990). *The fifth discipline. The art and practice of the learning organization*. New York: Doubleday.

Senthil, V., Devadasan, S., Selladurai, V. and Balahandayutham, R. (2001). Integration of BPR and TQM: past, present, and future trends. *Production Planning & Control, 7*, 680-688.

Shay, P. (2004). A psychometric analysis of an employee satisfaction index. Unpublished doctoral dissertation, The University of Oklahoma.

Shepperd, J. & Taylor, K. (1999). Social loafing and expectancy-value theory. *Personality and Social Psychology Bulletin*, n.p.

Shikiar, R. & Freudenberg, R. (1982). Unemployment rates as a moderator of the job dissatisfaction-turnover relation. *Human Relations, 35*, 845-856.

Shore, L., Newton, L., Thornton, G. (1990). Job and organizational attitudes in relation to employee behavioral intentions. *Journal of Organizational Behavior, 11*, 57-67.

Sigelman, C. (1999). *Life-span human development*. Pacific Grove: Brooks/Cole Publishing.

Silos, I. (1999). Employee involvement—A component of Total Quality Management. *Production and Inventory Management Journal, 1*, 56-66.

Smeyers, P. (2001). Qualitative versus quantitative research design: a plea for paradigmatic tolerance in educational research. *Journal of Philosophy of Education, 2*, 477-495.

Sogunro, O. (2002). Selecting a quantitative or qualitative research methodology: An experience. *Education Research Quarterly, 1*, 3-10.

Sotiriou, D. & Wittmer, D. (2001). Influence methods of project managers: Perceptions of team members and project managers. *Project Management Journal, 3*, 12-20.

Spears, L. (1998). *Insights on leadership: Service, stewardship, spirit, and servant-leadership.* New York: Wiley.

Spector, P. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations, 11*, 1005-1016.

Spector, P. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications.

Spillane, R. (1973). Intrinsic and extrinsic job satisfaction and labor turnover. *Occupational Psychology, 47*, 71-74.

Spreitzer, G. (1992). When organizations dare: The dynamics of individual empowerment in the workplace. The University of Michigan. Retrieved from ProQuest Digital Dissertations (UMI No. AAT 9308456)

Spreitzer, G. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal, 38*, 1442-1465.

Spreitzer, G. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal, 2*, 483-504.

Spreitzer, G. & Kizilos, M. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of Management, 5*, 679-704.

Staw, B. & Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. *Journal of Applied Psychology, 3*, 469-480.

Steers, R. & Rhodes, S. (1978). Major influences on employee attendance: A process model. *Journal of Applied Psychology, 63*, 391-407.

Steinecke, C. (1993). *The federal total quality management handbook: Employee involvement and quality management in the federal government*. Washington, D.C.: U.S. Government Printing Office.

Strauss, G. (1977) Managerial practices. In Hackman, J. & Suttle, L. (Eds.) *Improving life at work: Behavioral science approaches to organizational change*, 297-263. Santa Monica, CA: Goodyear.

Stryker, S. (1986). Identity theory: Developments and extensions. In K. Yardley & T. Honess (eds.), *Self and Identity*. New York: Wiley.

Sundbo, J. (1999). Empowerment of employees in small and medium-sized service firms. *Employee Relations, 2*, 105-127.

Suls, J. & Wills, T. (1991). *Social comparison: Contemporary theory and research.* Hillsdale, NJ: Erlbaum.

Sussman, M. & Robertson, D. (1986). The validity of validity: An analysis of validation study designs. *Journal of Applied Psychology, 4*, 461-468.

Tabdora, C. (2000). Leadership, teamwork, and empowerment: Future management trends. *Cost Engineering, 10*, 41-44.

Tannenbaum, A. (1968). *Control in organizations*. New York: McGraw-Hill.

Thibault, J. & Kelley, H. (1959). *The social psychology of groups*. New York: Wiley.

Thomas, K. & Velthouse, B. (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Academy of Management Review, 15*, 666-681.

Thompson, E., Chaiken, S. & Hazlewood, J. (1993). Need for cognition and desire for control as moderators of extrinsic reward effects: A Person × Situation approach to the study of intrinsic motivation. *Psychology, 64*, 987-999.

Thoresen, C., Kaplan, S., Barsky, A., & Warren, C. (2003). The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration. *Psychological Bulletin, 6,* 914-945.

Thorlakson, A. & Murray, R. (1996). An empirical study of empowerment in the workplace. *Group and Organization Management, 21,* 67-83.

Trickett, E. (1991). *Living an idea: Empowerment and the evolution of an alternative high school.* New Haven, CT: Brookeline Books.

Ugboro, I. & Obeng, K. (2000). Top management leadership, employee empowerment, job satisfaction, and customer satisfaction in TQM organizations: An empirical study. *Journal of Quality Management, 5,* 247-272.

U.S. Department of Labor (1994). *Road to high performance workplaces: A guide to better jobs and better business results.* Washington, DC: Office of the American Workplace.

Vandenberg, R. (1996). *Examining the influences of employee involvement processes on organizational effectiveness: A look at the insurance industry.* Athens, GA: Life Office Management Association, Inc.

Versteeg, A. (1990). Self-directed work teams yield long-term benefits. *Journal of Business Strategy, Nov/Dec,* 9-12.

Vest, M. & Scott, K. (2000). Factors influencing employee beliefs that pay is tied to performance. *Journal of Business & Psychology, 4,* 553-562.

Vogt, J. & Murrell, K. (1990). *Empowerment in organizations.* San Diego: University Associates.

Vroom, V. (1964). *Work and motivation.* New York: Wiley.

Wagner, J. (1994). Participation's effects on performance and satisfaction: A reconsideration of research evidence. *Academy of Management Review, 2,* 213-330.

Wall, T., Corbett, J., Martin, R., Clegg, C., & Jackson, P. (1990). Advanced manufacturing technology, work design, and performance: A change study. *Journal of Applied Psychology, 75,* 691-697.

Wanous, J. (1974). A causal-corelational analysis of the job satisfaction and performance relationship. *Journal of Applied Psychology, April,* 139-144.

Wanberg, C. & Banas, J. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology, 1*, 132-142.

Waterman, R., Waterman, R., & Collard, B. (1994). Toward a career resilient workforce. *Harvard Business Review, Jul-Aug*, 87-95.

Waters, L. & Roach, D. (1971). The two-factor theories of job satisfaction: Empirical tests for four samples of insurance company employees. *Personnel Psychology, 24*, 697-705.

Watson, T. (1986). *Management organization and empowerment strategy: New directions in theory and practice*. London: Routledge and Kegan Paul.

White, A. & Spector, P. (1987). An investigation of age related factors in the age-job-satisfaction relationship. *Psychology and Aging, 3*, 261-265.

White, R. (1959). Motivation reconsidered: The concept of competence. Psychological Review, 66, 297-333.

Wood, R. & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of Personality and Social Psychology, 56*, 407-415.

Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management, 15*, 251-289.

Zimmerman, B. (1985). The development of "intrinsic" motivation: A social learning analysis. *Child Development, 2*, 117-160.

Zwerdling, D. (1980). *Workplace democracy: A guide to workplace ownership, participation, and self-management experiences in the United States and Europe*. New York: Harper and Row.