INTRODUCTION OF SELF-MANAGED WORK TEAMS AT A BROWNFIELD SITE: A STUDY OF ORGANIZATION-BASED SELF-ESTEEM AND PERFORMANCE

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Christine Borycki, B.A., M.B.A.
Denton, Texas
May 1994
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This empirical study is aimed at understanding the patterns of relationships among the organization structure of self-managed work teams in terms of three sets of constructs: 1. organization-based self-esteem; 2. consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment; and 3. performance.

The primary significance of this study is that it adds to the pool of empirical knowledge in the field of self-managed work team research. The significance of this study to practicing managers is that it can help them make better-informed decisions on the use of the self-managed work team structure.

This study was a sample survey composed of five standardized questionnaires using a five-point Likert-type scale, open-ended questions, and demographic questions. Unstructured interviews supplemented the structured survey and for means of triangulation of results. The variables
were analyzed using regression analysis for the purpose of path analysis. The site was a manufacturing plant structured around self-managed work teams. The population was full-time, first-line production employees.

The results indicate that self-managed work teams can exhibit characteristics contrary to the popular notions associated with stage five teams. The teams in this study were in the second or third stages of development. Their relationships to organization-based self-esteem and performance were negative which may be indicative of their stages of development. There were nonsignificant relationships to the consequent behaviors of intrinsic work motivation, general job satisfaction, and organization commitment; a positive relationship existed to organization citizenship.

It was concluded that total commitment to the success of self-managed work team structure is required from all levels of management; this includes commitment of time, money, and training. In order for a work-place change of this magnitude to be successful, it must be given nurturance and time to grow as the teams experience stages of development and varying degrees of performance associated with each stage.
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CHAPTER 1

INTRODUCTION

The United States of America, once the pre-eminent world industrial and economic leader, has found itself losing its competitive lead to countries that it never even considered to be its competitors. American industry faces challenges from foreign competition, negative international balance of trade, rapidly changing technology, changing labor attitudes, demographics, diversity in the work force, and many other areas. In order to regain the country's competitive lead, some American companies have focused on improving quality and productivity.

Researchers, management experts, and corporate officers have suggested that one way to improve quality and productivity is to involve employees in decision making and to give them more power over their jobs (Aubrey and Felkins 1988). Job redesign and employee involvement have also been suggested as another way of improving quality and productivity (Maslow 1954; McGregor 1960; Argyris 1964; Herzberg 1966; Hackman 1967; Likert 1967; Lawler 1969; Ouchi 1981). Some of the forms that job redesign and employee involvement have taken are quality circles, total quality management, and self-managed work teams.
One of the latest forms of job redesign that involves employees in decision making is self-managed work teams (SMWTs). Self-managed work teams are trained groups of employees who are fully responsible for producing a well-defined segment of a finished product or service (Orsburn et al. 1990). Team members are delegated the responsibility and authority to make decisions over the details of their immediate tasks. A number of companies, including Boeing, Cummins Engine, Caterpillar, General Telephone, Texas Instruments, Xerox, Saturn, AT&T Operator Services, American Express Company, and Ford, have implemented this program of work structure, management, and reward (Orsburn et al. 1990). More and more organizations are being added to this list each day.

Among the presupposed benefits of self-managed work teams is an increased level of worker self-esteem at the organizational level. This organization-based self-esteem, in turn, is believed to result in increased levels of consequent behaviors such as intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment (Pierce et al. 1989)--each of which is said to benefit the organization in terms of quality and productivity.

Self-managed work teams, however, are a controversial tool. Unindoctrinated employees do not understand it,
middle managers fear it, and top managers embrace it as the latest panacea. While much has been assumed about the contribution of SMWTs to organizations and to the individuals who make up the teams, little is actually known. Most of the literature on self-managed work teams is anecdotal and is found in practitioner publications. Much needs to be understood about the contributions of self-managed work teams to an organization. In order to fully benefit from their use, an organization must know what SMWTs can and cannot do for them based on empirical research.

Statement of the Problem

Since among the presupposed benefits of self-managed work teams are an increased level of worker self-esteem at the organizational level, increased levels of specific consequent behaviors, and improved performance in terms of quality and productivity, this study provides empirical data and analysis regarding these benefits rather than relying on anecdotal material as previously noted. This empirical study is aimed at understanding the patterns of relationships among the organization structure of self-managed work teams in terms of three sets of constructs:

1. organization-based self-esteem;
2. consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment; and
Research Questions

Based upon these three sets of constructs, three major research questions are addressed in this study.

1. Do people participating in self-managed work teams possess high levels of organization-based self-esteem?

2. To what degree does the level of organization-based self-esteem of members of self-managed work teams affect intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment?

3. How is performance affected by the organization structure of self-managed work teams?

Theoretical Basis for the Study

The concept of self-managed work teams finds its origins in the sociotechnical system literature which includes work redesign (Hackman, Oldham, and Purdy 1975; Yorks 1976; Hackman and Oldham 1980) and workplace transformation (Nora, Rogers, and Stramy 1986). Sociotechnology, which integrates an organization’s social system and its technical system (Trist 1981), emphasizes the interrelatedness of these systems with the total organization and its total environment (Frederiksen, Riley, and Myers 1984).
Herbst (1962), building on the work of Trist and Bamforth (1951), traces the roots of sociotechnological systems back to an earlier tradition, back before the introduction and widespread acceptance of work techniques based on task segmentation, differential status and payment, and extrinsic hierarchical control. Trist (1976) points out that the internal discipline that develops in teams comes from the inclination of each member to make the work of other group members easier and to facilitate the carrying out of subsequent tasks of the group, a concept later identified as organization citizenship (Katz 1964).

Theorists share certain assumptions regarding work redesign (Whitsett 1975). Most believe that employees want to be productive at work, and that organizations, through poor job design, have not used the full talents of employees. The traditional approach to the design of work in many organizations is based on the work of Frederick Taylor and assumes that jobs should be simplified, standardized, and specialized for each component of the required work (Szilagyi and Wallace 1983). Some of the characteristics of jobs designed around Taylorism can be dysfunctional when applied inappropriately. These characteristics include mechanical pacing, repetitiveness, low skill requirements, concentration on only a fraction of the product or service, limited social interaction, and
predetermination of tools and techniques (Walker and Guest 1952). Work redesign, the theorists contend, brings about a reversal of the dysfunctional applications of Taylorism (Davis 1957; Herzberg 1966; Trist 1976).

At the same time that the person-based work redesign was being experimented with by organizations such as AT&T (Ford 1969), Texas Instruments (Myers 1970), and many others, more ambitious work restructuring efforts in the United States were being made based on the sociotechnical school emphasizing team or self-managed work groups (Yorks and Whitsett 1989). Critics of the work redesign movement have cautioned the more zealous theorists. Fein (1974) questions whether workers want or need work redesign, and how representative the publicized cases have been. Rief and Luthans (1972) argue the contingency view that characteristics of the job, the organizational level, and the characteristics of employees, such as general self esteem, experience gained through tenure on the job, age, and gender, are key situational factors. As work redesign evolved into workplace transformation (Nora, Rogers, and Stramy 1986), the concept became linked with other changes in managerial practices, including pay-for-knowledge compensation systems, participative structures, and higher standards of performance (Yorks and Whitsett 1989). More and more the literature seems to indicate that work redesign
cannot be dealt with in a vacuum; work redesign is part of a system of management with various interrelated parts.

Researchers have made connections with self-managed work teams to various behavioral outcomes (Tharenou 1979; Korman 1976). Primary among these outcomes is higher levels of organization-based self-esteem which in turn leads to increased levels of intrinsic work motivation, general job satisfaction, organization citizenship, organization commitment, and ultimately to enhanced performance (Pierce et al. 1989).

An underlying theoretical tenet of organization-based self-esteem that is of practical interest to organizations is that individuals develop attitudes and behave in ways that maintain their levels of self-esteem (Korman 1976). That is to say, individuals with high self-esteem develop positive work attitudes, such as intrinsic work motivation and general job satisfaction, and behave productively in order to maintain the self attitude of being competent individuals.

Organization-based self-esteem is a form of role-specific self-esteem. It is the degree to which individuals believe that they can satisfy their needs by participating in roles within the context of an organization (Pierce et al. 1989). It is a function of the global self-esteem with which an individual comes to an organization and the
accumulation of task- and situation-specific self-esteem experienced in the organization. Pierce et al. (1989) hypothesize that experiences in an organization shape organization-based self-esteem which, in turn, affects organization-related behaviors. The literature suggests that as an independent variable, organization-based self-esteem is positively related to intrinsic work motivation (Hackman and Oldham 1980; Lawler 1969), general job satisfaction (Porter and Steers 1973; Smith, Kendall and Hulin 1969), organization citizenship (Smith, Organ and Near 1983), organization commitment (Mowday, Porter and Steers 1982; Steers 1977a), and performance (Yorks and Whitsett 1989). The present study builds on the sociotechnical systems literature by investigating the relationships among the organization structure of self-managed work teams and these outcomes.

**Nature of the Study**

This empirical study was performed on the site of a food processing plant that is structured around self-managed work teams. This plant, which is located in an urban area of a nonmetropolitan county in a northeastern state of the United States with a population of about 25,000, employs 325 people. The firm produces private label fruit and vegetable juices in a plant of about 125,000 square feet. The average
yearly income of the employees studied was between $15,000 and $20,000.

A structured, written survey was administered at regular team meetings to the sample population of 105 employees on a volunteer basis. The subjects for this study were full-time, first-line production employees who represented the following functional areas: batching, maintenance, production, and quality control.

Qualitative data were also gathered through unstructured interviews with team members, both line and staff managers, and through observation of the study participants. Using triangulation methods explained in Chapter 3 in the sections entitled The Design and Additional Data, these qualitative data gave meaning to the quantitative data resulting from the written survey.

**Significance of this Study**

Recently, there has been an increase in the number of empirical studies on self-managed work teams. The primary significance of this study is to add to this pool of empirical knowledge. As more knowledge about SMWTs and their presupposed benefits—increased organization-based self-esteem, improvement in the consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment, and in performance—is gained, more refined hypotheses can be
made and more methodologically rigorous research testing can be performed.

The study will also be significant for practitioners in that it will help organization managers make better-informed decisions on the choice of whether or not to institute self-managed work teams. Managers must be aware of what the chances are of increasing employee performance by introducing more participation by employees in the decision making process. Caution should always be taken against adopting a seemingly perfect solution to an organization’s many problems. This is particularly true if SMWTs do not add to the areas they are presupposed to benefit, especially the area of performance (Bleakley 1993).

Self-managed work teams have developed a reputation as a panacea. Some of what they actually do or do not contribute to an organization was revealed in this study. The empirical research in this study should help organizations to be more effective in making decisions on whether or not to institute self-managed work teams.

Limitations of the Study

Four major limitations relate to this study.

1. The subjects were employees of a non-union food processing organization in the Northeastern United States. Generalizations are limited to such organizations with similar technology and union status. Further, the
membership of the sample group was one of convenience; only
central respondents were used. Because of this self-
selection procedure, the sample may not be truly
representative of the population.

2. Possible measuring effects may account for the
results that were found. Questionnaires are intrusive
measures; the subject is aware of being tested. Therefore,
subjects can respond in the manner that they think is
expected rather than responding as they truly feel.

3. The sample was taken from a brownfield site, i.e.,
an organization that institutes self-managed work team
structure after years of functioning as a traditional,
mechanistic structure. Generalizations should be limited to
organizations of this type. Greenfield sites, i.e.,
organizations that institute self-managed work team
structure at the beginning of their operation, may produce
significantly different results.

4. The major assumption under which this study was
conducted was that the participants were from a homogeneous
group. They shared similar economic, educational, and age
characteristics, however, there were major cultural
differences.

Summary of Methodology

This study was a sample survey composed of five
standardized questionnaires using a five-point Likert-type
scale, open-ended questions, and demographic questions, and was administered to a convenience sample of 105 members of self-managed work teams. Table 1 shows the sources of the five standardized questionnaires and who developed them;

**TABLE 1**

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<th>AUTHORS (YEAR)</th>
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<td>Global Self-Esteem</td>
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<td>Rosenberg (1965)</td>
</tr>
<tr>
<td>Intrinsic Work Motivation</td>
<td>Job Diagnostic Survey (JDS)</td>
<td>Hackman and Oldham (1974a)</td>
</tr>
<tr>
<td>General Job Satisfaction</td>
<td>Job Diagnostic Survey (JDS)</td>
<td>Hackman and Oldham (1974a)</td>
</tr>
<tr>
<td>Organization Citizenship</td>
<td>Organization Citizenship Scale</td>
<td>Smith, Organ, and Near (1983)</td>
</tr>
<tr>
<td>Organization Commitment</td>
<td>Organization Commitment Scale</td>
<td>Mowday, Steers, and Porter (1979)</td>
</tr>
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reliability and validity figures for the standardized questionnaires are presented in Chapter 3. The variables—self-managed work team structure, organization-based self-esteem, global self-esteem, tenure, age, gender, intrinsic work motivation, general job satisfaction, organization citizenship, organization commitment, and performance—were analyzed using regression analysis for the purpose of path analysis, a form of structural equation modeling.
Definitions and Operational Terms

Key terms used in this study are defined as follow:

**Self-managed work team** is a group of trained employees who are fully responsible for producing a well-defined segment of a finished product or service (Orsburn et al. 1990). These employees have decision-making power over the details of their immediate tasks, such as scheduling a predetermined work quota, rotating tasks among themselves, or changing some aspects of the production process. At a higher level of involvement, self-managed work teams have increased responsibility for quality control, participate in the selection and dismissal of fellow team members, and determine how to meet production targets. The team may deal with other departments as well as suppliers and customers (Aubrey and Felkins 1988).

**Organization-based self-esteem** is the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of an organization (Pierce et al. 1989).

**Global self-esteem** is an overall self-evaluation of approval or disapproval of self. It is the extent to which individuals believe themselves to be capable, and reflects a personal judgment of worthiness (Simpson and Boyle 1975).
Intrinsic work motivation is the degree to which a job holder is self-motivated to perform well because of some subjective rewards or feelings that the job holder expects to receive or experience as a result of performing well (Lawler and Hall 1970).

General job satisfaction is an overall measure of the degree to which an employee is satisfied and happy with his or her organizational association (Hackman and Oldham 1975).

Organization citizenship describes acts of cooperation, helpfulness, suggestions, gestures of goodwill, and altruism in the work place (Smith, Organ, and Near 1983).

Organization commitment is the degree to which employees are willing to endure internal and external actions on behalf of their organization. It describes employees' attachment to the organization and integration of the organization's goals and value systems into their own lives (Mowday, Steers, and Porter 1979).

Performance is comprised of any number of success measures of an organization from the individual level, to the group level, to the organizational level. It is measured in a variety of ways; in this study it is measured at the group level by level of output, amount of rework, time lost due to injuries, and absenteeism.
Summary

In their attempts to develop organizations that produce high quality products and services at the highest levels of performance, managers of American industry have turned to many organizational forms and management methods with varying degrees of success (Bleakley 1993). This study adds to the empirical knowledge associated with the organizational structural form of self-managed work teams as they relate to organization-based self-esteem, consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment, and performance. The theoretical basis for this sample survey study lies in the sociotechnical system literature. Not only does this study add to the pool of empirical knowledge, but it has a practical significance for practitioners by offering guidance in selection and implementation of self-managed work team structure.
CHAPTER 2

REVIEW OF THE LITERATURE

A review of the literature on self-managed work teams and the three sets of constructs of: 1. organization-based self-esteem; 2. four consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment; and 3. performance is presented in this chapter. The concept of self-managed work teams is defined and then expanded upon through an explanation of the stages of transition to self-managed work teams and the place self-managed work teams holds in the theoretical framework of sociotechnical systems. Next, the three sets of constructs that form the basis of the research questions are reviewed as they pertain to the study. A theoretical framework within which to study the patterns of relationships among these sets of constructs is also provided. A model conceptualizing the present study is presented and discussed. Based on this theoretical framework and the conceptual model, 24 hypotheses are offered. The hypotheses are grouped around the six theoretical relationships found in the literature.
Self-Managed Work Teams

As American industry focuses on organizational productivity and quality, more and more organizations are turning to the redesign of their structure through the implementation of a sociotechnical technique known as self-managed work teams (Orsburn et al. 1990). This form of employee involvement is one approach to improving quality and productivity with cooperative relationships, open communication, and group problem solving and decision making. Organizations in a number of countries, including Japan, Sweden, and the United States, have used this approach with great success (Aubrey and Felkins 1988).

In 1988 it was estimated that there were approximately 200,000 employee-involvement groups in the United States, and several million worldwide (Aubrey and Felkins 1988). In a 1990 survey of 476 Fortune 1,000 companies, half of the companies questioned said they would be relying significantly more on employee involvement groups in the years ahead (Dumaine 1990). The groups are identified by various names, including quality circles, quality-improvement teams, productivity teams, employee-involvement groups, self-directed work teams, autonomous work groups, work cells, and self-managed work teams. Each is as different as the unique organization that spawned it. In all cases, however, these are groups of employees who are
trained in problem-solving techniques with the improvement of quality and productivity within the organization as their primary goals.

Stages of Transition to Self-Managed Work Teams

Self-managed work teams do not suddenly appear as mature, productive entities like Athena from the head of Zeus. Moran and Musselwhite (1988) and Orsburn, et al. (1990) identify and describe five stages or levels of transition to fully functioning self-directed work teams. The first stage, start-up, is characterized by optimism of the teams and wariness of the supervisors. Together they begin to define their new roles and begin intensive training in communication, group dynamics, and additional technical skills.

The second stage is characterized by a state of confusion. The initial rush of the start-up stage is replaced by feelings of ambiguity, foot-dragging, and blatant resistance. Teams experience difficulty making cooperative decisions as authority shifts from the supervisor to the team. Team members invest a great deal of energy in team activities, but are not sure if what they are doing is effective. Teams worry about higher work standards, hypothetical disasters, and job security. Managers worry about their changing responsibilities from day-to-day operations to longer term, broader
responsibilities. Secretly, various groups hope for the change process to collapse.

Stage three, leader-centered teams, is achieved through continued faith in the self-managed work team concept and the people involved. It is characterized by growing confidence as teams become effective decision makers, adept at new technical skills, and able to make their work more efficiently. A leader emerges from within the team who acts as an interface with the organization and as a referee of internal team disputes. Teams begin to rotate various leadership roles so as to avoid a dominant leader who in reality simply takes over the manager’s role. Conflict declines as group norms evolve. Managers become less and less involved with daily operations and team productivity increases as the team performs in unity.

Stage four, tightly formed teams, is characterized by intense team loyalty. Teams manage their own scheduling, express their needs, meet goals with limited resources, and often protect themselves from outside criticism to the point of dysfunction. Team loyalty also nurtures fierce competition among teams which can lead to a change of focus from the organization goals to team super-achievement.

The final stage, self-managed teams, is characterized by maturity and a commitment to achieving organizational and team goals. Shop floor employees naturally focus on
organizational concerns such as world markets, customer satisfaction, and process improvements. Teams acquire new skills, respond to internal and external customer needs, improve support systems and work processes, and become more and more sophisticated about contracts, competitors and administrative duties. They think more and more in strategic terms rather than in shop floor terms. The challenge to management is to seek ways to maintain commitment, trust, and involvement of the team members. A continuous program of training and an effective flow of information is necessary to energize and feed the system. Table 2 summarizes the usual characteristics of each stage of transition of self-managed work teams as presented by Moran and Musselwhite (1988) and Orsburn, et al. (1990).

Antecedents and Outcomes of Self-Managed Work Teams

The antecedents, or preexisting conditions, prescribed for self-managed work teams parallel those of the job-characteristics approach to work redesign (Hackman and Lawler 1971; Hackman and Oldham 1976). The general categories of antecedents are skill variety, task identity, task significance, autonomy, and feedback (Wall et al. 1986). Because of the parallel between the antecedents of self-managed work teams and the job-characteristics approach
TABLE 2
STAGES OF TRANSITION TO SELF-MANAGED WORK TEAMS

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<th>STAGES</th>
<th>USUAL CHARACTERISTICS</th>
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<tr>
<td>Stage Two: State of Confusion</td>
<td>Feelings of ambiguity, foot-dragging, and blatant resistance</td>
</tr>
<tr>
<td>Stage Three: Leader-Centered Team</td>
<td>Growing confidence as teams become effective decision makers</td>
</tr>
<tr>
<td>Stage Four: Tightly Formed Team</td>
<td>Intense team loyalty</td>
</tr>
<tr>
<td>Stage Five: Self-Managed Work Team</td>
<td>Maturity and a commitment to achieving organizational and team goals</td>
</tr>
</tbody>
</table>

To work redesign, many theorists have argued for a synthesis of the two approaches (Rousseau 1977; Cummings 1978; Denison 1982). Hackman and Suttle (1977) go so far as to state that the self-managed work team approach is the more powerful of the two approaches. They suggest that teams can accomplish larger tasks than can individuals, and that teams allow for more manipulation of work characteristics. The primary difference between self-managed work teams and the work-characteristics approach is the level of analysis and application, not content (Wall et al. 1986). Self-managed work teams are at the group level of analysis, whereas the work-characteristics approach is at the individual level of analysis.
More detailed antecedents appear in the literature. In a representative work, Orsburn et al. (1990) list among the requirements for success, top-level commitment, management-employee trust, willingness to take risks, willingness to share information, enough time and resources, commitment to training, operations conducive to work teams, union participation, and access to help.

Although self-managed work teams are at the group level of analysis, the authors of sociotechnical literature deal with their outcomes at the individual level (Davis 1966; Kelly 1978). They assume that logical outcomes of self-managed work teams are intrinsic work motivation and general job satisfaction which, in turn, are reflected in improved group performance and reduced turnover (Wall et al. 1986). This parallels Hackman and Oldham's (1980) job-redesign approach.

Additional outcomes found in the literature are increased organization commitment (Emery 1959) and improved mental health (Herbst 1974), although neither is a central element in existing propositions (Wall et al. 1986). Aubrey and Felkins (1988) identify tangible and intangible outcomes. Among the tangible outcomes are increased individual self-respect, more positive attitudes, and reduced conflict stemming from the work environment. Intangible outcomes include improved communication,
increased problem-solving skills, better management-employee relationships, promotion of personal growth, improved attitude and morale, increased job knowledge, improved job satisfaction and increased employee motivation and commitment. Orsburn et al. (1990) add enhanced productivity, streamlining, flexibility, quality, commitment, and customer satisfaction.

Sociotechnical Systems

Historically, the concept of self-managed work teams finds its origins in the sociotechnical system literature which includes work redesign (Hackman, Oldham, and Purdy 1975; Yorks 1976; Hackman and Oldham 1980) and workplace transformation (Nora, Rogers, and Stramy 1986). Sociotechnology, which integrates an organization's social system and its technical system (Trist 1981), emphasizes the interrelatedness of these systems with the total organization and its total environment (Frederiksen, Riley, and Myers 1984). Thus while self-managed work teams may be a controversial tool in the "real world" of organizations, the basic theoretical concept is that work groups are the building blocks of organizations (Gibson, Ivancevich, and Donnelly 1988).

Herbst (1962) expanded the work of Trist and Bamforth (1951), and proposed the idea that groups that take over
complete responsibility for the total cycle of operations involved in a well-defined segment of work can emerge spontaneously. He labeled these groups composite work groups. Today we call them self-managed work teams. Herbst traces the roots of sociotechnological systems back to an earlier tradition, back before the introduction and widespread acceptance of work techniques based on task segmentation, differential status and payment, and extrinsic hierarchical control. Trist (1976) states that the internal discipline that develops in composite teams comes from each member's inclination to make the work of other group members easier and to facilitate the carrying out of subsequent tasks of the group.

Basic conditions are necessary for emergent or spontaneous autonomous work groups. These conditions include independence of the task itself (Wilson, Trist, and Bamforth 1951), definable physical boundaries (Rice 1958), ability of the group to effectively take control and responsibility of a task (Emery 1959), and control linked to variables that are observable and measurable (March and Simon 1958). Both Trist (1981) and Rice (1958) place importance on group responsibility for the whole task. Whereas Trist gives higher priority to enlarged jobs for each team member, Rice places more importance on group membership (Kelly 1978).
Work redesign refers to an organization's intervention in the content of an employee's job, the range of tasks performed, and the flow of work. It provides for more employee control over the work by allowing employees to make decisions on their own initiative (Yorks and Whitsett 1989). These changes can be on an individual or person-based level, or on a group level, where teams are established by the organization. Yorks and Whitsett note that the changes involve a sense of wholeness in that employees have broader responsibility for an identifiable segment of work flow. Employees receive increased information about the production process and the results of their work. Important to the success of work redesign is the commitment of management to develop a cooperative relationship between the levels of the organization.

Theorists share certain assumptions regarding work redesign (Whitsett 1975). Most believe that employees want to be productive at work, and that organizations, through poor job design, have not used the full talents of employees. As a result of these two conditions, organizations have incurred unnecessary costs in terms of lower performance, and in psychological stress to employees brought on by job dissatisfaction, frustration, and alienation at work. The traditional approach to the design of work in many organizations is based on the work of
Frederick Taylor and assumes that jobs should be simplified, standardized, and specialized for each component of the required work (Szilagyi and Wallace 1983). Some of the characteristics of jobs designed around Taylorism can be dysfunctional when applied inappropriately. These characteristics include mechanical pacing, repetitiveness, low skill requirements, concentration on only a fraction of the product or service, limited social interaction, and predetermination of tools and techniques (Walker and Guest 1952). The implementation of the principles of Taylorism can result in dismotivation and dissatisfaction of workers. It was often found that workers' reaction to the design of their jobs more than offset expected gains in efficiency and productivity (Lawler 1973). Work redesign, the theorists contend, brings about a reversal of the dysfunctional applications of Taylorism (Davis 1957; Herzberg 1966; Trist 1976).

The psychological concept of motivation was first linked to sociotechnical systems by Emery in 1959 (Kelly 1978). During the 1960s, Herzberg's (1966, 1968) work in motivation-hygiene theory acted as a stimulus to the interest in work redesign. Herzberg emphasized what he called the intrinsic motivating needs of people that could be satisfied through the design of individual jobs that provided a sense of achievement, recognition,
responsibility, and growth. He saw task advancement as the way to motivate high performance and job satisfaction.

At the same time that this individual work redesign, discussed by Yorks and Whitsett (1989), was being experimented with by organizations such as AT&T (Ford 1969), Texas Instruments (Myers 1970), and many others, more ambitious work restructuring efforts in the United States were being made based on the sociotechnical school emphasizing teams or self-managed work groups (Yorks and Whitsett 1989). These efforts were based on the European work-restructuring experiments conducted in Norway during the 1960s. This work, in turn, inspired Swedish organizations. Work redesign experiments at Volvo, Saab-Scandia, and the Norwegian merchant marine received widespread international publicity (Zemke 1988).

The less-extreme, but nevertheless adamant, work redesign theorists acknowledge that contingencies affect the feasibility of work redesign in a given situation. Hackman and Oldham (1980) suggest that work redesign concepts have widespread application and that management should implement them on a broad scale. Rief and Luthans (1972) are more conservative in their views. They advise caution, and emphasize the contingencies that can impede success of work redesign. Rief and Luthans (1972) also argue the contingency view that characteristics of the job, the organizational
level, and the characteristics of employees are key situational factors.

Rief and Luthans are not the only critics of the work redesign movement. Fein (1974) doubts whether workers want or need work redesign, and questions how representative the publicized cases have been. Other lines of criticism have been associated with accusations of deceiving workers into producing more output for the same pay (Winpisinger 1973). Even Hackman (1975), ever a proponent of work redesign, has expressed concerns about the possibly inflated claims made in the popular business press.

In 1975, Hackman predicted the "coming demise" of work redesign. In fact, by the end of the 1970s, work redesign went underground. Throughout the 1980s, however, several organizations continued to implement work-design methods (Walton 1985; Nora, Rogers, and Stramy 1986). Organizations became more secretive. This was due, in part, to the belief of many behavioral scientists and managers that publicity often served to undermine work redesign efforts (Walton 1975).

As work redesign evolved into workplace transformation (Nora, Rogers, and Stramy 1986), the concept became linked with other changes in managerial practices, including pay-for-knowledge compensation systems, participative structures, and higher standards of performance (Yorks and
Whitsett 1989). The present study builds on the sociotechnical systems literature by investigating the relationships among self-managed work teams, intrinsic work motivation, general job satisfaction, organization citizenship, organization commitment, and performance.

**Organization-Based Self-Esteem**

Sociologists have studied self-esteem extensively. Some of this work has been done in organizational settings and has revealed positive relationships between self-esteem and factors such as supervisory support (Hackman and Lawler 1971), job complexity (Kohn and Schooler 1973), control over work (Staples, Schwalbe, and Gecas 1984), work autonomy (Mortimer and Lorence 1979), and amount of interaction on the job (Gardell 1971). A majority of the researchers have established that multiple dimensions of the work experience determine adult self-esteem (Tharenou 1979). The underlying impetus to most of this work appears to be that the way individuals react to life experiences varies with the extent to which they perceive themselves as competent, need-satisfying individuals (Korman 1976).

An underlying theoretical tenet of self-esteem that is of practical interest to organizations is that individuals develop attitudes and behave in ways that maintain their levels of self-esteem (Korman 1976). That is to say, individuals with high self-esteem develop positive work
attitudes, such as intrinsic work motivation and general job satisfaction, and behave productively in order to maintain the self attitude of being competent individuals. By the same token, individuals with low self-esteem develop unfavorable work attitudes and unproductive work behaviors that reinforce their self-attitude of low competence. Hollenbeck and Brief (1987) found that individuals with high self-esteem were more apt to value the attainment of performance goals than were individuals with low self-esteem.

Research has been done on at least three levels of a hierarchy of self-esteem. Simpson and Boyle (1975) summarize them as (1) global self-esteem, the highest level in this hierarchy, which refers to an overall evaluation of self-worth; (2) role-specific self-esteem, which is the self-evaluation that comes from one of life's many roles, such as parent or employee, and (3) task- or situation-specific self-esteem, which is the self-evaluation that results from behavior in a specific situation and competence in a task just performed. Each higher level in this hierarchy is made up of a conglomerate from the next lower level (Brockner 1988). For example, the role-specific self-esteem an individual develops at work is a reflection of the many task-specific self-esteesms the individual experiences at work. At the same time, a higher level self-esteem
affects the lower levels, because it sets up a predisposition for how an individual responds in new situations (Brockner 1988).

Researchers (Simpson and Boyle 1975; Tharenou 1979) have argued that the appropriate self-esteem measure should be used for any given level of analysis. For instance, organization-based self-esteem should predict organization related phenomena such as organization commitment and intrinsic work motivation more strongly than should global self-esteem.

Organization-based self-esteem is a form of role-specific self-esteem. It is the degree to which individuals believe that they can satisfy their needs by participating in roles within the context of an organization (Pierce et al. 1989). It is a function of the global self-esteem with which an individual comes to an organization and the accumulation of task- and situation-specific self-esteem experienced in the organization. Korman (1976) views self-esteem as both an outcome of experiences and, as such, a key to the explanation of employee motivation, attitudes, and behaviors. Pierce et al. extend this reasoning by hypothesizing that experiences in an organization shape organization-based self-esteem which, in turn, affects organization-related behaviors and attitudes.
Tharenou (1979) suggests that self-esteem be treated as both a dependent and an independent variable. Organization-based self-esteem is dependent on an individual's environment (Korman 1971), intrinsic job characteristics, and extrinsic job characteristics (Brockner 1988).

Korman (1971) suggests that an individual's environment affects self-esteem. He emphasized that under mechanistic conditions where there is a high level of organization-imposed control through a rigid hierarchy, centralized decision making, standardization, and formalization of rules and procedures, employees eventually develop a belief system consonant with the apparent basic mistrust or lack of respect for people implicit in that environment. In other words, they would develop low organization-based self-esteem. By extension, Pierce et al. (1989) suggest that an organic organizational system, which by definition is more personal and democratic and less concerned with hierarchy, procedures, formality, and control, leads to higher levels of organization-based self-esteem. This is a reflection of the inherent trust given employees as competent, valuable, contributing individuals in this environment. Sources of environmental structure, such as self-managed work teams, that permit employees to direct and control their own work should be positively related to high organization-based self-esteem (Pierce, Dunham, and Cummings 1984).
Brockner (1988) points out other determinants of organization-based self-esteem. Intrinsic job characteristics include the level of variety, skill, and participation in decision making. Extrinsic job characteristics include pay, job level, and nature of the social relationships between employees and their coworkers and supervisors.

A number of personal mediators have been identified in the literature as having direct positive relationships with organization-based self-esteem (Pierce, et al. 1989). Prime among these independent variables are global self-esteem (Korman 1976), tenure on the job (Mowday, Porter, and Steers 1982), age (Steers 1977a), and gender (Bandura 1978). More specifically, the higher the global self-esteem a person brings to an organizational situation, the more positively that person will tend to interpret organizational experiences. Also, the longer a person is with an organization, the more likely that person is to interpret organizational experiences as positive and to internalize them as higher organization-based self-esteem. The older a person becomes, based on increasing life and work experiences through time, the more likely that person is to have higher levels of organization-based self-esteem. And finally, women tend to have higher levels of organization-based self-esteem than do men.
The literature suggests that as an independent variable, organization-based self-esteem is positively related to intrinsic work motivation, general job satisfaction, low turnover rates, low absenteeism, organization commitment, organization citizenship, and performance (Brockner 1988). A cause-and-effect relationship cannot be claimed, however. The literature also suggests that as a dependent variable, organization-based self-esteem is positively influenced by participative organization structures such as self-managed work teams, and by personal mediators such as global self-esteem, tenure, age, and gender (Pierce, et al. 1989).

Consequent Behaviors

The organization structure of self-managed work teams produces a number of outcomes, or consequent behaviors. Among these consequent behaviors are intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment (Wall et al. 1986; Aubrey and Felkins 1988; Orzburn et al. 1990). Pierce et al. (1989) show how these same four consequent behaviors are also outcomes of organization-based self-esteem. Following is a literature review showing how these constructs fit into the theoretical framework of self-managed work teams.
Intrinsic Work Motivation

Lawler (1969) defines intrinsic work motivation as the degree to which a job holder is motivated to perform well because of some subjective rewards or feelings that the job holder expects to receive or experience as a result of performing well. Thus, intrinsic work motivation exists when esteem, feelings of growth, and fulfillment of other internal needs are tied to performance. Intrinsic work motivation can be thought of as the degree to which attaining higher-order need satisfactions depends upon the individual's performance (Maslow 1954; Alderfer 1972). Intrinsic work motivation is a function of both an individual's characteristics and the job characteristics (Lawler and Hall 1970). Cavanagh (1984) theorizes that intrinsic work motivation develops from an atmosphere that includes four dimensions: the personal qualities of the employee, the nature of the job, the qualities of the supervisor, and the company philosophy.

Hackman and Oldham (1980) argue that there are three key conditions, called critical psychological states, for intrinsic work motivation. An individual must have knowledge of the results, experience responsibility, and experience the work as meaningful. They also argue that core job characteristics impact intrinsic work motivation. Core job characteristics are skill variety, task identity,
task significance, autonomy, and feedback from the job. To accommodate for the differences found among people, they include in their model moderators of knowledge and skill, growth need strength, and satisfaction with the work context.

Hackman and Oldham's model has been subjected to many tests since it was published in 1980. Most of this work has shown the model to be a useful tool in explaining internal work motivation. Sherman and Smith (1984) concluded that the core job characteristic of autonomy did, in fact, influence intrinsic motivation. Specifically, they found that mechanistic structures that minimized autonomy undermined intrinsic motivation. Thomas and Velthouse (1990) use the premises presented by Hackman and Oldham in 1980, as the foundation for a model of intrinsic motivation in which they theorize that empowerment is simply increased intrinsic task motivation. Their model purports to provide a more comprehensive set of task assessments, called critical psychological states by Hackman and Oldham, than the original Hackman and Oldham model. Still, the Thomas and Velthouse work adds to the credibility of the original model. Finally, George (1992) found that intrinsic involvement as indexed by task significance was associated with low social loafing, a behavior which diminishes group effectiveness (Middlemist and Hitt 1981).
Motivation theorists have tried to identify the forces that influence employees' behavior. These theories can be classified into two general categories, content theories and process theories.

**Content Theories**

The first category of motivation theories is content theories (Campbell et al. 1970). These theories focus on the factors internal to the individual that arouse, direct, sustain, and stop behavior (Gibson, Ivancevich, and Donnelly 1988), or simply put, intrinsically motivate (Lawler 1969). Intrinsic motivation can be satisfied or enhanced.

The content theory of motivation that acts as a foundation for many others is Maslow's need hierarchy theory (Maslow 1954). Simplistically put, Maslow states that individuals are continuously in a motivated state but that the nature of their motivation is fluctuating and complex. As one desire or need level becomes at least partially satisfied, another takes its place. This sequence of emerging needs forms the following hierarchy of needs: (1) physiological needs--food, air, water; (2) safety needs--order, stability, rules; (3) social needs--affiliation, love; (4) ego needs--status, respect of peers, and (5) self-fulfillment needs--self-actualization.

Alderfer (1972) views motivational needs as a three-tier hierarchy. They are (1) existence--food, air, water,
pay, working conditions, and job security; (2) relatedness—meaningful social and interpersonal relationships; and (3) growth—individual making creative or productive contributions. Alderfer suggests that as needs at a lower level, such as existence, are satisfied, an individual progresses to the next level. He also proposes that if an individual is frustrated in attempts to satisfy one level of needs, the individual regresses to the next-lower level.

Herzberg (1966), another classic content theorist, stated that there are two factors, dissatisfiers-satisfiers, or extrinsic-intrinsic factors, that affect motivation. The extrinsic factors are found in the job context. When they are not present, an employee is dissatisfied. Among these extrinsic factors are company policy, salary, interpersonal relations, job security, working conditions, status, fringe benefits, and quality of technical supervision. Intrinsic factors are found in the job content. When they are present, the employee is satisfied or motivated. Among these intrinsic factors are achievement, recognition, advancement, the work itself, possibility of growth, and responsibility.

McClelland’s (1961, 1962) learned needs theory is based on the relative strengths of an individual’s needs for achievement, affiliation, and power. The need for achievement governs an individual’s orientation to tasks
faced in an organization. The need for affiliation is analogous to Maslow's (1954) social needs. The need for power is made up of some social and self-fulfillment needs, but seems more closely related to ego and status needs.

Process Theories

The second category of motivation theories is process theories (Campbell et al. 1970). They describe and analyze how behavior is motivated. These theories generally offer tangible things that can be done to enhance and capitalize on intrinsic motivation. Process theories of motivation are represented here by three general theories: expectancy theory, equity theory, and goal setting theory.

Expectancy theory assumes that individuals evaluate situations before acting on them. This theory suggests that a person's motivation to behave in a given way is determined by outcomes the person sees as desirable, and the person's belief that these desired outcomes can be attained (Vroom 1964).

A second theory deals with equity. Equity is the state of mind possessed by an individual who perceives that the ratio of efforts to rewards is equivalent to the ratio of comparison individuals (Gibson, Ivancevich, and Donnelly 1988). The equity theory of motivation is based on the assumptions that individuals are motivated by a need to be treated equitably, or fairly, at work, and that an
individual's perceptions may be altered by changing the individual's inputs, outputs, or attitudes; the reference person; the situation; or the inputs or outputs of the reference person. Some of these changes can be done by an organization, and thus, the theory implies, the organization can create a situation in which the individual is motivated.

The third process motivation theory is based on goal setting (Locke 1968) and entails an individual setting goals and working to achieve them. Locke believes that an individual's conscious goals and intentions are the primary determinants of behavior. Motivation is a function of job performance and goal difficulty (Locke and Latham 1984), and the level of participation that an individual has in setting the goals (Latham and Yukl 1975; Erez and Arad 1986).

In summary, the literature on content and process theories of motivation suggests that, based on previous findings, intrinsic work motivation would have a positive relationship to the workplace environment created by self-managed work team structure. It was also expected that intrinsic work motivation would have a positive relationship to organization-based self-esteem based on positive work experiences inherent in self-managed work teams.

General Job Satisfaction

Satisfaction and motivation are closely tied in the literature. As indicated from the previous discussion, a
great deal is said about satisfying individuals' needs in order to motivate them. To this point the literature on satisfaction and motivation runs parallel (DuBrin 1984). Job satisfaction is a subset of satisfaction, and need satisfaction in the work situation is a prerequisite to general job satisfaction (Ferratt and Starke 1977).

Simply put, general job satisfaction is "an overall measure of the degree to which the employee is satisfied and happy with the job" (Hackman and Oldham 1975, 162). Locke (1976, 1342) defines job satisfaction as "the pleasurable emotional state resulting from the perception of one's job as fulfilling or allowing the fulfillment of one's important job values, providing these values are compatible with one's needs." Gibson, Ivancevich, and Donnelly (1988, 79) define job satisfaction as "an attitude that employees develop over time about various facets of their jobs."

Smith, Kendall, and Hulin (1969) categorize the facets of job satisfaction into five general groups: pay, job, promotion opportunities, supervisor, and co-workers. Satisfaction with pay is the amount of money and benefits received and the perceived equity of them. Satisfaction with job is the extent to which job tasks are considered interesting and provide opportunities for learning and for accepting responsibility. Satisfaction with promotion opportunities is judged by the availability for advancement.
Satisfaction with supervisor refers to the abilities of the supervisor to demonstrate interest in and concern about employees. Satisfaction with coworkers refers to the extent to which coworkers are friendly, competent, and supportive.

Porter and Steers (1973) suggest that influences on employee attitudes, such as general job satisfaction, can be grouped into four categories. The first category includes organization-wide factors which are variables that are available or applied to most employees. Second are the immediate physical work environment factors. Job content factors, the third category, are the actual job activities. Finally, personal factors are the characteristics that differentiate one person from another. The organization has control over organization-wide factors, the immediate work environment factors, and the job content factors; personal factors are mediating factors over which the organization has little or no control.

General job satisfaction can have a variety of positive and negative outcomes, both for organizations and for individuals. Low levels of general job satisfaction can lead to high rates of absenteeism and turnover (Locke 1976). The link between job satisfaction and job performance is tenuous (Iaffaldano and Muchinsky 1985) and seems to be dependent on the rewards, both intrinsic and extrinsic, related to performance (Greene 1972). Korman (1970)
suggests that the relationship between performance and satisfaction is moderated by self-esteem. He hypothesizes that individuals with high self-esteem are more apt to exhibit a positive performance-satisfaction relationship than are individuals with low self-esteem. Testing of this hypothesis has brought mixed results (Lopez and Greenhaus 1978; Dipboye et al. 1979; Tharenou and Harker 1984).

General job satisfaction is important to both organizations and individuals. It can affect how employees feel toward an organization and whether or not employees continue membership in an organization. General job satisfaction can affect how employees feel about life in general, and themselves in particular (Steers 1984).

In summary, the literature suggests that, based on previous findings, general job satisfaction would have a positive relationship to the workplace environment created by self-managed work team structure. It was also expected that general job satisfaction would have a positive relationship to organization-based self-esteem based on positive work experiences inherent in self-managed work teams.

Organization Citizenship

Organization citizenship is what Katz (1964) describes as innovative and spontaneous activity in an organization that goes beyond role prescriptions. He sees this behavior
as essential to the functioning of an organization. Without these acts of cooperation, helpfulness, suggestions, gestures of goodwill, and altruism, Katz believes that an organization's fragile social system will fall apart.

Roethlisberger and Dickson (1964) refer to organization citizenship as cooperation. Whereas productivity and efficiency are functions of the formal organization, its authority structure, role specifications, and technology, cooperation is a function of the acts that serve to maintain the equilibrium of the organization. Cooperation includes the day-to-day social gestures of members of the organization to other members in order to accommodate their work needs. Roethlisberger and Dickson view cooperation as a combination of the informal organization and what they call logic of sentiment. Logic of sentiment is influenced by the quality of the work experience and by previous social conditioning. Roethlisberger and Dickson imply that, at the organization level of analysis and over the long term, efficiency and cooperation are interdependent.

Citizenship behavior, or prosocial behavior, can be considered the lubricant of the social machinery of an organization (Smith, Organ, and Near 1983). Without it, an organization lacks flexibility to get through unforeseen contingencies. With it, organization members can cope with the complexities of interdependence in the work place. As
Katz (1964) notes, citizenship cannot be accounted for by the same motivational bases that prompt persons to join, stay, and perform within contractual, enforceable roles. An organization cannot make individuals be considerate through rules or monetary incentives. Although unquantifiable, citizenship behaviors are often noted by supervisors and probably have some influence on appraisals of individual performance (Smith, Organ, and Near 1983).

Citizenship behavior can be accounted for by a combination of direct effects from workplace environment and personality variables as well as indirect effects through job satisfaction (Smith, Organ, and Near 1983). Two identified dimensions of workplace environment are leader supportiveness and reciprocal task interdependence. Leader supportiveness is, in itself, a model of citizenship behavior for other members of an organization to emulate (Berkowitz 1970). It also starts a pattern of reciprocity from organization members to leaders (Dansereau, Graen, and Haga 1975).

Reciprocal task interdependence requires many spontaneous mutual adjustments in order to achieve coordination (Thompson 1967). This situation encourages the formation of social norms of cooperation, helping, and sensitivity to needs of other organization members, that are characteristic of organization citizenship (Krebs 1970).
Smith, Organ, and Near (1983) indicate a stronger relationship between organization citizenship and reciprocal task interdependence than between task independence or sequential dependence.

Researchers have identified two personality variables present in citizenship behavior: level of extraversion and "belief in a just world" (Lerner and Miller 1978; Smith, Organ, and Near 1983). Citizenship behavior may be one manifestation of a person's level of extraversion. Krebs (1970) suggests that extroverts display altruistic citizenship behavior. They tend to be sensitive to their physical and social surroundings and to act more spontaneously. Neurotics, or emotionally unstable persons, do not act altruistically. They tend to be preoccupied with their own problems and do not concern themselves with the problems or convenience of others.

Zuckerman (1975) found that persons who believe that what they do in the present eventually will be rewarded tend to display prosocial behavior. Organization citizenship is one opportunity for these people to practice their "belief in a just world" (Lerner and Miller 1978).

Smith, Organ, and Near (1983), in testing the relationships of good citizenship, mood state, environmental forces, and individual difference variables, identified two factors that make up citizenship behavior. The first factor
is directly and intentionally aimed at helping a specific person, such as orienting new people or helping someone with a heavy workload. The second factor is more impersonal. The person’s actions indirectly help others involved in the system, such as punctuality or efficient use of time. The second factor seems to reflect compliance with internalized norms of an organizational group.

In summary, the literature suggests that, based on previous findings, organization citizenship would have a positive relationship to the workplace environment created by self-managed work team structure. It was also expected that organization citizenship would have a positive relationship to organization-based self-esteem based on positive work experiences inherent in self-managed work teams.

Organization Commitment

During the 1970s, social scientists conducted a great many inquiries into the concept of organization commitment. They developed a theoretical framework of the construct and sought empirically to determine the antecedents and outcomes of organization commitment (Sheldon 1971; Hall and Schneider 1972; Hrebinik and Alutto 1972; Buchanan 1974; Mowday, Porter, and Dubin 1974; Porter et al. 1974; Kanter 1977; Salancik 1977; Steers 1977a; Mowday, Steers, and Porter 1979). Researchers may have been prompted in this inquiry
by the changes in employees' attitudes toward their jobs. Whyte (1981) explains that during the 1950s, employees had a feeling of belonging to the organization that employed them. A sense of reciprocity existed between employees and the organization; if employees were loyal to the organization, the organization would be loyal to the employee. Over time, Whyte notes, that situation has changed. Loyalties seem to have shifted from the organization to oneself.

Most studies of organization commitment have been one-time case studies. The methodologies and approaches used in most of this research are fragmented, and the results are difficult to generalize from or to compare (Hrebiniak and Alutto 1972). One theme, however, is repeated throughout the studies: commitment is an important variable in understanding the work behavior of employees in organizations (Mowday, Steers, and Porter 1979).

What is organization commitment? Researchers vary in their approach to defining the concept (Becker 1960; Grusky 1966; Kanter 1968; Brown 1969; Hall, Schneider, and Nygren 1970; Sheldon 1971; Hrebiniak and Alutto 1972; Buchanan 1974; Salancik 1977; Wiener and Gechman 1977). In general, organization commitment is the degree to which employees are willing to endure internal and external actions on behalf of their organization. It describes employees' attachment to the organization and integration of the organization's goals
and value systems into their own lives (Mowday, Steers, and Porter 1979).

Two factors emerge from the literature. The first factor is commitment related behaviors, or overt manifestations of commitment. These are behaviors that exceed formal expectations of the organization (Salancik 1977). The second factor is commitment-related attitudes. This is exemplified by individuals who adopt the goals of an organization to the point of congruency (Hall, Schneider, and Nygren 1970) or by individuals whose identity is linked to an organization (Sheldon 1971). These individuals identify with an organization and its goals and wish to remain members of the organization in order to achieve these goals. March and Simon (1958) note that this kind of commitment may involve an exchange relationship between an individual and an organization. The individual may attach to the organization in return for certain rewards or payments.

Mowday, Porter, and Steers (1982) combine both of these factors, and define organization commitment as the relative strength of an individual’s identification with, and involvement in, an organization. Organization commitment is characterized by (1) a strong belief in and acceptance of an organization’s goals and values; (2) a willingness to exert a great deal of effort on behalf of an organization; and (3)
a strong desire to maintain organizational membership. It is more than a passive loyalty relationship. It is an active relationship in which individuals are willing to give something of themselves in order to help an organization succeed (Steers 1984).

The antecedents and outcomes of organization commitment are summarized by Steers (1977a) and Mowday, Porter, and Steers (1982). The first antecedent, personal factors, includes such aspects as age, length of association with the organization, gender, and education. Older, longer-tenured employees have higher commitment scores. Women score higher than men, and the more education an employee has, the less committed the employee is likely to be.

The second antecedent, role-related characteristics, indicates that enriched jobs lead to more commitment and jobs with high conflict and ambiguity lead to less commitment. Structural characteristics, the third antecedent, include decentralization and worker-ownership which both lead to higher commitment. The fourth antecedent, work experiences, includes a series of experiences from which the employee develops attitudes toward the organization. These include a sense that the organization is dependable and really cares about the welfare of its employees and that the employee is important to the organization. A positive relationship exists between
dependability, trust, caring, and social involvement and commitment.

Outcomes of organization commitment are the behaviors exhibited by employees as a reflection of their level of commitment. March and Simon (1958) found that the higher the commitment, the lower the absentee rate. Mowday, Steers, and Porter (1979) found that commitment is inversely related to turnover and intent to leave an organization. They also found that commitment is a better predictor of employee turnover than satisfaction when employees have been with an organization for a long period of time. As employees adopt and identify with an organization’s goals over time, they become more likely to maintain an association with the organization, to become more involved with their jobs and to put more effort into the job itself (Mowday, Porter, and Dubin 1974). Job involvement and effort are aspects of general work motivation.

Thus, the literature suggests that, based on previous findings, organization commitment would have a positive relationship with self-managed work team structure because of its role-related and structural characteristics. It also was expected that organization commitment would have a positive relationship with organization-based self-esteem, based on positive work experiences inherent in self-managed work teams.
Performance

Performance is perhaps the most researched of the outcomes of the organizational structure of self-managed work teams that are addressed in this study. While this study is most concerned with performance as it pertains to the work group, the concept of performance is relevant as a continuum from individual behavior to organizational success. A discussion of performance at all three of these levels includes the perspectives of psychology, sociology, and organizational behavior as well as the organizational theory perspective taken in this study.

Individual Performance

Performance of the individual is typically measured and reported as part of a routine performance appraisal system (Latham and Wexley 1981). Each organization has its own understanding of what constitutes employee performance. In most organizations, performance criteria include rather objective measures such as productivity and quality measures as well as some rather subjective criteria such as cooperation and loyalty (Steers et al. 1985). Regardless of the specific measures used, however, the validity of evaluation depends upon the degree of objectivity on the part of person appraising the individual (Latham and Wexley 1981). To better understand the nature of individual performance and to insure greater validity in the appraisal
process, researchers have attempted to develop models of individual performance. Each of these models includes a number of variables that partially explain individual performance. Such models allow the appraiser to see specific issues and to present the complexity of performance.

One such appraisal model is presented by Organ and Bateman (1991). It is based upon work done by Porter and Lawler (1968) and Vroom (1964). This model defines performance as a function of motivation, effort, ability, task, role perceptions, and environment. Steers (1977b) provides a similar model with motives, goals, needs, abilities, and role clarity as the independent variables resulting in performance. Szilagyi and Wallace (1983) offer a third model suggesting that perceptions contribute to learning which, when combined with personality, results in abilities. Ability is then combined with motivation to produce efforts which then result in performance. Cummings and Schwab (1973) published a complex path model of performance that included organizational variables interacting with the individual's ability, motivation, goal aspirations, and satisfaction levels to produce extrinsic, i.e., organizational outcomes.

Each of these models present a set of predecessor variables that directly or indirectly result in the outcome
of individual performance. Each model attempts to establish a framework that can be applicable and useful to any organization. It is important to note, however, that none of these models implies that organizational performance is simply the sum of all individual performances.

Organizational Performance

At the organization level, the distinction between performance and effectiveness is blurred, at best (Steers 1977b), and in some cases, the two are used interchangeably (Szilagyi and Wallace 1983; Robbins 1988). It might be argued that effectiveness is the outcome of performance, but this study treats the two terms as synonymous.

Etzioni (1964) provided the most basic model for understanding organizational effectiveness or performance. He equated organizational effectiveness with the degree to which the organization realizes its goals. This goal attainment approach, or goals model, then assesses the degree to which one or more specific goals are met.

In addition to the goals model of Etzioni, another well established model for identifying organizational effectiveness is the systems model (Yuchtman and Seashore 1967). The systems model suggests that performance or effectiveness is more complex than mere goal accomplishment. It concerns itself with the way in which goals are met as
well as the degree to which they are met. Still another model is the internal process approach (Bass 1952) which maintains that an organization is effective only if it establishes a benevolent relationship with its members through free flowing communication and a trusting environment.

In 1978, Pfeffer and Salancik formalized a model called the strategic constituencies model. Their view was that organizations needed to satisfy the objectives of several key groups of people and that each of these groups had a different perspective on organizational performance. Among these key constituency groups may be the organization's owners, workers, management, customers and suppliers, as well as government agencies and the local community.

Steers (1977b) proposed a process model that combined the models of goal optimization, a systems perspective, and an emphasis on human behavior in organizational settings. More recently, a theory known as the competing values perspective has evolved (Quinn and Cameron 1979; Cameron and Whetten 1981; Quinn and Cameron 1983). This theory draws on all of the previously mentioned approaches.

While there is no absolute agreement on the nature of organization performance or effectiveness, the subject has been researched and discussed enough to allow an established taxonomy to develop. Theories are goal oriented, systems
oriented, people/process oriented, or some combination of the three. How to actually measure organization effectiveness, however, is less established. Not only is the task of measuring organization effectiveness difficult, but as Etzioni (1964) warned:

"Curiously, the very effort - the desire to establish how we are doing and to find ways of improving if we are not doing as well as we ought to do - often has quite undesired effects from the point of view of the organizational goals. Frequent measuring can distort the organizational efforts because, as a rule, some aspects of its output are more measurable than the others. Frequent measuring tends to encourage over-production of highly measurable items and neglect those of the less measurable ones" (1964, p9).

Group Performance

Since the Hawthorne studies (Roethlisberger and Dickson 1964), management theorists have been attempting to explain and to understand work groups. It seems self-evident that the issue of work group performance is more complex than that of individual performance simply because of the added interactions of individuals (Thompson 1967). It is also more complex, because individuals participate in group efforts in order to satisfy their own goals, as well as organizational goals (Steers 1977b). As with performance at the individual and organization level, several explanations of group performance and effectiveness have been developed. Also the distinction between group performance and group effectiveness is obfuscated in much the same way the
The distinction between organization effectiveness and performance is.

Group effectiveness in organizations is the immediate result of two sets of outcomes (Jewell and Reitz 1981). The first set is comprised of four outcomes that are internal to the group; these four are cohesiveness, conformity, influence, and satisfaction with the group and its members. The second set is made up of five external outcomes; they include decisions, intergroup relations, productivity, task performance, and satisfaction with outside agents and objects.

According to Daft and Steers’ (1986, 198) interpretation of Hackman’s model of work group effectiveness, "the effectiveness of a work group is influenced by environmental factors, design factors, and task-related interpersonal processes, which in turn influence intermediate criteria. These intermediate criteria then combine with the nature of work technology to determine ultimate work group effectiveness." Hackman (1990, 6-7) also claims that there are three important criteria of group effectiveness: the extent to which the group’s productive output meets the user’s expectation of quality, quantity, and timeliness; the extent to which the group process insures future group effectiveness; and the
extent to which the group experience contributes to the well-being of its members.

Other authors have explained group effectiveness through the use of characteristics displayed by effective groups. Costley and Todd (1983) summarized the findings of several researchers' findings with the following list of characteristics frequently observed in productive groups: shared leadership, relaxed, supportive, and cooperative relationships, group loyalty and trust, confidence in the ability of group members, open communication, shared norms and values, challenging goals set by the group, and strong team spirit. Middlemist and Hitt (1981) state that effective groups exhibit the following characteristics: all members tend to contribute to the group effort; there are few social loafers; group goals, both formal and informal, are achieved; there is a sense of shared satisfaction and high morale; the group structure satisfies the mix of individual needs, skills, and backgrounds; communication within and between groups is open; and they are responsive to other groups' needs.

Clearly any understanding of group performance must include some consideration of productive output (Organ and Bateman 1991). Both the Hackman (1990) model and the Jewell and Reitz (1981) model specifically include output. The models that define effective groups according to their
characteristics, such as Middlemist and Hitt (1981) and Costley and Todd (1983), do imply that these characteristics will result in more productive output. It is significant that these characteristics include many of the same characteristics that describe self-managed work teams in their fifth stage of development.

The Present Study

As shown in the literature, many commonalities and complex interrelationships exist among the concepts studied here. A theoretical model based on this literature review helps conceptualize these relationships (Figure 1).

The causal variable is organizational implementation of self-managed work team structure. The objective measure represents the organization structure as determined by observation of the functioning of the organization. The subjective measure represents the level of self-management as perceived by the subjects of the study. Organization-based self-esteem, as well as its consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment, are consequent behaviors. These behaviors are not easily controlled and even less easily predicted. They are the dividends that tend to emerge from the interactions that
Fig. 1. Theoretical model of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance.
occur while the organization strives for desired outcomes. Personal mediators, represented here by global self-esteem, tenure, age, and gender, are the variables that are unique to, and relatively stable in each individual in the organization. The outcome phenomenon, performance, is the goal of the causal variable, self-managed work teams.

This study is an investigation of theoretical interrelationships among the variables represented in the model. Path analysis, a type of structural equation modeling, was used to reveal the relationships that occur in the organization under study. It was hypothesized that as the level of self-managed work teams increases, the degree of organization-based self-esteem in its members would increase, which would, in turn, lead to an increased degree of intrinsic work motivation, general job satisfaction, organization citizenship, and commitment, and finally to an increased level of performance. Meanwhile, it was hypothesized that each subject's level of organization-based self-esteem would have a positive relationship with personal mediators of global self-esteem, tenure, age, and gender. It also was hypothesized that there would be a direct positive relationship between the level of self-managed work teams and the level of performance.
Hypotheses

Based on the literature and research to date and the theoretical model developed on them, 24 hypotheses in six groups are addressed in this study.

Group 1A

The first hypothesis discusses the correlation between the objective measure (variable 1) and the subjective measure (variable 2) of the level of self-managed work teams. The subjective measure acts as a check on the objective.

Hypothesis 1. There is a positive correlation between the objective measure of the level of self-managed work teams and the subjective measure of the level of self-managed work teams.

Group 1B

The next hypothesis discusses the direct relationship between the objective measure of the level of self-managed work teams (variable 1) and organization-based self-esteem (variable 3). The literature suggests that, as a dependent variable, organization-based self-esteem is positively influenced by the organizational structure of self-managed work teams.

Hypothesis 2. There is positive relationship between the level of self-managed work teams and the degree of organization-based self-esteem.
Group 2

The next four hypotheses discuss the direct relationship between organization-based self-esteem and personal mediators. The literature suggests that as a dependent variable, organization-based self-esteem (variable 3) is positively influenced by personal mediators such as global self-esteem (variable 4), tenure (variable 5), age (variable 6), and gender of the respondent (variable 7).

Hypothesis 3. There is a positive direct relationship between the degree of organization-based self-esteem and the degree of global self-esteem.

Hypothesis 4. There is a positive direct relationship between the degree of organization-based self-esteem and the length of tenure.

Hypothesis 5. There is a positive direct relationship between the degree of organization-based self-esteem and age of the respondent.

Hypothesis 6. There is a positive direct relationship between the degree of organization-based self-esteem and the gender of the respondent.

Group 3

The next four hypotheses discuss the direct relationship between organization-based self-esteem and consequent behaviors. The literature suggests that as an independent variable, organization-based self-esteem
(variable 3) positively influences consequent behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11).

Hypothesis 7. There is a positive direct relationship between the degree of organization-based self-esteem and the degree of intrinsic work motivation.

Hypothesis 8. There is a positive direct relationship between the degree of organization-based self-esteem and the degree of general job satisfaction.

Hypothesis 9. There is a positive direct relationship between the degree of organization-based self-esteem and the degree of organization citizenship.

Hypothesis 10. There is a positive direct relationship between the degree of organization-based self-esteem and the degree of organization commitment.

Group 4A

The next four hypotheses discuss the indirect relationship between the level of self-managed work teams and consequent behaviors. The literature suggests that, as an independent variable, self-managed work teams (variable 1) positively influences consequent behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship
through organization-based self-esteem (variable 3).

Hypothesis 11. There is a positive indirect relationship between the level of self-managed work teams and the degree of intrinsic work motivation.

Hypothesis 12. There is a positive indirect relationship between the level of self-managed work teams and the degree of general job satisfaction.

Hypothesis 13. There is a positive indirect relationship between the level of self-managed work teams and the degree of organization citizenship.

Hypothesis 14. There is a positive indirect relationship between the level of self-managed work teams and the degree of organization commitment. Group 4B

The next four hypotheses discuss the direct relationship between the level of self-managed work teams and consequent behaviors. The literature suggests that, as an independent variable, self-managed work teams (variable 1) positively influences consequent behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11).

Hypothesis 15. There is a positive direct relationship
between the level of self-managed work teams and the degree of intrinsic work motivation.

Hypothesis 16. There is a positive direct relationship between the level of self-managed work teams and the degree of general job satisfaction.

Hypothesis 17. There is a positive direct relationship between the level of self-managed work teams and the degree of organization citizenship.

Hypothesis 18. There is a positive direct relationship between the level of self-managed work teams and the degree of organization commitment.

Group 5

The next four hypotheses discuss the direct relationship between the consequent behaviors and performance. The literature suggests that, as a dependent variable, performance (variable 12) is positively influenced by behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11).

Hypothesis 19. There is a positive direct relationship between the degree of intrinsic work motivation and the level of performance.
Hypothesis 20. There is a positive direct relationship between the degree of general job satisfaction and the level of performance.

Hypothesis 21. There is a positive direct relationship between the degree of organization citizenship and the level of performance.

Hypothesis 22. There is a positive direct relationship between the degree of organization commitment and the level of performance.

Group 6

The last two hypotheses discuss the relationship between the level of self-managed work teams and performance. The literature suggests that, as a dependent variable, performance (variable 12) is directly positively influenced by the level of self-managed work teams (variable 1) and indirectly positively by the level of self-managed work teams through organization-based self-esteem (variable 3) and consequent behaviors (variables 8, 9, 10, and 11).

Hypothesis 23. There is a positive direct relationship between the level of self-managed work teams and the level of performance.

Hypothesis 24. There is a positive indirect relationship between the level of self-managed work teams and the level of performance.
CHAPTER 3

THE DATA, THEIR TREATMENT, AND THEIR INTERPRETATION

The Data

The data developed for this research are of two types. They are primary and secondary.

Primary Data

Four types of primary data were used in this study. First, data for this study were generated through standardized questionnaires using Likert-type five-point scales. These data were used to determine global self-esteem, organization-based self-esteem, intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment. These data are ordinal, but were treated as interval data for the purposes of analysis. Traditionally, data collected using Likert-type scales have been treated as interval data in regression applications such as is used in structural equation modeling (Churchill 1987). Scales, such as ordinal scales, that seek to yield interval or ratio level measurement can effectively be used especially when dealing with summations of scores as is the usual practice with Likert-type scales (Cohen and Cohen 1983). The power of regression analysis is so great
compared to ordinal-level techniques, that the risk of error is acceptable in that regression analysis with ordinal data arrives at the same conclusion as when using interval or ratio data (Lewis-Beck 1985). In the specific case of using summated Likert-type scales as is done in this study, correlation of scores on the summated scale to other measures can be done without concern for the absolute value or degradation of results (Emory 1985).

A second type of primary data used was the content of responses to open-ended questions. These qualitative data were used to interpret the findings of the data collected using Likert-type scales.

A third type of primary data used was demographic data. These categorical data also were used to explain and interpret the findings of the data collected using Likert-type scales.

A fourth type of primary data used was observations and judgements, a type of qualitative primary data. These observations were used to categorize the degree of self-management exercised by work teams and to interpret the findings.

Secondary Data

Performance measures were obtained from the food processing plant under study. Data resulting from research, dissertations, and information in books and texts constitute
a type of secondary data. These data were significant in the isolation of variables and the theoretical constructs upon which this research was based.

The Research Methodology

The Design

The research design used in this study is known by various names such as sample survey (Stone 1978) and analytical survey (Leedy 1985). Analytical survey is a systematic technique using questionnaires or interviews to collect data from members of a sample that represents a known population. No independent variables are manipulated. The purpose of research using this design can range from exploration of phenomena to the testing of hypotheses (Stone 1978).

The basic design of this analytical survey is a cross-sectional survey. In this design, "data are collected at one point in time from a sample selected to describe some larger population at that time...A subsequent survey might find quite a different relationship" (Babbie 1973, 62-63).

One part of this study collects data about the respondents' environment; this is known as a contextual study, or an examination of the respondents' context. These environmental data can then be used to analyze the
respondents’ attitudes as determined by the analytical survey (Babbie 1973).

Analytical survey design was selected for three reasons. First, it allows for generalizations to a defined population. Second, surveys often yield data that suggest new hypotheses (Stone 1978). And finally, the analytical survey allows for triangulation, which is the use of various systematic data collection methods, such as interviews, questionnaires, and observation, that can be combined to gain a deeper and clearer understanding of the setting, people, and variables being studied (Taylor and Bogdan 1984).

The Questionnaire

The questionnaire used for this study was a combination of Likert-type scale questions developed specifically for this study, standardized surveys, demographic questions, and open-ended questions. A copy of the questionnaire is provided in Appendix A.

Two sets of Likert-type scale questions were developed specifically for this study. Both were used to measure the level of self-managed work teams based on the characteristics discussed in the section on stages of self-managed work teams in Chapter 2, p. 17. The objective measure contained all ten items, whereas the subjective measure used the last six items.
Six standardized surveys were used. These particular construct measures were chosen because they had previously-established psychometric properties. Organization-based self-esteem was measured with a ten-item scale developed by Pierce et al. (1989). Global self-esteem, a personal mediator of organization-based self-esteem, was measured with the ten-item Rosenberg self-esteem scale (RSE) (Rosenberg 1965). Intrinsic work motivation and general job satisfaction were measured with appropriate portions of Hackman and Oldham's Job Diagnostic Survey (1974a). Organization citizenship was measured with a fourteen-item scale based on a survey developed by Smith, Organ, and Near (1983). Organization commitment was measured with a ten-item scale taken from an instrument developed by Mowday, Steers, and Porter (1979).

Demographic questions were used to determine the personal mediator variables of tenure, age, and gender. Respondents were offered categories of responses for each category.

Four open ended questions were used to gather unstructured responses. These responses were used to interpret the results of the quantitative part of the questionnaire.

The ethnic make-up of the sample of this study necessitated the development of a Spanish version of the
questionnaire as well as an English version. The development of the questionnaire originally was written in the English language. A professional translator then translated the English version of the questionnaire into Spanish. The Spanish version of the questionnaire was then retranslated into English by two employees at the study site and compared to the original English version. This was done to verify that meaning had not been lost in the translation process and to help ensure comprehension by the Puerto Rican respondents in the sample.

Additional Data

Three additional groups of data were collected for this study. As a means of triangulation, written open-ended questions and unstructured interviews were used. Open-ended questions on the questionnaire asked respondents to indicate, in their own words, what they liked and disliked about their working situation and themselves. Unstructured interviews were conducted with team members, supervisors, and staff personnel. The data were gathered as unobtrusively as possible in order to avoid the tendency respondents have to modify answers to suit the interviewer. The data collected in this manner were similar to those found in the formal questionnaire. The answers to the open-ended questions and the interviews were used to help interpret the results of the standardized portion of the
questionnaire. This method of triangulation was used to guard against researcher bias and to gain a deeper and clearer understanding of the setting and the persons being studied (Taylor and Bogdan 1984).

The Procedure

Setting

This analytical survey required that the organization be structured around self-managed work teams and that it offered an ample number of subjects. The nature of the study, therefore, essentially necessitated a sample of convenience. Even with convenience samples gaining access to organizations has traditionally been difficult (Taylor and Bogdan 1984). Fortunately, a food processing plant was found that was team-based, accessible, and provided the appropriate number of subjects.

This plant is located in an urban area of a nonmetropolitan county in a northeastern state of the United States with a population of about 25,000. Although it sits in the heart of fertile, productive farm lands, the area supports a broad diversity of industry including lumber and wood products, primary metals, fabricated metals, machinery, processed food, printing and publishing, and construction. The average unemployment rate for the area from May 1988 through August 1990 was 5 percent while the average weekly
wage of all employees covered by unemployment insurance in 1989 was $343.77. The average weekly wage of employees in manufacturing in 1989 was $442.71.

The labor force in the county is generally well educated and skilled. The county supports a four-year liberal arts college, a two-year junior college, and a vocational school. Health care services include five accredited hospitals and there are many cultural and tourist attractions as well.

The food processing plant that was the site of this study is one of a number of similar food processing plants in the county. One hundred forty of the 325 employees were participants in the self-managed work-team structure. They represented the following functional areas: batching, maintenance, production, and quality control. The other 185 employees were a part of a traditional structure representing warehousing, clerical, trucking, and management.

The food processing plant, which processes fruit and vegetable juices, encompasses 125,000 square feet. The average yearly income of the employees studied was between $15,000 and $20,000.

Description of the Sample

The subjects for this study were 116 full-time, first-line production employees working in self-managed work teams
(75% of all employees in teams). All qualifying employees within a unit were surveyed on a volunteer basis. Of the 116 completed surveys, 105 of them were usable; the other 11 were eliminated because of uncompleted sections of the survey. Four subjects used a Spanish version of the survey. One Spanish speaking subject could not read, so a bilingual (Spanish and English) team member volunteered to help administer the survey in that one case.

The sample for this study consisted of 325 employees at a food processing plant. Of the 325 employees, 140 were part of a self-managed work-team structure (Fig. 2). The 105 employees who were surveyed (75% of the 140), and whose responses were usable, represented the following functional areas: production (68), batching (24), maintenance (7), and quality control (6) (Fig. 3). The 185 employees who were not used in this study were part of a traditional structure. They represented warehousing, clerical, trucking, and management areas.

The study participants belonged to seven different teams, ranging in size from fourteen to twenty-one members. Four of the teams worked day shift and three of the teams worked night shift. Each team was comprised of representatives from each of the four traditional departments: production (packaging the product, 64.1%), batching (preparation of the food product, 23.3%),
SMWT Survey Employees 105

Non-SMWT Employees 185

SMWT Non-Survey Employees 35

Total no. of employees in sample = 325

*Fig. 2. Structure of the sample.*

Batching 24

Maintenance 7

Quality Control 6

Production 68

Total no. of employees in survey = 105

*Fig. 3. Self-managed work teams by function.*
maintenance (6.8%), and quality control (5.8%).

The overall sample included 82 males (78.1%) and 23 females (21.9%) (Fig. 4). The largest percentage of the sample were twenty-six to thirty-five years old (36.2%), while 30.5 percent were less than twenty-six years old and 33.3 percent were more than thirty-five years old (Fig 5). Several broad ethnic groups were represented; 65.7 percent identified themselves as Caucasian, 17.1 percent as Hispanic, 12.4 percent as Afro-American, and 4.8 percent as Native American (Fig. 6). The workers' education levels ranged from less than six years (3.8%) to more than twelve years (33.7%), with the majority (53.8%) reporting ten to twelve years of education (Fig 7). Most of the Hispanic team members were emigrants from Puerto Rico. For most, their formal education stopped when they left Puerto Rico to seek employment in the United States. Most spoke English, but all could communicate with others through bilingual team members. Tenure on the job ranged from less than six months to more than two years.

Treatment

This study was designed to investigate relationships among the organization structure of self-managed work teams, organization-based self-esteem, its consequent behaviors of intrinsic work motivation, general job satisfaction, organization citizenship, organization commitment, and
Total no. of employees in survey = 105

Fig. 4. Self-managed work teams by gender.

Total no. of employees in survey = 105

Fig. 5. Self-managed work teams by age.
Total no. of employees in survey = 105

Fig. 6. Self-managed work teams by ethnic group.

Total no. of employees in survey = 105

Fig. 7. Self-managed work teams by education level.
performance. This study is an analytical survey; thus, there was no treatment and no variables were manipulated.

Variables

The variables and the characteristics of each instrument used to measure them are presented in the following paragraphs.

Level of Self-Managed Work Teams

The first two key variables in the model are the objective measure of the level of self-managed work teams (variable 1), and the subjective measure of the level of self-managed work teams (variable 2) (Fig. 1, p. 60, Theoretical model of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance). A self-managed work team is characterized, at minimum, by the following:

1. A single social unit, or team, is responsible for producing a well-defined segment of finished product or service.

2. All functions and technical skills necessary for process control, maintenance, and adjustment are included within the team.

3. Output of the team can be defined and measured.
4. The team is comprised of individual members who are jointly committed to optimize the functioning of the team with respect to production goals (DuBrin 1984; Aubrey and Felkins 1988; Orsburn et al. 1990). Additional characteristics may include, but are not limited to the following:

1. Individual members or whole teams cross traditional channels and barriers to deal with other departments.

2. Leadership responsibilities are rotated among team members.

3. Tasks are rotated among team members.

4. Members may participate in the selection and dismissal of fellow team members.

5. The team determines how to meet production targets.

6. Individual members or whole teams cross traditional channels and barriers to deal with customers and suppliers (DuBrin 1984; Aubrey and Felkins 1988; Orsburn et al. 1990).

No known valid quantitative instrument can consistently determine the level of employee self-management. This is due in part to the various interpretations by practitioners and researchers of the concept of self-management. An objective observation measure of self-management was judged
qualitatively for this study. The standards for judgement were the ten characteristics listed on page 80. Teams were rated using data gathered through unstructured interviews with supervisors and employees and through observation. In addition, six questions based on the last six characteristics listed were included in the questionnaire in order to gather the employees' perceptions of their level of self-management. These six items are questions 48 through 53 of the questionnaire in Appendix A. The objective measurement and the subjective measurement of the employees were compared and analyzed. Internal reliability of the subjective measure was high (Cronbach's alpha = .75).

Organization-Based Self-Esteem

The third key variable in the model is organization-based self-esteem (variable 3, fig. 1, p. 60, Theoretical model of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance). Organization-based self-esteem, a construct defined by Pierce et al. (1989), is the degree to which a member of an organization believes that personal needs can be satisfied by participating in a role within the context of that organization. Therefore, employees with high organization-based self-esteem would see themselves as important, meaningful, effectual, and worthwhile within the work situation. Experiences within an organization shape
organization-based self-esteem. Organization-based self-esteem acts as an antecedent of organization-related behaviors and attitudes such as intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment.

Organization-based self-esteem was characterized by a score determined through the administration of an instrument developed and tested by Pierce et al. (1989). Their instrument has ten items and uses a five-point Likert-type scale. These ten items are questions 28 through 37 of the questionnaire in Appendix A. Respondents were asked to think about the messages they receive from the attitudes and behaviors of their managers, supervisors, and coworkers, and to indicate the extent to which they agreed or disagreed with each of the statements. A measure of overall organization-based self-esteem for each respondent was derived by taking the mean score across all items. The measure's reliability estimates and validity measures, as reported in Pierce et al. (1989), are: an internal consistency alpha value equal to or greater than .86; a test-retest reliability coefficient of .75 ($p < .01$); a predictive validity of organization structure, $r = -.32$ ($p < .05$) to $r = -.54$ ($p < .01$) (this negative relationship suggests that the more impersonal and authoritarian or traditional an organization is, the lower an employee's
organization-based self-esteem will be); incremental validity in relation to organization commitment, $r = .55$; and incremental validity in relation to organization satisfaction, $r = .77$ ($p < .01$). Incremental validity provides "some increment in predictive efficiency over the information otherwise easily and cheaply available" (Sechrest 1963, 154).

**Personal Mediator Variables**

The next four variables are the personal mediators of organization-based self-esteem. The variables are (4) global self-esteem, (5) tenure, (6) age and (7) gender (Fig.1, p. 60, Theoretical model of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance).

**Global Self-Esteem**

Global self-esteem (variable 4) is an overall self-evaluation of approval or disapproval of self (Simpson and Boyle 1975). It is derived from an aggregation of life experiences in many contexts, including work experiences, that accumulate across time (Pierce et al. 1989). Global self-esteem is both an antecedent and outcome of organization-based self-esteem. In this study, global self-esteem was treated as an independent variable, a personal mediator of organization-based self-esteem. It was included
in this study to verify the findings of organization-based self-esteem.

Global self-esteem was characterized by a score determined through the administration of an instrument developed and tested by Rosenberg (1965). The ten items are numbered 1 through 10 on the questionnaire. Although Rosenberg used a Guttman scale, most researchers use the simpler Likert method of summing across the ten items (Wylie 1989). The original four-point scale was replaced with a five-point scale for consistency in the overall instrument and for increased test-taking ease for the respondents. Several items were negatively phrased and reverse scored in an effort to reduce response bias. No descriptive statistics are available for the Likert-type scale scoring of the instrument, although several researchers have used the Rosenberg Self-Esteem Scale. Statistics on reliability and validity are strong for the Guttman scale (Wylie 1989). Wylie reports that for internal consistency, the Cronbach alpha was .77 in a study of 5,024 students, and the alpha coefficients in seven studies ranged from .72 to .87. The coefficients of reproducibility were .92 or more.

Tenure, Age, and Gender

Tenure (variable 5), age (variable 6), and gender (variable 7) are personal mediators of organization-based self-esteem. These data were obtained by asking team
members how long they had worked in their present position, how old they were, and whether they were male or female. Respondents were offered categories of responses for each mediator question. The three items are numbered 73 through 75 on the questionnaire.

Consequent Behaviors

The next four key variables in the model represent the set of consequent behaviors of intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11) (fig. 1, p. 60, Theoretical model of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance).

Intrinsic Work Motivation and General Job Satisfaction

Intrinsic work motivation (variable 8) is the effort expended by an employee toward organizational objectives or work accomplishment (DuBrin 1984). Cognitive consistency theory assumes that persons are motivated to achieve outcomes that are consistent with their self-concept (Korman 1971). This suggests that employees with high organization-based self-esteem see themselves as organizationally valuable and meaningful, and that they are motivated to engage in behaviors valued in the organization.
General job satisfaction (variable 9) is an attitude that employees develop as a consequence of their perceptions of their job situations in general (Hackman and Oldham 1975). In this respect, it is a dependent variable. A number of dimensions have been associated with general job satisfaction, including how interesting the job is, how fulfilling the job is, what the promotion opportunities are, how supportive supervisors are, if pay is equitable, and how friendly, competent, and supportive coworkers are (Smith, Kendall, and Hulin 1969). To the extent that an organization can provide these, employees experience general job satisfaction, coupled with a reinforcement of their organization-based self-esteem (Pierce et al. 1989). In this respect it is an independent variable. In this study, general job satisfaction is used as both an independent variable with respect to performance and a dependent variable with respect to level of self-managed work teams and organization-based self-esteem.

For this study, intrinsic work motivation and general job satisfaction were determined through the administration of parts of the Job Diagnostic Survey, developed and tested by Hackman and Oldham (1974a). Items 11, 12, 15, 17, and 19 of the present questionnaire measure general job satisfaction. Items 13, 14, 21, 23, 25, and 27 measure intrinsic work motivation. An average of item scores in
each category for each respondent yields the score for that measure. The original seven-point Likert-type scale was replaced with a five-point scale. The responses range from 1 = agree strongly to 5 = disagree strongly. The change was made for consistency in the overall instrument and for increased test-taking ease for the respondents. Several items were negatively phrased and reverse scored in an effort to reduce response bias. Both intrinsic work motivation and general job satisfaction measures had an internal consistency reliability of .76 (Hackman and Oldham 1975). The substantive validity of the instrument is reported in detail in Hackman and Oldham (1974b). "In general, the results suggest that both the internal consistency reliability of the scales and the discriminant validity of the items are satisfactory" (Hackman and Oldham 1975, 164).

Organization Citizenship

Organization citizenship (variable) is characterized by acts of cooperation, helpfulness, suggestions, gestures of goodwill, and altruism in the work place (Smith, Organ, and Near 1983). Organization citizenship is what Roethlisberger and Dickson (1964) refer to as cooperation, or something beyond productivity. Whereas productivity is a function of the formal organization, cooperation (or organization citizenship) is the day-to-day spontaneous gestures of
employees accommodating the work needs of others. Roethlisberger and Dickson describe cooperation as a consequence of both the quality of work experience and previous social conditioning. In this respect cooperation functions as a dependent variable.

Organization citizenship was characterized by a score which was determined through the administration of an instrument developed and tested by Smith, Organ, and Near (1983). The instrument has fourteen items, numbered 54 through 67 on the present questionnaire, and uses a five-point Likert-type scale. Two factors make up this construct, a personalized altruism and a more impersonal form of generalized compliance. Coefficient alpha reliability estimates were .88 and .85, respectively, for the two factors. A five-point Likert-type scale is used with responses ranging from 1 = very characteristic of me, to 5 = very uncharacteristic of me. Several items were negatively phrased and reverse scored in an effort to reduce response bias. A summation of item responses yielded the respondents’ scores on organization citizenship.

Organization Commitment

Organization commitment (variable 11) is defined by Porter et al. (1974) as the relative strength of an individual’s identification with and involvement in a particular organization. They contend that it can be
characterized by at least three factors: (1) a strong belief in and acceptance of the organization's goals and values, (2) a willingness to exert a great deal of effort on behalf of the organization, and (3) a strong desire to maintain organizational membership. Organization commitment represents an active relationship with an organization; individuals are willing to give something of themselves in order to contribute to the organization's well being (Mowday, Steers, and Porter 1979). Because it is a consequent behavior of organization-based self-esteem (Pierce et al. 1989), organization commitment is a dependent variable.

Organization commitment was characterized by a score derived from an instrument developed and tested by Mowday, Steers, and Porter (1979). It has ten items, numbered 38 through 47 in the questionnaire used for this study. The original seven-point Likert-type scale was altered to a five-point scale and the responses range from 1 = agree strongly to 5 = disagree strongly. The change was made for consistency in the overall instrument and for increased test-taking ease for the respondents. Several items were negatively phrased and reverse scored in an effort to reduce response bias. As effectiveness of a questionnaire is dependent, in part, on the total length of the questionnaire (Churchill 1987), items with an average item-total
correlation less than .50 were eliminated. A summation of responses yielded a respondents' scores on organization commitment. Internal consistency reliability had a coefficient alpha ranging from .82 to .93, with a median of .90. Test-retest reliabilities were $r = .53, .63, \text{ and } .75$ over two-, three-, and four-month periods, respectively. Convergent validity ranged from .63 to .74, with a median of .70.

**Performance**

The last key variable in the model is performance (variable 12) (fig.1, p. 60, Theoretical model of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance). Team, or work group, performance is a function of the organization measured in various ways (Chapter 2, p. 55). In this study performance was determined by using level of output, amount of rework, time lost due to injuries on the job, and absenteeism for each team. These secondary data for this variable were obtained from the food processing plant under study.

**Specific Treatment of the Data**

The data needed for this study were (1) the identity of members of self-managed work teams, (2) the responses from these subjects to the questionnaire, and (3) performance
measures. After gaining access to a food processing plant structured in part around self-managed work teams, identification of appropriate subjects was made of members of teams defined by, but not limited to, the list of characteristics outlined earlier in this chapter in the section entitled variables. This was done through unstructured interviews with supervisors and team members, and observation. Team members were also asked their perceptions of the level of their self-management by means of six questions in the questionnaire. These questions were based on the last six characteristics listed in the variables section.

The data were collected at regular team meetings over the course of one week. Both the written and interview data were collected in person at the work site. Prior to the distribution of the questionnaire, an informed consent form was voluntarily signed by all participants. The form was collected separately to ensure anonymity of responses to the questionnaire. A sample of the release form is provided in Appendix B.

Four of the participants spoke and read only Spanish. To accommodate them, a Spanish version of the questionnaire was administered. Bilingual participants assisted in this process.
Performance measures for each team were obtained from the food processing plant under study. These measures included level of output, amount of rework, time lost due to injuries on the job, and absenteeism level. A composite score for each team represented the performance measure.

Treatment of the Data

The sections of the questionnaire dealing with organization-based self-esteem, intrinsic work motivation, general job satisfaction, organization citizenship, organization commitment, and global self-esteem utilized Likert-type scales. The level of each variable for each member of the self-managed work teams was determined by summing the responses of the appropriate questions for each respondent. Descriptive statistics and Pearson Product-Moment correlations were performed on the data.

This study is an investigation of the theoretical interrelationships among the variables represented in the model illustrated in figure 1 (Chapter 2). Regression analysis was performed for the purpose of path analysis. Path analysis is a recursive statistical method used to study patterns of causation among variables. This method was used to help understand the relationships that occurred among the constructs under study. It was hypothesized that as the level of self-managed work teams increased, the
degree of organization-based self-esteem in its members would increase, which would in turn lead to an increased degree of intrinsic work motivation, general job satisfaction, organization citizenship, and commitment, and finally to an increased level of performance. It was also hypothesized that a direct positive relationship exists between the level of self-managed work teams and the level of performance.

Data Analysis

Statistical procedures from ABSTAT software were used to analyze the data for descriptive statistics and correlations. EQS Structural Equations Program Version 3.0 was used to perform the path analysis.

Interpretation of the Data

Path analysis is a method for studying patterns of causation among a set of variables (Pedhazur 1982). Path analysis can reveal the extent of the association of the variables being examined in a particular model, but does not explain the cause of the association. One variable may cause the other, or they may interact in causation, or they may be associated because of outside influences (Balsley 1978). Few empirical studies have been published about the effects that self-managed work teams have on the members of
these teams or about their effects on the performance of an organization. The present study was designed to discover what relationships exist in the organization under study, and to offer explanations of those relationships.
CHAPTER 4

RESULTS

The results of this study are presented in this chapter. The results of the path analysis performed on the theoretical model, presented in Chapter 2. A new model that emerged from the data and accompanying rationale are then presented. The chapter concludes with a presentation of the results as they support the research hypotheses.

Stage of Transition of Self-Managed Work Teams

The stage of transition of the self-managed work teams, as determined by observation and described in Chapters 2 and 3, varied among the teams. In quantitative terms, on a scale of one to five, with one representing the weakest degree of self-management, or stage one of transition, the teams were evaluated between 2.5 and 3, or stages 2 and 3 (Table 3).

This restriction of range had the effect of reducing correlations with other variables in the model. In accordance with the definition of self-managed work teams provided in Chapter 3, all teams in the study were responsible for producing a well-defined segment of finished product or service, included all functions and technical
skills necessary for process control, maintenance, and adjustment, and had output that could be defined and measured. The teams, however, were comprised of individual members who were variously committed to optimizing the functioning of the team with respect to production goals. Joint commitment was stronger in some teams than in others, and the commitment within teams also varied.

The extent to which individual members crossed traditional channels and barriers to deal with other departments varied among and within teams. Leadership responsibilities, however limited, were rotated among team members in a combination of consensus among team members and acceptance by management. Few tasks were rotated among team members. For the most part, team members tended to specialize their skills. There were some notable exceptions to this, however. Although management did not encourage job rotation or cross training, these practices were accepted within the teams if they were desired by team members. Team members were allowed informal input into the selection and dismissal of fellow team members. Management weighed the input, to some degree, on the level of respect that management seemed to have for a team. Teams had little influence in determining how to meet production targets, and individual members or whole teams did not cross traditional channels and barriers to deal with customers and suppliers.
TABLE 3
STAGES OF TRANSITION OF SELF-MANAGED WORK TEAMS IN STUDY

<table>
<thead>
<tr>
<th>STAGES</th>
<th>SURVEY CHARACTERISTICS</th>
<th>STAGE OF TEAMS IN STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage One: The Start-Up Stage</td>
<td>Optimism of the team and wariness of the supervisor</td>
<td></td>
</tr>
<tr>
<td>Stage Two: State of Confusion</td>
<td>Feelings of ambiguity, foot-dragging, and blatant resistance</td>
<td>Night Shift Teams</td>
</tr>
<tr>
<td>Stage Three: Leader-Centered Team</td>
<td>Growing confidence as teams become effective decision makers</td>
<td>Day Shift Teams</td>
</tr>
<tr>
<td>Stage Four: Tightly Formed Team</td>
<td>Intense team loyalty</td>
<td></td>
</tr>
<tr>
<td>Stage Five: Self-Managed Work Team</td>
<td>Maturity and a commitment to achieving organizational and team goals</td>
<td></td>
</tr>
</tbody>
</table>

Correlations

Correlations among all of the variables in the theoretical model are presented in Table 4. These correlations serve as the basis of the path analysis used to interpret the relationships among the constructs in this study.
As indicated in Table 4, the objective measure of the level of self-managed work teams (SMWT1, variable 1) and the subjective measure of the level of self-managed work teams (SMWT2, variable 2) have a correlation coefficient of $r = 0.129$, which at an alpha level of 0.05 is not significant. The level of self-managed work teams (SMWT1, variable 1) and organization-based self-esteem (OBSE, variable 3) have a correlation coefficient of $r = -0.078$, which at an alpha level of 0.05 is not significant. The level of self-managed work teams (SMWT1, variable 1) has the following correlation coefficients with each of the consequent behaviors: intrinsic work motivation (IM, variable 8) $r = -0.070$; general job satisfaction (SATIS, variable 9) $r = -0.060$; organization citizenship (CIT, variable 10) $r = 0.190$; and organization commitment (COMM, variable 11) $r = -0.122$. None of these correlations are significant at an alpha level of 0.05. Self-managed work teams (SMWT1, variable 1) and performance (PERFORM, variable 12) have a correlation coefficient of $r = -0.342$, which is significant at an alpha level of 0.01.

Organization-based self-esteem (OBSE, variable 3) has the following correlation coefficients with each of the personal moderators: general self-esteem (GSE, variable 4) $r = 0.148$; tenure (TENURE, variable 5) $r = -0.053$; age (AGE, variable 6) $r = -0.097$; and gender (GENDER, variable 7) $r = \ldots$
### Table 4.
CORRELATION MATRIX WITH MEAN AND STANDARD DEVIATIONS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tenure</th>
<th>Gender</th>
<th>Age</th>
<th>SMWT1</th>
<th>SMWT2</th>
<th>OBSE</th>
<th>GSE</th>
<th>IM</th>
<th>SATIS</th>
<th>CIT</th>
<th>COMM</th>
<th>PERFORM</th>
<th>MEAN</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Gender</td>
<td>-0.024</td>
<td>1.000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.177</td>
<td>-0.044</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>SMWT1</td>
<td>-0.152</td>
<td>-0.021</td>
<td>-0.070</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMWT2</td>
<td>0.071</td>
<td>-0.023</td>
<td>-0.106</td>
<td>0.129</td>
<td>1.000</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>OBSE</td>
<td>-0.053</td>
<td>0.226</td>
<td>-0.097</td>
<td>-0.078</td>
<td>0.294</td>
<td>1.000</td>
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<td></td>
</tr>
<tr>
<td>GSE</td>
<td>0.157</td>
<td>-0.003</td>
<td>0.146</td>
<td>-0.146</td>
<td>0.077</td>
<td>0.148</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>IM</td>
<td>0.015</td>
<td>0.025</td>
<td>-0.085</td>
<td>-0.070</td>
<td>0.109</td>
<td>0.456</td>
<td>0.088</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SATIS</td>
<td>0.030</td>
<td>0.017</td>
<td>-0.244</td>
<td>-0.060</td>
<td>0.220</td>
<td>0.385</td>
<td>0.231</td>
<td>0.354</td>
<td>1.000</td>
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<td></td>
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</tr>
<tr>
<td>CIT</td>
<td>0.043</td>
<td>-0.178</td>
<td>-0.063</td>
<td>0.190</td>
<td>0.005</td>
<td>0.040</td>
<td>0.151</td>
<td>0.105</td>
<td>0.016</td>
<td>1.000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>COMM</td>
<td>0.172</td>
<td>0.092</td>
<td>-0.187</td>
<td>-0.122</td>
<td>0.201</td>
<td>0.513</td>
<td>0.119</td>
<td>0.424</td>
<td>0.636</td>
<td>0.010</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERFORM</td>
<td>0.051</td>
<td>0.148</td>
<td>-0.107</td>
<td>-0.342</td>
<td>-0.004</td>
<td>0.250</td>
<td>0.152</td>
<td>0.001</td>
<td>0.247</td>
<td>-0.219</td>
<td>0.230</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 SMWT1 = Self-Managed Work Team (objective measure), 2. SMWT2 = Self-Managed Work Team (subjective measure), 3. OBSE = Organization based Self-Esteem, 4. GSE = General Self-Esteem, 5. IM = Intrinsic Work Motivation, 6. SATIS = General Job Satisfaction, 7. CIT = Organization Citizenship, 8. COMM = Organization Commitment, 12. PERFORM = Performance. N=105. * Significant at the 0.05 level, ** Significant at the 0.01 level.
Gender correlates significantly at an alpha level of 0.01; none of the other correlations between organization-based self-esteem and its personal moderators are significant at an alpha level of 0.05. Organization-based self-esteem (OBSE, variable 3) has the following correlation coefficients with each of its consequent behaviors: intrinsic work motivation (IM, variable 8) \( r = 0.456 \); general job satisfaction (SATIS, variable 9) \( r = 0.385 \); organization citizenship (CIT, variable 10) \( r = 0.040 \); and organization commitment (COMM, variable 11) \( r = 0.513 \). Each of the correlations with intrinsic work motivation, general job satisfaction, and organization commitment is significant at an alpha level of 0.01; the correlation between OBSE and organization citizenship is not significant at an alpha level of 0.05.

Performance (PERFORM, variable 12) has the following correlation coefficients with each of the consequent behaviors of self-managed work teams and organization-based self-esteem: intrinsic work motivation (IM, variable 8) \( r = 0.001 \); general job satisfaction (SATIS, variable 9) \( r = 0.247 \); organization citizenship (CIT, variable 10) \( r = -0.219 \); and organization commitment (COMM, variable 11) \( r = 0.230 \). Each of the correlations between performance and general job satisfaction, organization citizenship, and organization commitment is significant at an alpha level of
0.01; the correlation between performance and intrinsic work motivation is not significant at an alpha level of 0.05.

Path Analysis

Path analysis was performed to explore the tenability of the theory-based causal model developed in Chapter 2. Because the objective was aimed at understanding the pattern of relationships among the constructs, a theory-trimming approach was used (Pedhazur 1982).

The first step was to regress each endogenous variable on all others that preceded it in the full theoretical model (Fig. 1, p. 60, Chapter 2). Endogenous variables, or dependent variables, are variables whose variation is explained by other variables in the model, or dependent variables. The regression analyses were based on the correlation matrix in Table 4. Standardized beta weights were used to estimate path coefficients. A path coefficient is the direct effect that a variable hypothesized as an independent variable has on the dependent variable. This regression procedure assumes that in the full theoretical model, all variables that precede a particular endogenous variable in the causal sequence have direct causal effects on it. As shown in Figure 8, some of the paths in the full model have path coefficients that are near zero. Coefficients this low have little if any real effect on the dependent variable (Hair et al. 1992). "Since it is almost
Fig. 8. Full Model: Path analysis of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance.
never possible to account for the total variance of a variable, residual variables are introduced to indicate the effect of variables not included in the model" (Pedhazur 1982, 582). In Figure 8, the residual variables are indicated by the notation $e_n$.

The next step was to trim the full model by deleting, one at a time, paths with path coefficients near zero. This yielded a restricted model whose path coefficients were recalculated by regressing each endogenous variable on antecedent variables, that is, those variables that make up the path to the endogenous variable being regressed. As in the first step, standardized beta weights were used to estimate path coefficients. The third step was to repeat the previous step by deleting paths with path coefficients near zero. These paths were $p_{1c3}$ from organization-based self-esteem to organization citizenship, $p_{53}$ from organization-based self-esteem to tenure, $p_{81}$ from self-managed work teams to intrinsic work motivation, $p_{94}$ from self-managed work teams to general job satisfaction, and $p_{111}$ from self-managed work teams to organization commitment. The resulting restricted or trimmed model is provided in Figure 9.

Finally, each restricted model was tested for goodness of fit using the chi-square test, the $R^2$, and the $Q$
Fig. 9. Restricted Model: Path analysis of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance.
statistic. The results for the full model and the final restricted model are presented in Table 5.

<table>
<thead>
<tr>
<th>TEST</th>
<th>$X^2$</th>
<th>df</th>
<th>$p$</th>
<th>$R^2$ (M)</th>
<th>$Q$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Model</td>
<td>21.28</td>
<td>46</td>
<td>.99</td>
<td>.902</td>
<td></td>
</tr>
<tr>
<td>Restricted Model</td>
<td>14.40</td>
<td>40</td>
<td>.99</td>
<td>.898</td>
<td>.960</td>
</tr>
</tbody>
</table>

The chi-square test was used to compare the variance explained by the causal or hypothesized model and the variance explained by the restricted model, or goodness of fit. "A large drop in chi-square compared to the difference in df between the original and the revised model is taken as support for the changes in the model" (Pedhazur 1982, 620). In the study, the chi-square dropped from 21.28 for the causal model to 14.40 for the revised or restricted model, a drop of 6.88 and the degrees of freedom dropped from 46 to 40, a drop of 6. This is a critical probability of 70.2%, thus lending some but not overwhelming support for the changes in the model. The probabilities of the chi-square for each model were .99.

Next, the $R^2$ for the full model and the $M$ for the reduced model were calculated. The following is the procedure for overidentified models, models which contain
more variables than are necessary to estimate the path coefficients. The formulas used were:

\[ R^2_m = 1 - (e_1 e_2 e_3 \ldots e_n) \]
\[ M = 1 - (e_1 e_2 e_3 \ldots e_n) \]

where "\( R^2_m \) is the ratio of the generalized variance explained by the causal (or hypothesized) model to the generalized variance which was to be explained by the (reduced) model" (Pedhazur 1982, 619), and \( e_i \) represents the residual paths. "In short, to calculate \( R^2_m \) for a fully recursive model calculate the product of all the squared residual paths and subtract from one" (Pedhazur 1982, 619). The next step is to compare the results for the causal or hypothesized model (\( R^2_m = .902 \)) and the reduced model (\( M = .898 \)). Note that \( M \) is calculated in the same manner as is \( R^2_m \), except that some or all of the paths have been deleted. Therefore, \( M \) can take values between zero and \( R^2_m \). The closer the results for the two models, the better the fit of the reduced model to the data. The difference between \( R^2_m \) and \( M \) is \( .004 (.902 - .898 = .004) \), indicating that the reduced model is a good fit.

Another measure of goodness of fit for an overidentified model is the \( Q \) statistic. It was calculated using the following formula:
The $Q$ statistic can vary from 0 to 1. The closer it approaches 1, the better the restricted model fits the data (Pedhazur 1982). The results of the calculations indicate that the $Q$ statistic for the restricted model was .960.

Test of Hypotheses

Using the procedures outlined (correlation, path analysis, and theory trimming) each of the twenty-four hypotheses presented in Chapter 2 were tested. In accordance with standard path analysis practices, each path in the original theory-based model is represented by an hypothesis. When the path coefficient between two variables increases the goodness of fit of the model, it is retained, and the correspondent hypothesis is accepted or rejected. When the path coefficient between two variables has little or no affect on the goodness of fit of the model and is not part of the core theory on which the model was developed, the path is trimmed from the model and the correspondent hypothesis is no longer applicable (Pedhazur 1982).

Following is a brief report of these results. Nine of the hypotheses are supported by the data, ten are not supported, and five hypotheses are no longer applicable and their correspondent paths are trimmed. Table 6 summarizes these
findings. Their meaning and significance to the theoretical model are discussed in Chapter 5.

The first hypothesis discusses the correlation between two measures of the level of self-managed work teams (variables 1 and 2). The result follows the hypothesis.

Hypothesis 1 states that there is a positive correlation between the objective measure of the level of self-managed work teams and the subjective measure of the level of self-managed work teams.

The correlation, as seen in Table 4, between the objective measure of the level of self-managed work teams and the subjective measure of the level of self-managed work teams was positive ($r = .13, p = .19$), and although it is not statistically significant, the path with which hypothesis 1 corresponds affects the goodness of fit of the model and therefore was retained as support for Hypothesis 1.

The next hypothesis discusses the direct relationship between the objective measure of the level of self-managed work teams (variable 1) and organization-based self-esteem (variable 3). The literature suggests that, as a dependent variable, organization-based self-esteem is positively influenced by the organizational structure of self-managed work teams. The result follows the hypothesis.
Hypothesis 2 states that there is a positive relationship between the level of self-managed work teams and the degree of organization-based self-esteem.

The direct relationship between self-managed work teams (objective measure) and organization-based self-esteem had a -.138 path coefficient, and thus does not support Hypothesis 2.

The next four hypotheses, Group 2, discuss the direct relationship between organization-based self-esteem and personal mediators. The literature suggests that as a dependent variable, organization-based self-esteem (variable 3) is positively influenced by personal mediators such as global self-esteem (variable 4), tenure (variable 5), age (variable 6), and gender of the respondent (variable 7). The results follow the hypotheses.

Hypothesis 3 states that there is a positive direct relationship between the degree of organization-based self-esteem and the degree of global self-esteem.

Hypothesis 4 states that there is a positive direct relationship between the degree of organization-based self-esteem and the length of tenure.

Hypothesis 5 states that there is a positive direct relationship between the degree of organization-based self-esteem and age of the respondent.
Hypothesis 6 states that there is a positive direct relationship between the degree of organization-based self-esteem and the gender of the respondent.

The positive direct relationships between organization-based self-esteem and its mediators of global self-esteem ($p_{43} = .223$) and gender of the respondent ($p_{63} = .151$) support Hypotheses 3 and 6 respectively. The positive direct relationship predicted in Hypothesis 5 between the degree of organization-based self-esteem and age of the respondent proved to be negative ($p_{73} = -.222$), and thus does not support the hypothesis. The relationship between the degree of organization-based self-esteem and tenure is near zero ($p_{53} = .060$), the path contributes little or nothing to the goodness of fit of the model, and it is not part of the core theory on which the model was developed, hence the path is trimmed from the model and its correspondent Hypothesis 4 is no longer applicable.

The next four hypotheses, Group 3, discuss the direct relationship between organization-based self-esteem and consequent behaviors. The literature suggests that as an independent variable, organization-based self-esteem (variable 3) positively influences consequent behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11).
The results follow the hypotheses.

Hypothesis 7 states that there is a positive direct relationship between the degree of organization-based self-esteem and the degree of intrinsic work motivation.

Hypothesis 8 states that there is a positive direct relationship between the degree of organization-based self-esteem and the degree of general job satisfaction.

Hypothesis 9 states that there is a positive direct relationship between the degree of organization-based self-esteem and the degree of organization citizenship.

Hypothesis 10 states that there is a positive direct relationship between the degree of organization-based self-esteem and the degree of organization commitment.

The positive direct relationships (path coefficient) between organization-based self-esteem and its consequent behaviors of intrinsic work motivation ($p_{83} = .518$), general job satisfaction ($p_{93} = .660$), and organization commitment ($p_{113} = .751$) support Hypotheses 7, 8, and 10. The relationship between organization-based self-esteem and organization citizenship is near zero ($p_{103} = .064$); the path contributes little or nothing to the goodness of fit of the model, and it is not part of the core theory on which the model was developed, hence the path is trimmed from the model and its correspondent Hypothesis 9 is no longer applicable.
The next four hypotheses, Group 4A, discuss the indirect relationship between the level of self-managed work teams and consequent behaviors. The literature suggests that, as an independent variable, self-managed work teams (variable 1) positively influences consequent behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11) through organization-based self-esteem (variable 3). The results follow the hypotheses.

Hypothesis 11 states that there is a positive indirect relationship between the level of self-managed work teams and the degree of intrinsic work motivation.

Hypothesis 12 states that there is a positive indirect relationship between the level of self-managed work teams and the degree of general job satisfaction.

Hypothesis 13 states that there is a positive indirect relationship between the level of self-managed work teams and the degree of organization citizenship.

Hypothesis 14 states that there is a positive indirect relationship between the level of self-managed work teams and the degree of organization commitment.

The indirect relationships between self-managed work teams and intrinsic work motivation, general job satisfaction, organization citizenship, and organization
commitment were all negative, and thus do not support Hypotheses 11, 12, 13, and 14. The indirect effect of the level of self-managed work teams on each of the consequent behaviors was calculated by multiplying the path coefficient from the level of self-managed work teams to organization-based self-esteem with the path coefficient from organization-based self-esteem to each variable in question. The negativity is a function of the negative relationship between self-managed work teams and organization-based self-esteem.

The next four hypotheses, Group 4B, discuss the direct relationship between the level of self-managed work teams and consequent behaviors. The literature suggests that, as an independent variable, self-managed work teams (variable 1) positively influences consequent behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization citizenship (variable 10), and organization commitment (variable 11). The results follow the hypotheses.

Hypothesis 15 states that there is a positive direct relationship between the level of self-managed work teams and the degree of intrinsic work motivation.

Hypothesis 16 states that there is a positive direct relationship between the level of self-managed work teams and the degree of general job satisfaction.
Hypothesis 17 states that there is a positive direct relationship between the level of self-managed work teams and the degree of organization citizenship.

Hypothesis 18 states that there is a positive direct relationship between the level of self-managed work teams and the degree of organization commitment.

The direct relationships (path coefficients) between the level of self-managed work teams and consequent behaviors was mixed and often weak. The paths between level of self-managed work teams and intrinsic work motivation ($p_{8_1} = -.009$), general job satisfaction ($p_{9_1} = .003$) and organization commitment ($p_{11_1} = -.043$) are near zero and do not contribute to the goodness of fit of the model. These paths are dropped from the model and the correspondent Hypotheses 15, 16, and 18 are no longer applicable. Level of self-managed work teams had a positive direct relationship with organization citizenship ($p_{10_1} = .192$), and thus supports Hypotheses 17.

The next four hypotheses, Group 5, discuss the direct relationship between the consequent behaviors and performance. The literature suggests that, as a dependent variable, performance (variable 12) is positively influenced by behaviors such as intrinsic work motivation (variable 8), general job satisfaction (variable 9), organization
citizenship (variable 10), and organization commitment (variable 11). The results follow the hypotheses.

Hypothesis 19 states that there is a positive direct relationship between the degree of intrinsic work motivation and the level of performance.

Hypothesis 20 states that there is a positive direct relationship between the degree of general job satisfaction and the level of performance.

Hypothesis 21 states that there is a positive direct relationship between the degree of organization citizenship and the level of performance.

Hypothesis 22 states that there is a positive direct relationship between the degree of organization commitment and the level of performance.

The positive direct relationships between performance and general job satisfaction ($p_{129} = .22$) and organization commitment ($p_{1211} = .198$) support Hypotheses 20 and 22. The direct relationships between performance and intrinsic work motivation ($p_{128} = -.147$), and organization citizenship ($p_{1210} = -.17$) were negative, and thus do not support Hypotheses 19 and 21.

The last two hypotheses, Group 6, discuss the relationship between the level of self-managed work teams and performance. The literature suggests that, as a dependent variable, performance (variable 12) is directly
positively influenced by the level of self-managed work teams (variable 1) and indirectly positively by the level of self-managed work teams through organization-based self-esteem (variable 3) and consequent behaviors (variables 8, 9, 10, and 11). The results follow the hypotheses.

Hypothesis 23 states that there is a positive direct relationship between the level of self-managed work teams and the level of performance.

Hypothesis 24 states that there is a positive indirect relationship between the level of self-managed work teams and the level of performance.

The direct relationship between performance and self-managed work teams is negative path coefficient ($\beta_{121} = -0.282$) and thus does not support Hypothesis 23. The indirect effect of the level of self-managed work teams on performance was calculated by summing the results of a series of path coefficient multiplications. The first set of results was achieved by multiplying the path coefficient from the level of self-managed work teams to organization-based self-esteem with the path coefficients from organization-based self-esteem to each of the consequent behaviors and from each of them to performance. The next set of results was achieved by multiplying the path coefficient from level of self-managed work teams to organization citizenship with the path coefficient from
organization citizenship to performance. When calculated in this manner, the indirect relationship between self-managed work teams and performance is negative, and thus does not support Hypothesis 24.

Analysis of the data provided some anticipated and some surprising results. Table 6 is a summary of the test of the hypotheses. Prime among the unexpected results were the negative relationships that self-managed work teams had with organization-based self-esteem and with performance. The nonsignificant relationship between self-managed work teams and intrinsic work motivation, general job satisfaction, and organization commitment was also of special interest. A discussion of these and other findings is provided in Chapter 5.
### TABLE 6
TEST OF THE HYPOTHESES

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CHAPTER 5

CONCLUSION

The results of this study are discussed in this chapter. Each of the theoretical constructs used in the development of the model presented in Chapter 2 are reviewed with respect to the actual results. Possible explanations are offered as well as recommendations for future research.

The theoretical literature assumes a number of logical outcomes of self-managed work teams. Hackman and Oldham's (1980) job-redesign approach assumes a positive relationship with intrinsic work motivation and general job satisfaction as did Wall et al. (1986) and Aubrey and Felkins (1988). Additional outcomes found in the literature are increased organization commitment (Emery 1959; Aubrey and Felkins 1988; Orsburn et al. 1990), reduced conflict stemming from the work environment (organization citizenship) (Aubrey and Felkins 1988), increased individual self-esteem in the workplace (Aubrey and Felkins 1988), and enhanced performance (Hackman and Oldham 1980; Wall et al. 1986; Orsburn et al. 1990).

In most cases, the results of this study found negative links between the level of self-managed work teams and the theoretical outcomes (Fig. 9, Restricted model, Chapter 4).
The literature often proceeds on the assumption that teams under study are at stage five of development, the stage at which teams have worked out their differences and are performing at their best for the organization. Realistically, however, this is not the case for most teams; at any given time, most teams are going through stages of development when performance will vary, usually below the optimum level sought by the organization, because so much of their energy is put into becoming highly performing teams. Low performance for a team is not necessarily an indication of failure of the self-managed work team system; it may be characteristic of the stage of development of that team. They may be performing at high levels given the tasks necessary for development, but the organization usually sees it as low performance because of the performance measures used to evaluate the teams. The self-managed work team system should not be abandoned at this point based on temporary low performance due to stage of development; it should be given a chance to develop into a high performance stage five team organization.

Validity Issues

The purpose of this section is to address the validity of the study. Validity refers to how close to truth a study comes. This study will be examined using Cook and Campbell's (1979) four general areas of validity,
statistical conclusion validity, internal validity, construct validity of causes or effects, and external validity as guidelines. The validity of each of the attitude scales used in this study was reported in Chapter 3.

**Statistical Conclusion Validity**

Statistical conclusion validity refers to the justifiability of making inferences from a study based on the strength of statistical covariation. Covariation is dependent on statistical power which is a function of sample size and the relative statistical significance of the results.

The sample size of this study is adequate relative to the number of variables being tested in the theoretical model given the nature of path analysis. Were traditional regression analysis employed, twelve variables would require a substantially larger sample than the one employed in this study. Path analysis, in general and specifically as modeled for this study, does not manipulate all of the variables at once in one regression model. Rather, many regression analyses are performed simultaneously, each employing different combinations or subsets of independent variables, never exceeding four variables at a time. Therefore, the sample size of n=105 is adequate for this study.
The relative statistical significance of this study is dealt with in the trimming method as fully explained in the section on path analysis in chapter 4. Those paths with beta coefficients near zero are candidates for being trimmed from the original full theoretical model (Fig. 8, Chapter 4). After the trimming procedure was performed in accordance with the assumptions necessary in path analysis (see Path Analysis, Chapter 4), the resultant restricted model represents those causal relationships that are supported both statistically and theoretically (Fig. 9, Chapter 4).

Threats to statistical conclusion validity include reliability of treatment implementation and random irrelevancies in the testing setting (Cook and Campbell 1979). These issues were taken into consideration into the design of the study. The surveys were administered to each team by the same person using a scripted, unvarying procedure in the same setting each time. They are, therefore, nonissues. Other threats to statistical conclusion validity deal with experimental designs. As this study is not experimental in nature, these threats are of no concern here.

Internal Validity

Internal validity deals with the issue of causal relationships between variables and the direction of the
causality (Cook and Campbell 1979). Most of the threats to internal validity of this study are nonissues because of its design. As a one time survey measurement and not a test-retest design, history, maturation, testing, instrumentation, statistical regression, mortality, selection and any possible interactions of these threats do not apply. There is, however, concern over the ambiguity of the direction of causal influence. Whether A causes B, or B causes A is often debatable in this study, and is discussed more fully in each of the subsections dealing with the support or non-support of the hypotheses and in the section on recommendations for future research.

Construct Validity

Construct validity, according to Cook and Campbell (1979, 59) "refers to the possibility that the operations which are meant to represent a particular cause or effect construct can be construed in terms of more than one construct, each of which is stated at the same level of reduction. Confounding means that what one investigator interprets as a causal relationship between theoretical constructs labeled A and B, another investigator might interpret as a causal relationship between constructs A and Y or between X and B."

In attempting to measure attitudes and their causal relationships, research invariably falls short in the area
of construct validity. The human mind is too complex and attitudes are too subject to interactions with recent events for the researcher to pinpoint real relationships among given attitudes and their preconditions and consequences. All interpretations of the results of this study must be made with this in mind.

**External Validity**

External validity is a two-stage process. The first stage is generalizing to specific target persons, settings, and times. The second stage is generalizing across types of persons, settings, and times (Cook and Campbell 1979).

The first stage is satisfied by this study. The conclusions are generalizable to low-skilled, operations level workers going through the initial stages of development of self-managed work teams at a Brownfield site. As long as these conditions are controlled for, the conclusions of this study can be generalized to other samples.

Different types of people, settings, and times would represent a population different enough from the study sample so as to prohibit generalization of this study to them. As long as this condition is recognized and respected, the value of this study stands in that it can be useful in understanding given populations sharing the characteristics of the sample used in this study. This
study can also be used as a comparator to other samples as long as only one of the conditions (people, setting, or times) or a subset of one of the conditions is changed.

**Hypotheses Supported by the Research**

Of the 24 hypotheses of this study, nine were clearly supported by the research and five were trimmed because of the weak link found in the data (Pedhazur 1982). No pattern was apparent, however, high residual variable coefficients may account for the weak path coefficients.

**Self-Managed Work Teams**

**Objective Measure and Subjective Measure**

Two methods were used to measure the level of self-management. In the development of the model on which this study was based, both an objective measure and a subjective measure were used to act as checks on one another. The correlation between the two ($r = .13$) proved to be positive, but nonsignificant. The reason for this is threefold. First, the measures are not identical. The objective measure consisted of ten items observed by the researcher, whereas the subjective measure consisted of only six of those same ten items. These six items appeared on the formal written survey. Second, the level of analysis of the objective measure was at the team level, whereas the level of analysis of the subjective measure was at the person
level. Comparison of the two is not entirely appropriate. Although correlations can be calculated between any two variables, the conclusions from the correlations should cautiously be approached. Third, the differences in language, culture, and demographics may have had an effect on the lack of correlation between the objective measure and subjective measure. At least three different groups were represented: 1. college educated, English-speaking Northeasterner; 2. high school educated, English-speaking Northeasterners; and 3. high school educated, Spanish-speaking Puerto Ricans. The interpretation of the items may have varied with the backgrounds of the people reading them. In addition, shades of meaning may have been lost or added with the conversion of the questionnaire from English to Spanish in spite of following reverse translation procedures (see Chapter 3, Questionnaire). In the case of this study, the correlation between the objective and subjective measures of the level of self-management should be viewed with a suspect eye.

Organization-Based Self-Esteem and Personal Mediators

The theoretical premise is that the relationship between organization-based self-esteem and each of its personal mediators is positive. In this study, the personal mediator of tenure had a positive path coefficient to
organization-based self-esteem ($p_{53} = .060$), but the path was so weak that it was trimmed from the model. The theory would have us believe that people who stay with a job longer have higher levels of organization-based self-esteem (Brockner 1988; Pierce et al. 1989). In this case that was not borne out. Length of time on the job had nonsignificant effect. Perhaps the reason behind this is that, in general, people in this study did not stay on the job long enough to show a significant connection between tenure and organization-based self-esteem. Unstructured interviews with the subjects of this study disclosed that working at the plant is often considered a temporary situation; the pay is low and there is little prestige in working there.

The stage of self-managed work teams is also a crucial factor involved in analyzing the relationship between organization-based self-esteem and personal mediators and might explain the observed anomaly. Some of the teams were in stage one of development and most of the respondents were new to the company or new to this system. The team members were very optimistic and keen to acquire new skills. The respondents had no real perception of organization-based self-esteem at this stage because they were in no position to identify global self-esteem regardless of tenure. Other teams were in stage two and may have been in a state of confusion where even members of the team that had been with
the company for some time might still be focused more on team activities and less on organizational issues. The weak path coefficient, therefore, might be attributed to the fact that some of the teams studied were in stage one or stage two of development. Had all teams been in stage three or higher, the results might have been more consistent with theory.

The personal mediators of global self-esteem \( (p_{43} = .218) \) and gender \( (p_{73} = .157) \) also had positive path coefficients to organization-based self-esteem, but they were stronger than that of tenure and kept in the restricted model. The path coefficients show that women tended to have higher organization-based self-esteem and that people with higher global self-esteem tended to display higher organization-based self-esteem. This agrees with the theoretical literature (Brockner 1988; Pierce et al. 1989), but the connections were weak in this study.

One explanation for the weak path coefficients that personal mediator variables had with organization-based self-esteem (as well as the negative path coefficient age had) is that there may be other mediators that were not included in this study that may affect the path coefficients. This is evidenced by the high residual variable values in the model. Mediators of note are education, ethnic identity, comfort with coworkers and with
management, differences in cultural values among workers, and ability of workers to communicate easily with coworkers and management. As more and more companies take advantage of the benefits of doing business in other countries such as Mexico, these factors will become increasingly important to the success of managing workers from diverse and different cultural backgrounds. More work is needed in this area if organizations are to be designed and managed effectively in changing environments.

Organization-Based Self-Esteem and Consequent Behaviors

The theoretical premise is that the relationship between organization-based self-esteem and each of the consequent behaviors is positive; in this study, the relationships are borne out. Organization-based self-esteem has strong path coefficients to all but the consequent behaviors except to organization citizenship ($p_{103} = .064$). Although positive, the path coefficient is near zero and was trimmed from the model in accordance with the procedures recommended by Pedhazur (1982). This weak coefficient between organization-based self-esteem and organization citizenship may be due to the influences of quality of work experience and previous social conditioning on organization citizenship. Over the long term, efficiency and cooperation are interdependent. Citizenship cannot be accounted for by the same motivational bases that prompt persons to join,
stay, or perform with contractual roles. Also, since personal mediators such as ethnic identity, social background, and comfort with coworkers are not studied in depth here, it is difficult to establish a strong base for organization citizenship. If all teams had been in stage three through stage five, where leader support and reciprocal task interdependence is high, the organization citizenship might also have been higher. The personality variables such as level of extraversion also play an important role in determining organization citizenship. These are found only in higher stages of team development when global self-esteem has been established. Some teams studied were in stage one and stage two of development and, therefore, organization citizenship had a weak positive relationship to organization-based self-esteem. The path coefficients from organization-based self-esteem to intrinsic work motivation \( p_{s3} = .517 \), general job satisfaction \( p_{g3} = .658 \), and organization commitment \( p_{c3} = .750 \) are the strongest in the entire model (Hackman and Oldham 1980; Orsburn et al. 1990).

Self-Managed Work Teams
Consequent Behaviors, and Performance

The theoretical premise is that the relationship between self-managed work teams and each of the consequent behaviors is positive. In this study, one path coefficient
supports the literature whereas the other three are weak. These three weak paths, intrinsic work motivation ($p_{81} = -0.009$), general job satisfaction ($p_{91} = 0.003$), and organization commitment ($p_{111} = -0.043$), were trimmed from the model because their path coefficients are near zero and contribute little or nothing to the goodness of fit of the model; the one path that remained was from self-managed work teams to organization citizenship ($p_{101} = 0.176$). These relationships affected the path coefficients from the consequent behaviors to performance, two of which were negative (intrinsic work motivation ($p_{128} = -0.149$) and organization citizenship ($p_{1210} = -0.164$)). This phenomenon may be accounted for by the actual structure and level of commitment by management to the team concept which are more fully explained in the section on self-managed work teams and organization-based self-esteem. It may also be accounted for by the stage of team development. For example, in the case of intrinsic work motivation, which is the degree to which a job holder is motivated to perform well because of some subjective rewards, intrinsic work motivation exists when esteem is linked to performance. In the early stages of team development which the respondents represent, characteristically, performance is low, therefore esteem derived from performing well is lacking and hence intrinsic work motivation is suppressed. Further, core job
characteristics impact intrinsic work motivation and core job characteristics are highest in the advanced stages of four and five. It is likely that those teams which had lower intrinsic work motivation were in the primary stages of development. In those primary stages (stages one, two, and three) of development, the focus is not on task identity, autonomy and feedback from the job that are essentials of core job characteristics. Stage of team development may also explain the weak path of general job satisfaction. An analysis of the importance of each of the five general job satisfaction factors (pay, satisfaction with job, promotion, satisfaction with supervisors, and satisfaction with coworkers) during the five stages of self-managed work team development suggested that these factors took on varying degrees of significance during different stages of development and, therefore, no clear picture emerges as to path of factors. This may account for the weak link between self-managed work teams, general job satisfaction and performance.

Hypotheses Not Supported by the Research

Ten of the 24 hypotheses of this study were not supported by the research. The soundness of the theory on which the hypotheses were based is not in question. Rather, additional theory is needed to explain the results.
Self-Managed Work Teams and Organization-Based Self-Esteem

The theoretical premise is that the relationship between self-managed work teams and organization-based self-esteem is positive; in this study, the relationship is negative ($p_{31} = -.145$). The theoretical premise is that the more control an individual has over the task and how it will be performed, the more that individual’s needs will be satisfied within the context of the organization (Tharenou 1979; Brockner 1988; Pierce et al. 1989). That is to say, there is a direct positive correlation between the level of self-managed work teams and organization-based self-esteem. The data did not bear this out. The sources of this contradiction may be twofold: the level of development of the self-managed work teams and the level of commitment held by management to the organization structure of self-managed work teams.

The first possible source of contradiction is the stage of development of the teams in the study. Pierce et al. (1989) show that the more organic an organization’s structure is, the higher the organization-based self-esteem of the employees; that is to say, the more the teams develop and move away from mechanistic structure and closer to organic structure, the more the workers in those teams will experience higher levels of organization-based self-esteem. This reasoning does not take into account the
characteristics of work teams as they struggle through the developmental stages of self-management (Moran and Musselwhite 1988; Orsburn et al. 1990). The teams in the study have developed to the second and third stages. In these stages there is a great deal of confusion, feelings of ambiguity, and resistance, and they gradually begin to experience a few minor successes as a team. Much energy is put into working out differences among the team members and developing group norms and few organizational or intrinsic rewards or positive feedback is experienced by the team. Organization-based self-esteem is a result of positive experiences in an organizational setting. In the early developmental stages of teams, these positive experiences may be few, thus diminishing organization-based self-esteem. It will not be until the team achieves higher levels of development that organization-based self-esteem will have a positive relationship with the organization structure of self-managed work teams.

The second possible source of contradiction is the level of commitment held by management to the concept and implementation of the organization structure of self-managed work teams. Management commitment to any venture is important to the venture’s success (Bleakley 1993). The links in the chain leading from level of management commitment through the level of self-managed work teams to
organization-based self-esteem and performance are many. Management commitment translates into long-term commitment of money, time, and other tangible resources, as well as a philosophical commitment to the venture. Ventures need to be nurtured if they are to succeed.

At the company in this study, the attitude of management above the operations level was one of tolerance to the new, experimental structure. Upper management practiced a laissez faire form of management; they instructed the operations managers to get the product out on time and within budget. How this was accomplished was left entirely up to middle and lower management. Little or no communication on any matter existed between upper management and the rest of the company. Upper management offices were located in a separate building some distance from the production site; the new vice president of operations, after three months with the company, had not met with any of the operations managers let alone with employees. This lack of concern for the operations of the company by upper management lead to a lack of understanding of the needs of the lower levels.

The concept of self-managed work teams was introduced to the company by the personnel manager. He and a few interested middle managers attended one workshop on worker self-management. They saw it as the answer to their
productivity and quality problems. Upper management's official position on the subject was that, as long as it did not cost the company anything, self-managed work teams could be instituted.

Without the philosophical commitment of upper management there was no commitment of needed resources. Proper implementation of self-managed work teams includes a great deal of training in team building, problem solving, decision making, communication, leadership, and ethics, as well as a positive reorientation toward the customer. What resulted was the form of self-managed work teams without the essence. The teams were given little training in team functioning. They were delegated the responsibility for running their teams and increasing quality and productivity, but were not delegated the correspondent authority, nor were they trained in the necessary skills. This led to a great deal of ambiguity and cognitive dissonance on the part of the team members, reflecting a stage two level of transition to self-managed work teams.

Even the leadership of the teams was ambiguous. Day shift teams were allowed to lead themselves, but were not given the training to do so effectively. They were motivated to make their teams work, but were not given the tools or the authority to do so. Night shift teams were led by the night shift production manager; he ran the meetings,
told the team members what he thought was important to them, and entertained little or no participation from the team members. The night shift production manager did not trust the team to lead itself.

The lack of team skills and distrust from management may account for a good deal of the negative correlation between the level of self-managed work teams and organization-based self-esteem. The day shift was struggling with self-management. They had no authority, training, guidance, mentors, or advocates. Perhaps they saw themselves as incapable of creating effective teams. This would lead to lower self-esteem derived from association with the organization. The night shift, on the other hand, never really felt the responsibility to function as a self-managed work team because they really never were given the opportunity to lead themselves. They attended team meetings, but they did not fool themselves into thinking they could affect their jobs or the company. Because they were not set up for failure as teams, they did not see themselves as failures in the organization.

If self-managed work team structure is to be effective for both the company and the employees, all members of management and the work force, from the top down, must be philosophically committed to the concept of worker self-management. There must be a clear understanding of the
prerequisites and ramifications. The management must make a long-term commitment of time, money, and effort to the self-management learning process. It can take up to five years or more from initiation of the teams to their being fully functional. The learning and reevaluation never stop in a functioning team structure. There must be management-employee trust, willingness to take risks, willingness to share information, enough time and resources, commitment to training, operations conducive to work teams, union participation, and access to outside consultant help. There is no place for laissez faire management; dedicated involvement must become natural to management and employees alike.

Organization-Based Self-Esteem and Age

The first path of concern is the direct path between organization-based self-esteem and age ($p_{63} = -.221$). The theoretical premise is that there is a positive relationship between these two constructs (Pierce et al. 1989); the data indicates a negative relationship. The results may be accounted for by the status of working for the company under study.

Among blue collar workers in the sample’s geographic area, varying degrees of prestige are associated with different industries and with different companies within an industry. The food processing industry, albeit a common
industry in the area, is rather low on the prestige scale. It requires little skill and does not pay well. Within the food processing industry, the company under study pays an average wage but its benefits and job security do not compare well with other companies in the area. Given these factors, the conclusion can be drawn that in the mind of the workers in this study, it is a respectable job for a young person. It is often a first job for recent arrivals from Puerto Rico. As workers gain experience and skills, they tend to move on to companies that offer more money and benefits.

Unfortunately, turnover statistics were not available, but speculation is that the status of the organization in terms of salary and benefits may lead to higher than average rates of turnover, even in a weak economy. Older individuals may see themselves as not keeping up with the additional obligations of maturity; they may see themselves as less than a success for working at the company. Given the labor pool available to the company, this matter is of little concern to the company. If, however, the availability of suitable labor were a problem, the company could take steps to increase the status of working there, such as offer a competitive wage, improve benefits and job security, and, the least costly of all, management could show respect for the workers.
Self-Managed Work Teams and Performance

The next path of concern is the direct path from self-managed work teams and to performance ($p_{121} = -0.293$). The theoretical premise is that the more control an individual has over the task and how it will be performed, the better that individual’s performance will be (Hackman and Oldham 1980; Wall et al. 1986). By logical extension, the same relationship would hold true for teams and performance (Orsburn et al. 1990). That is to say, there is a direct positive correlation between the level of self-managed work teams and performance; the more self-managed a team is, the higher its performance is. The data indicated otherwise. This reversal of logic can be accounted for by the number and nature of the tasks performed by the different teams.

The day shift teams were assessed as being more self-managed than the night shift teams. This was primarily a function of each shift’s production manager’s attitude toward the teams’ ability to manage themselves. The day shift teams had to perform a greater number of and more complex tasks than did the night shift teams. This too may be an outcome of the respective managers’ attitudes toward the abilities of the teams; the greater the respect for the teams’ abilities, the more challenging are the tasks given to the teams. The day shift teams performed two time
consuming tasks more often than did the night shift, product change-overs and maintenance.

Change-overs, a change from one product to another, translate into down time during which product is not being made. The change-over process consists of machinery being cleaned of the previous product, packaging being changed, and new product being mixed and tested. Maintenance of machinery also results in down time. The only filter rebuilders in the company worked days, so this function, as well as general machine maintenance, was done during the day shift. The resulting down time was reflected in lower output of product per day.

The down time that is associated with product change-overs and maintenance was not adequately accounted for in the performance measure which was obtained from the company. Based on the inaccurate performance measure, recognition was given to the highest performing team each month; invariably it went to a night shift team. This inequitable situation may have backfired on the company. Although the literature defines the relationship between the level of self-managed work teams and performance as positive, perhaps this relationship is only true in the case of levels of self-management that approach the ideal. At some critical point the relationship seems to reverse. Orsburn et al. (1990) note that productivity tends to drop off during the second
The stage of transition to self-managed work teams. The time of euphoric optimism is over and a state of confusion engulfs the team. A great deal of energy is expended on role definition, establishment of group norms, and doubts concerning the value and real purpose of team participation. The teams that work through this stage of confusion eventually see a rise in productivity in the third stage of transition to self-managed work teams and enjoy increasing productivity through the fifth stage.

Intrinsic Work Motivation and Performance

The third path of concern is the direct path between intrinsic work motivation and performance ($p_{128} = -.149$). The theoretical premise is that the higher the intrinsic work motivation the higher the level of performance is (Lawler 1969; Hackman and Oldham 1980). The fact that the data reveals a negative relationship between these two constructs may be associated with the two production managers' differing attitudes toward the team members and the resulting difference in work assigned to their teams, and ultimately with the inequitable method of measuring performance.

The day shift production manager displayed a higher level of trust and respect for the teams he worked with than did the night shift production manager. Consequently, the day shift teams were given more challenging and time
consuming tasks; the result was reflected in lower performance as measured by the company. High performers were rewarded, low performers were not. Time spent solving problems was not accounted for in calculating performance, hence, the teams that were honored by their manager’s trust and respect were actually punished by the company. This situation can be rectified in two ways: 1. the performance measures can be reevaluated to more accurately reflect the different demands made on different teams, and 2. duties that are not included in the performance measures can be distributed equitably among all teams.

The fact that there was an inverse relationship between intrinsic work motivation and performance suggests that there may be a recursive rather than a nonrecursive relationship between the two constructs. Although it is agreed upon in the literature that motivation must be present in order for an individual to perform, the perceived results of performance may act as feedback to the individual in whom the level of intrinsic work motivation will increase or decrease based on that perception (Vroom 1964; Porter and Lawler 1968; Kreitner and Kinicki 1992).

Organization Citizenship and Performance

The fourth path of concern is the direct path between organization citizenship and performance ($P_{1210} = -.164$). The theoretical premise is that there is a positive
relationship between organization citizenship and performance (Smith, Organ, and Near 1983). The data indicates, however, that acts of cooperation, helpfulness, and altruism in the workplace lead to lower performance. One explanation for this phenomenon may be the multicultural composition of the teams.

The teams were composed of local English speakers, Puerto Rican Spanish speakers and Puerto Rican bilingual speakers. Upon observation there was no animosity among these groups; there was good natured teasing and concern for each other. Bilingual Puerto Ricans took the effort and time to interpret and instruct the Spanish speakers. Because there is little or no formal training for new employees and the managers only speak English, this is a necessary arrangement. The company came to depend on these informal, spontaneous acts of goodwill of one team member toward another to smooth the operation of the team and the company. This unassigned role, however, did lower the performance rate of teams whose members displayed high organization citizenship because it was not included in the measurement of performance. As much as the company depended on these acts of organization citizenship, it did not see fit to reward it. In actuality, the company punished its most valuable citizens by formally ignoring them. Their team's performance as measured by the company was lower and
so did not receive the recognition or rewards given higher performers who exhibited lower organization citizenship. In order to make the rewards more equitable in this company, acts of organization citizenship needed to be integrated in the measure of performance. The company took unjust advantage of its bilingual employees.

Recommendations for Future Research

This study attempts to provide a better understanding of the patterns of relationships among self-managed work teams, organization-based self-esteem, consequent behaviors, and performance. It did not yield conclusive results. The statistical method, path analysis, was used to test theory and to develop further theory as suggested by the results.

Little empirical research has been reported on self-managed work teams. Although it is popularly held that as an organizational structure it improves both productivity and quality, proof of this relationship has not been established. Many organizations have grasped at the concept; many have also abandoned it after a short trial period. The reasons for their failures have been suggested by the results of this study. Therefore, further research should address the following problems.

First, the level of commitment of management to the organization structure of self-managed work teams should be
determined; without management’s total commitment to the concept and implementation of self-managed work teams, they are doomed to failure (Bleakley 1993). A measurement instrument must be devised for this. Areas to consider are belief in the concept of self-managed work teams, willingness and ability to delegate both decision making responsibility and authority, willingness and ability to financially support the teams in terms of training and additional resources, level of management-employee trust, willingness to take risks, willingness to share information, and length of commitment. Each level of management should be assessed.

Second, in order to better judge the stage of transition to self-managed work teams, additional factors should be considered. These factors may include the type of training the teams have received, whether the training is ongoing, and whether the team’s authority is commensurate with its responsibility. Also, a scale with more gradations than the five used in this study should be used so as to open up the range which would allow for more accurate correlations with the other variables.

Third, additional variables should be considered for inclusion. The residual variable values in this study were high, indicating other pertinent variables that were not included in this study. Some variables to be considered are
education, ethnic identity and comfort with coworkers and
with management, differences in cultural values among
workers, and ability of workers to communicate easily with
coworkers and management.

Fourth, the direct relationship between organization-
based self-esteem and performance should be included in the
model for testing. Whereas this study tested the indirect
relationship between organization-based self-esteem and
performance through the personal outcomes of intrinsic work
motivation, general job satisfaction, organization
citizenship, and organization commitment, Pierce et al.
(1989) show a basis for the direct relationship.

Fifth, if both an objective measure and a subjective
measure of the level of self-managed work teams is used in
the future, care should be taken to make sure they measure
the same things. Differences in semantics between the
objective response of the researcher and the subjective
responses of the subjects of the study must be taken into
account, as well as any language, cultural, or demographic
differences among the subjects.

Sixth, a longitudinal study of one or more plants would
be most enlightening. The actual changes in the
organization-based self-esteem, consequent behaviors, and
performance could be studied through the stages of team
development thereby testing the theoretical literature more fully.

Finally, the path analysis employed is a nonrecursive statistical method for studying the patterns of causation among a set of variables. It requires a one-way causal flow. Follow-up research should examine the possibilities that reciprocal causation between variables exists. Although the literature defines organization-based self-esteem, intrinsic work motivation, general job satisfaction, organization citizenship, and organization commitment as antecedents of performance, the perception of the degree to which the measurement of performance is equitable may in fact affect the antecedents. A more appropriate method of analysis might be a recursive model.
ORGANIZATIONAL ATTITUDE QUESTIONNAIRE

The purpose of this survey is to gather information about your attitudes about your workplace. Thank you for your time and cooperation.

Use this scale for the following 53 questions. Write a number in the blank for each statement based on this scale.

<table>
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<tr>
<th>1 Agree Strongly</th>
<th>2 Agree</th>
<th>3 Neither Agree nor Disagree</th>
<th>4 Disagree</th>
<th>5 Disagree Strongly</th>
</tr>
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Please indicate how you personally feel about yourself in general by marking how much you agree with each of the statements.

____ 1. I feel that I'm a person of worth, at least on an equal plane with others.
____ 2. I feel that I have a number of good qualities.
____ 3. All in all, I am inclined to feel that I am a failure.
____ 4. I am able to do things as well as most other people.
____ 5. I feel I do not have much to be proud of.
____ 6. I take a positive attitude toward myself.
____ 7. On the whole, I am satisfied with myself.
____ 8. I wish I could have more respect for myself.
____ 9. I certainly feel useless at times.
____ 10. At times I think I am no good at all.

Now think of the other people in your organization who hold the same job as you. If no one has exactly the same job as you, think of the job which is most similar to yours. Think about how accurately each of the statements describes the feelings of those people about the job.

It is quite all right if your answers here are different from when you described your own reactions to the job. Often different people feel quite differently about the same job.

____ 11. Most of the people on this job are very satisfied with the job.
____ 12. People on this job often think of quitting.
____ 13. Most people on this job feel a great sense of personal satisfaction when they do the job well.
____ 14. Most people on this job feel bad or unhappy when they find that they have performed the work poorly.
Now indicate how you personally feel about your job. Each of the statements below is something that a person might say about his or her job. Please indicate your own personal feelings about your job by marking how much you agree or disagree with each of the statements.

1. Generally speaking, I am very satisfied with this job.
2. This job does not allow me to use any personal initiative or judgment in doing the work.
3. I am generally satisfied with the kind of work I do in this job.
4. This job gives me a lot of independence and freedom in how to do the work.
5. I frequently think of quitting this job.
6. My job permits me to decide for myself how to do the work.
7. My opinion of myself goes up when I do this job well.
8. My supervisor tells me exactly what to do and when to do it.
9. I feel a great sense of personal satisfaction when I do this job well.
10. My supervisor lets me do the job my way.
11. I feel bad and unhappy when I discover that I have performed poorly on this job.
12. I am allowed to work much of the time without supervision.
13. My own feelings generally are not affected much one way or the other by how well I do on this job.

Think about the messages you receive at work from the attitudes and behaviors of your managers, supervisors, and co-workers. Read the following statements and indicate to what degree you agree or disagree with them based on the scale at the top of this page.

15. I am taken seriously around here.
16. I am important around here.
17. I am trusted around here.
18. There is faith in me around here.
19. I can make a difference around here.
20. I am valuable around here.
21. I am helpful around here.
22. I am efficient around here.
23. I am cooperative around here.

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<tr>
<td>Agree</td>
<td>Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Disagree</td>
<td>Disagree Strongly</td>
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Strongly
Now think about how you feel about the company you work for. Please indicate your own feelings about this particular company by marking how much you agree with each of the statements.

38. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
39. I talk up this organization to my friends as a great organization to work for.
40. I find that my values and the organization's values are very similar.
41. I am proud to tell others that I am part of this organization.
42. This organization really inspires the very best in me in the way of job performance.
43. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
44. There's not too much to be gained by sticking with this organization indefinitely.
45. I really care about the fate of this organization.
46. For me this is the best of all possible organizations for which to work.
47. Deciding to work for this organization was a definite mistake on my part.

The next six statements deal with what you think you and your work unit do. Please indicate how much you agree or disagree with each of the statements.

48. During the day my co-workers and I work with people in other work units.
49. My co-workers and I take turns performing leadership duties in our work unit.
50. Some of my co-workers deal directly with customers and/or suppliers.
51. My co-workers and I help decide who should be hired into our work unit.
52. In our work unit we take turns doing different jobs.
53. My co-workers and I decide how to meet production requirements.
The following statements represent **things you may do at work**. Please indicate the degree of how characteristic each one is of you.

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<tr>
<td><strong>Very characteristic of me</strong></td>
<td><strong>Somewhat characteristic of me</strong></td>
<td><strong>Not characteristic or uncharacteristic of me</strong></td>
<td><strong>Somewhat uncharacteristic of me</strong></td>
<td><strong>Very uncharacteristic of me</strong></td>
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54. I help others who have been absent.
55. I am on time.
56. I volunteer for things that are not required.
57. I take undeserved breaks.
58. I orient new people even though it is not required.
59. I miss fewer days of work than most of my coworkers.
60. I help others who have heavy work loads.
61. I coast toward the end of the day.
62. I give advance notice if I am unable to come to work.
63. I spend a great deal of time with personal phone conversations.
64. I do not take unnecessary time off work.
65. I make innovative suggestions to improve the department.
66. I do not take extra breaks.
67. I do not spend time in idle conversation.

Please answer the following questions the best you can.

68. The thing I like most about working here is:

69. The thing I like least about working here is:

70. How have your feelings about yourself changed since you started working in your present job?  
   (More or less self confidence? More or less job stress? Happier?)

71. How has your job changed over the past 2 years?
Please circle the letter before the appropriate answer.

72. What department do you work in?
   A. Batching
   B. Maintenance
   C. Production
   D. Quality Control

73. How long have you worked here in your current position?
   A. less than 6 months
   B. 6 months to 1 year
   C. between 1 and 2 years
   D. more than 2 years

74. I am
   A. Male

75. My age is
   A. 25 or younger
   B. between 26 and 35
   C. between 36 and 45
   D. over 45

76. I am:
   A. Afro-American
   B. Asian
   C. Caucasian/White
   D. Hispanic
   E. Native American
   F. Other ____________

77. How many years of education have you had?
   A. Up to 6 years
   B. 7-9 years
   C. 10-12 years
   D. More than 12 years

78. Have you ever worked at any other job in groups that had little or no supervision?
   A. No
   B. Yes

79. Have you ever worked at another organization in a group that made its own decisions about its work and how it was done?
   A. No
   B. Yes
APPENDIX B

QUESTIONNAIRE IN SPANISH
CUESTIONARIO DE ACTITUDES ORGANIZACIONALES

El propósito de esta encuesta es el de obtener información acerca de sus actitudes, sus respuestas serán anónimas y confidenciales. Las preguntas de antecedentes al final de este cuestionario NO serán usadas para identificarte. Este estudio es parte de una investigación de la universidad. Únicamente se proporcionará un resumen de la encuesta a la gerencia de la compañía para la que tu trabajas, para que ellos puedan saber en qué pueden mejorar tu ambiente de trabajo. Gracias por tu tiempo y por tu cooperación.

Utiliza esta escala para las primeras 53 preguntas. Escribe un número den el espacio en blanco en un lado de cada afirmación, basándote en esta escala.

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<tbody>
<tr>
<td>Muy de acuerdo</td>
<td>De acuerdo</td>
<td>Ni de acuerdo</td>
<td>En desacuerdo</td>
<td>Muy en desacuerdo</td>
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Indica por favor cómo te sientes en general al numerar según estés de acuerdo con las siguientes afirmaciones.

1. Yo me siento como una persona valiosa, al menos al mismo nivel que otras.
2. Yo siento que tengo un número de buenas cualidades.
3. Tomando todo en consideración, yo me inclino a pensar que soy un fracaso.
4. Yo puedo hacer las cosas tan bien como la mayoría de las personas.
5. No siento que tengo mucho de que enorgullecerme.
6. Yo tengo una actitud positiva hacia mí mismo.
7. A nivel general, estoy satisfecho conmigo mismo.
8. Desearía tener más respeto para mí mismo.
9. Definitivamente en ocasiones me siento inútil.
10. En ocasiones pienso que soy un bueno para nada.

Ahora piensa de las demás personas en tu compañía que tienen el mismo trabajo que tú, o piensa en el trabajo que mas se parezca al tuyo. Piensa que tan bien describe cada una de la afirmaciones de esas personas acerca de su trabajo.

No hay problema si tus respuestas son diferentes a las que ya diste describiendo tus propias reacciones acerca de tu trabajo. A menudo personas distintas piensan en forma diferente acerca del mismo trabajo.

11. La mayoría de las personas en este trabajo están muy satisfechas con el.
12. La gente en este trabajo a menudo piensan en renunciar.
13. La mayoría de las personas en este trabajo sienten una gran satisfacción cuando hacen bien su trabajo.
14. La mayoría de las personas se sienten mal o están descontentas cuando se dan cuenta que han hecho mal su trabajo.
Ahora indica cómo tú en lo personal te sientes acerca de tu trabajo. Cada una de estas afirmaciones reflejan algo que una persona podría decir acerca de su trabajo. Indica por favor tu sentir personal acerca de tu trabajo marcando que tanto estas de acuerdo con estas afirmaciones.

____ 15.- En términos generales, estoy muy satisfecho con mi trabajo.
____ 16.- Este trabajo no me permite tener iniciativa propia o juicio propio al estarlo realizando.
____ 17.- En general, estoy satisfecho con el tipo de trabajo que realizo.
____ 18.- El trabajo me da mucha independencia y libertad en cómo realizarlo.
____ 19.- Con frecuencia pienso en renunciar a este trabajo.
____ 20.- Mi trabajo me permite decidir por mi mismo cómo realizarlo.
____ 21.- La opinión de mi mismo mejora cuando hago mi trabajo mejor.
____ 22.- Mi supervisor me deja hacer mi trabajo a mi manera.
____ 23.- Siento mucha satisfacción cuando hago mi trabajo bien.
____ 24.- Mi supervisor me dice exactamente qué hacer y cuándo hacerlo.
____ 25.- Me siento mal y descontento cuando descubro que he hecho un mal trabajo.
____ 26.- Se me permite trabajar mucho de mi tiempo sin supervisión.
____ 27.- Mis propios sentimientos por lo general no se ven afectados de un modo u otro por cómo realicé mi trabajo.

Piensa acerca de los mensajes que has recibido en el trabajo de las actitudes y el comportamiento de tus gerentes, supervisores y compañeros de trabajo. Lee las siguientes afirmaciones e indica a qué grado estas de acuerdo o en desacuerdo con estas basado en la escala de la parte superior de esta página.

____ 28.- Yo soy alguien aquí.
____ 29.- A mi se me toma en cuenta aquí.
____ 30.- Yo soy importante aquí.
____ 31.- Se me tiene confianza aquí.
____ 32.- Se me tiene fe aquí.
____ 33.- Yo puedo influir aquí.
____ 34.- Yo soy valioso aquí.
____ 35.- Yo soy útil aquí.
____ 36.- Yo soy eficiente aquí.
____ 37.- Yo soy cooperativo aquí.
Ahora piensa en cómo te sientes acerca de la compañía para la la que trabajas. Indica por favor tus propios sentimientos acerca de esta compañía al marcar qué tanto estás de acuerdo con cada una de las siguientes afirmaciones.

38.- Yo estoy dispuesto a poner un gran esfuerzo más allá de lo que normalmente se espera de mi para ayudar que la compañía tenga éxito.
39.- Yo hablo de esta compañía a mis amigos como "la gran organización para la cual trabajo".
40.- Yo encuentro que mis valores y los de la compañía son muy similares.
41.- Estoy orgulloso de decirle a otras personas que yo soy parte de esta compañía.
42.- Esta compañía realmente me inspira a dar lo mejor de mí mismo en lo que a desempeño de trabajo se refiere.
43.- Estoy mucho muy contento de haber escogido a esta compañía para trabajar en lugar de otras que estuve considerando antes de entrar a trabajar aquí.
44.- No hay mucho que ganar al quedarme aquí por tiempo indefinido en esta compañía.
45.- Realmente me importa lo que le pueda suceder a esta compañía.
46.- Para mí esta es la mejor de todas las posibles compañías en las que pudiera trabajar.
47.- El haberme decidido a trabajar para esta organización, realmente fue un error de mi parte.

Las siguientes seis afirmaciones tratan con que es lo que tú piensas que tú y tu línea o grupo de trabajo hacen. Indica por favor tus propios sentimientos acerca de esta compañía al marcar qué tanto estás de acuerdo con cada una de las siguientes afirmaciones.

48.- Durante el día (o turno) mis compañeros y yo trabajamos con otras personas de otras líneas o grupos de trabajo.
49.- Mis compañeros y yo nos turnamos realizando funciones de líder en nuestra línea o grupo de trabajo.
50.- Algunos de mis compañeros tratan directamente con clientes y/o proveedores.
51.- Mis compañeros y yo ayudamos a decidir quién deberá ser contratado para nuestra línea o grupo de trabajo.
52.- En nuestro grupo de trabajo, nos turnamos para realizar diferentes funciones.
53.- Mis compañeros y yo decidimos cómo cumplir con nuestras necesidades de producción.
Las siguientes afirmaciones representan cosas que tal vez tú hagas en tu trabajo. Indica por favor en qué grado cada afirmación es característica en ti.

Escriba un número en el espacio en blanco para cada afirmación, basándose en la escala arriba mostrada.

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<tr>
<td><strong>Muy típico de mí</strong></td>
<td><strong>Algo típico de mí</strong></td>
<td><strong>No es típico de mí</strong></td>
<td><strong>Algo no típico de mí</strong></td>
<td><strong>No típico de mí</strong></td>
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54.- Yo les ayudo a los compañeros que hayan estado ausentes.

55.- Yo llego a tiempo a mi trabajo.

56.- Yo me ofrezco a realizar funciones que no son mi obligación.

57.- Yo me tomo descansos que no merezco.

58.- Yo oriento a nuevos empleados aun cuando no me sea requerido.

59.- Falto menos días que la mayoría de mis compañeros.

60.- Yo le ayudo a otros que tengan una carga de trabajo pesada.

61.- Me la paso tratando de trabajar lo menos posible hasta el final del turno.

62.- Aviso con anticipación si no voy a poder asistir a trabajar.

63.- Me paso mucho tiempo en llamadas telefónicas personales.

64.- No me tomo tiempo innecesario fuera del trabajo.

65.- Hago sugerencias innovadoras para mejorar mi departamento.

66.- No me tomo descansos adicionales.

67.- No pierdo tiempo platicando.
Por favor contesta las siguientes preguntas lo mejor que pueda.

68.- Lo que más me gusta de mi trabajo es:

69.- Lo que menos me gusta de mi trabajo aquí es:

Por favor circula la letra que indique la respuesta más apropiada.

70.- ¿Cuánto tiempo has trabajado aquí en tu puesto actual?.
   A).- Menos de 6 meses
   B).- De 6 meses a 1 año
   C).- De 1 a 2 años
   D).- Más de 2 años

71.- Yo soy de sexo:
   A).- Masculino
   B).- Femenino

72.- Mi edad es de:
   A).- 16 a 19 años
   B).- Entre 20 y 25 años
   C).- Más de 25 años

73.- ¿Cuántos años de educación has tenido?.
   A).- Hasta 6 años
   B).- De 7 a 9 años
   C).- De 10 a 12 años
   D).- Más de 12 años.
I understand that the questionnaire I have been asked to fill out is for academic research on the attitudes of workers. The title of the project is Organizational Attitudes.

I also understand, if asked to do anything that, in good conscience, I cannot ethically or morally do, I may discontinue my participation in this project immediately.

Participant's Name (Please print)

Participant's Signature

Date
REFERENCE LIST


Argyris, Chris. 1964. Integrating the individual and the organization. New York: John Wiley and Sons.


Shefald, M. E. 1971. Investments and involvements as mechanisms producing commitment to the organization. *Administrative Science Quarterly* 16 (June): 142-150.


