TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP BEHAVIORS PERFORMED BY MANAGEMENT TEAM AND SELF-MANAGED WORK TEAM MEMBERS

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
December, 1993

TRANSFORMATIONAL AND TRANSACTIONAL

LEADERSHIP BEHAVIORS PERFORMED BY

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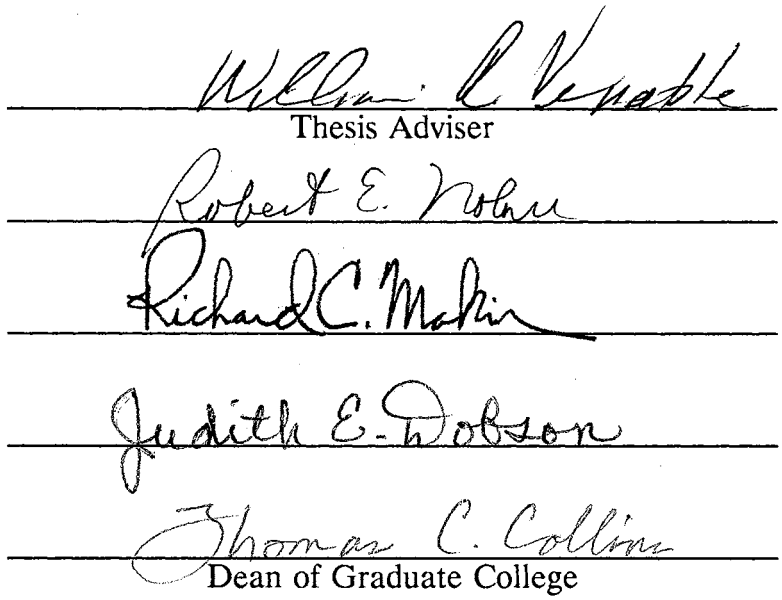
Thesis Approved:



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ACKNOWLEDGMENTS

I wish to express appreciation to my family, friends, and colleagues for their support and encouragement. I extend my thanks to my doctoral committee members, Dr. William Venable, Chairperson; Dr. Robert Nolan; Dr. Richard Makin; and Dr. Judith Dobson. Their advice and suggestions during my research study are appreciated. Special thanks are due to my colleague and friend, Dr. Janice Williams, for her guidance as I completed my dissertation.

This project is dedicated in memory of my parents, Mr. and Mrs V.H. Cockrell. It was their love, dedication, and support that developed my sense of values. They encouraged me to pursue worthy goals and developed my discipline to achieve them. I would also like to thank my brothers and sister and their families for their constant encouragement and support. Their belief in me never wavered. I wish to thank my in-laws, Mr. and Mrs. Don Hale, for their support and encouragement through my graduate studies. To my brothers and sisters in-laws who constantly encouraged me to complete my studies, I extend my love and appreciation.

My deepest gratitude is extend to my husband, Kim. His support, love, and endless encouragement demonstrate his belief in my abilities. With his support I achieve my goals.

I further wish to express my sincere appreciation to the staff members in the Testing Division and Research Division at the Oklahoma Department of Vocational

and Technical Education. Their interest, help, and support were greatly appreciated. A special thanks is extend to Kimberly Sadler and Dr. Chuck Hopkins for providing me the opportunity to complete my work. A special thank you is extend to Dr. Behrooz Jahanshahi and Ms. Alice Price Rushmore for their statistical and research assistance. I also wish to express appreciation to Melisa Davenport and Lisa Meyers for the assistance they provided.

Lastly, I wish to express my sincere thanks to the organization and employees under study. The organization's commitment, time, and contributions demonstrate its commitment to the pursuit of excellence.

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CHAPTER I

INTRODUCTION

American corporations are currently struggling to maintain resilience and solvency in a competitive and turbulent marketplace. Increased global competition, coupled with low productivity, high absenteeism, and high employee turnover, are jeopardizing the survival of many corporations. In order to effectively address these problems, many organizations are reorganizing themselves by adopting innovative work designs. One such work design is self-managed work teams. Self-managed work teams currently are used by companies such as Xerox, General Foods, and Hewlett-Packard (Barry, 1991; Orsburn et al., 1990). Organizations using self-managed work teams have experienced increased productivity, quality control, flexibility, and employee commitment (Orsburn et al., 1990).

Self-managed work teams make these improvements possible by capitalizing on the synergy of the work group to achieve goals that can not be achieved through individual efforts (Rees, 1991). A self-managed work team is generally defined as a small group of highly trained employees who are fully responsible for producing a specific segment of finished work, or a whole task or service (Orsburn et al., 1990; Cummings, 1978). This work design places a high degree of decision-making autonomy and behavioral control at the work team level. This allows the work team

to assume many traditional leadership responsibilities, such as planning, coordinating work assignments, and selecting and evaluating team members. Consequently, the roles of external leaders who occupy supervisory and administrative positions are altered. These external leaders are organizational members who occupy administrative positions outside the self-managed team.

The roles of external leaders are altered because supervisors and administrators are no longer able to delegate tasks or communication through intermediaries. As Peters (1987) explains, the organizational structure is flattened by reducing the number of middle managers. Organizations are reducing the number of management positions to increase their ability to respond quickly and efficiently to customer needs and change. Computers are also influencing the reduction of middle management by providing front line employees quick access to information and increased communication with administrators. When the management structure is reduced, administrators must often manage large groups of employees without middle-management buffers. Consequently, management team leaders must acquire new skills and behaviors because they are confronted with new work situations and responsibilities. This often creates role clarity problems for external leaders (Wellins, Byham, & Wilson, 1991).

As Manz & Sims (1984) point out, role ambiguity is one of the most troublesome issues regarding the implementation of self-managed work teams. Role ambiguity occurs when leadership roles are not clearly defined. Leaders cannot identify their responsibilities or effective leadership behaviors. This not only affects the pattern of work interactions and the distribution of work, but also the attainment of organizational goals (Stogdill et al., 1956).

The roles of external leaders in self-managed organizations are problematic because existing leadership theories are inadequate for guiding self-managed teams. Existing leadership theories propose that the appointed leader becomes the legitimate authority figure and then suggest effective leader behaviors within this framework. This assumption may be inappropriate for self-managed work teams, as self-managed work teams are given an unusual amount of traditional legitimate authority. Self-managed work teams are also expected to rely considerably less on external influence and guidance (Barry, 1990; Manz & Sims, 1986).

Research examining leadership in self-managed organizations has focused primarily on leadership behaviors utilized by supervisors (Susman, 1979) or coordinators occupying organizational positions analogous to foremen (Manz & Sims, 1984, 1986, 1989). This research suggests that the appropriate leadership behaviors for managers and executives in self-managed organizations are to maintain subordinates' zone or boundary authority and to encourage employees to use self-management behaviors (Susman, 1979; Manz & Sims, 1984, 1986, 1989).

Current literature suggests that executives occupying leadership positions in self-managed organizations also energize and motivate employees by introducing an expounding and guiding vision. These executives also provide boundary maintenance to work teams and help to develop self-managed employees. These behaviors motivate employees to achieve organizational goals (DePree, 1989; Bennis, 1990; Bass, 1985).

Leadership today requires a new mindset, different skills, and values which build employee commitment (Stowell, 1988). The investigation of leadership in a self-managed organization must not only focus on leadership behaviors that instill

employee commitment and self-management, but must also describe and differentiate leadership behaviors utilized at the various organizational levels. One leadership theory that would provide insight into leadership in self-managed organizations is Bass' (1985) Transformational Leadership Theory.

The premise of transformational leadership is that whatever the separate interests a person might hold, such interest are presently or potentially united in the pursuit of "higher" goals. For this reason, leaders have a vital teaching role. Leaders shape, alter, and elevate followers' motives, values and goals in pursuance of higher order goals (Burns, 1978). Bass' (1985) suggests that transformational leadership behaviors are augmented by transactional leadership behaviors. Transactional leadership exchanges rewards and promises of reward for effort (Bass, 1985). Bass (1985) further conceives transactional and transformational leadership as having independent dimensions within each leadership behavior. Each dimension is composed of several factors. The factors that characterize the transactional leaders are contingent reward and management by exception. The factors that characterize the transformational leader are charisma, intellectual stimulation, and individual consideration.

Self-regulating work designs often are applied inappropriately because of a lack of understanding about external leadership in self-managed organizations. This results in confusion and the failure of self-managed work teams (Cummings, 1978). Research that identifies the leadership behaviors exhibited by management team members from those exhibited by work team members in self-managed organizations might provide valuable information for training, selecting, and evaluating external leaders in self-managed organizations. This could enable management team

members to successfully implement self-managed work designs (Herrick, 1990; Manz & Sims, 1986). More knowledge about leadership behaviors appropriate for self-managed organizations is needed if self-regulating designs are to emerge out of loose metaphors for worker autonomy and into scientifically sound and practical operational strategies for work design (Cummings, 1978).

Statement of the Problem

The problem which gave rise to this study was that self-managed work designs often fail because leaders do not understand their role in self-managed organizations. Transferring these leadership responsibilities to the work team changes the role of the external leaders who occupy supervisory and administrative positions (Rees, 1991). Role ambiguity and confusion about the external leader's role in directing self-managed work teams is one of the most troublesome issues regarding the implementation of self-managed work teams (Manz & Sims, 1984). Role ambiguity occurs when leadership roles are not clearly defined. This makes it difficult for the leaders to identify their responsibilities and effective leadership behaviors. Leadership role definition is important because it affects the pattern of work interactions and the distribution of work. As Stogdill et al. (1956) explain, this becomes more evident when considering the fact that organizational members do not behave randomly or operate in isolation, but always with reference to other organizational members. Moreover, the leader's own accomplishments and the achievement of organizational goals are dependent upon the role expectations of organizational members. The role of the external leaders in self-managed

organizations is also troublesome because existing leadership theories are inadequate for guiding self-managed teams (Barry, 1990; Manz & Sims, 1986).

Cummings (1978) asserts that the lack of comprehension regarding leadership roles in self-managed organizations often leads organizations to apply self-regulating designs inappropriately. This results in confusion and other unintended consequences.

Purpose of the Study

The purpose of this study was to identify the transformational leadership behaviors and the transactional leadership behaviors performed by management team members and self-managed work team members.

Need for the Study

Current literature suggests that self-managed work teams perform many of the same leadership functions as managers. As a result, self-managed work team members become leaders themselves. The research available on leadership in self-managed organizations provides insight into the leadership behaviors performed by supervisors and foremen. This research fails to empirically identify the leadership performed by work team members from the leadership performed by management team members. It also fails to differentiate the similarities and differences between the work team members and management team members. This has left a theoretical gap in the investigation of leadership in self-managed organizations. Bass' (1985)

Transformational Leadership Theory provides a framework for identifying leadership behaviors performed by management team members and self-managed work team members. These leadership behaviors help to develop employees into leaders and inspire employees to achieve organizational goals.

The Transactional Leadership Theory provides a framework for differentiating leadership behaviors performed by management team members and self-managed work team members in order to establish goals and work team member boundaries. Differentiating the transformational leadership behaviors from the transactional leadership behaviors performed by management team members and self-managed work team members could provide new information regarding the leadership in self-managed organizations. This information could be used for selecting, training, and evaluating management team members and self-managed work team members. This could enable organizations to successfully implement self-managed work designs.

Definitions

TRANSFORMATIONAL LEADERSHIP is a form of leadership in which a leader uses charisma, inspiration, intellectual stimulation, and individualized consideration to guide peer and employee performance (Bass, 1985).

> CHARISMA is a transformational leadership behavior exhibited by individuals who provide a vision and a sense of mission and who gain the respect and trust of followers (Bass, 1985).

INDIVIDUALIZED CONSIDERATION is a transformational leadership behavior exhibited by leaders who give personal attention to employees, treat each employee individually, and coach and advise employees (Bass, 1985).

INSPIRATION is a transformational leadership behavior exhibited by leaders who communicate high expectation, use symbols to focus efforts, and confidently express a vision (Bass, 1985).

INTELLECTUAL STIMULATION is a transformational leadership behavior exhibited by leaders who foster creativity, stress the use of intelligence, and provoke reexamination and evaluation of current assumptions and work methods (Bass, 1985).

TRANSACTIONAL LEADERSHIP is a form of leadership in which the leader uses contingent reward and management by exception to guide peer and employee performance (Bass, 1985).

CONTINGENT REWARD is a transactional leadership behavior exhibited by leaders who clarify objectives for subordinates and contract the exchange of rewards for effort and agreed upon levels of performance (Bass, 1985).

MANAGEMENT BY EXCEPTION is a transactional leadership behavior exhibited by leaders who intervene only when standards are not met (passive management by exception) or by leaders who watch and search for deviation

from rules and standards, and then take corrective action (active management by exception) (Bass, 1985).

MANAGEMENT TEAM MEMBERS are those members who occupy strategic and tactical team positions external to the self-managed work team.

Strategic team members are the top administrative level in the organization. The strategic team members are responsible for long-term planning, policy making, and reviewing recommendations of the tactical and operating teams.

Tactical team members occupy positions directly below the strategic team members. Tactical team members coordinate the work assignments of the operating teams.

Operating team are self-managed work teams responsible for the production or distribution of vinyl flooring or maintaining the equipment used in the production of vinyl floor products.

SELF-MANAGED WORK TEAMS are groups of employees who are fully responsible for offering or producing a specific segment of finished work, or a whole task or service (Orsburn et al., 1990).

CASE STUDY is a multifaceted investigation of a single phenomenon (Feagin et al., 1991).

CONTENT ANALYSIS is a multipurpose research method developed to investigate any problem in which the content of communication serves as the basis of inference (Holsti, 1969). Content analysis is used to examine the artifacts of social communications (Berg, 1989).

FOCUS GROUP DISCUSSION consists of a group of people working with a moderator to express opinions and attitudes and to discuss specific topics in which all group participants are familiar (Merton et al., 1990).

Research Questions

1. What transactional leadership behaviors are performed by management team members and by self-managed work team members?

2. What transformational leadership behaviors are performed by management team members and by self-managed work team members?

3. What are the differences between the transactional leadership behaviors performed by management team members and the transactional leadership behaviors performed by self-managed work team members?

4. What are the differences between the transformational leadership behaviors performed by management team members and the transformational leadership behaviors performed by self-managed work team members?

Limitations

The limitations of this study were as follows:

1. The generalizability of the study was limited to organizations implementing a self-managed work design utilizing two primary team levels.

2. The study was limited to one organization implementing a self-managed work design.

3. The study was limited to the leadership behaviors conceptualized in Bernard Bass' Transformational Leadership Theory and Transactional Leadership Theory (1985).

4. The study was limited to the transformational leadership behaviors and transactional leadership behaviors performed by management team members and self-managed work team members.

5. The organizational structure of the case studied may not be representative of all self-managed organizations.

6. The study was limited to the self-perceptions of organizational members regarding transactional leadership behaviors and transformational leadership behaviors performed by management team members and self-managed work team members.

Assumptions

The following assumptions were made regarding this study:

1. The strategic team members and the tactical team members were an appropriate representation of management team members. The strategic team members and tactical team members serve in administrative or supervisory positions and facilitated the self-managed work team work and plant operations.

2. The newsletters articles analyzed were not modified or falsified by any individual for research purposes.

Chapter Summary

Chapter I is an introduction to the study. The remainder of the study is presented in four chapters. Chapter II is a review of the literature relevant to the study. The methodology is presented in Chapter III. In Chapter IV, the findings are presented. Chapter V includes the summary, conclusions, and recommendations.

CHAPTER II

REVIEW OF LITERATURE

This chapter presents a review of literature relevant to the investigation of management team leadership in self-managed organizations. The review of literature is presented in six major sections. The first section presents an overview of the current trends influencing organizations. These trends are the emphasis on human resources as an organizational strategic advantage, the changing work force demographics, and organizational reorganization. The second section describes the system design of self-managed work teams and the work team responsibilities.

Section three presents the problems associated with the external leader's role in self-managed work teams. Role ambiguity is identified as the major problem facing external leaders occupying leadership positions in self-managed organizations. The rationale for studying external leadership in self-managed organizations is also presented. By studying leadership in self-managed organizations, information could be obtained about the training, selection, and promotion of leaders. And information defining the role of external leaders can provide new information regarding the design and functioning of self-managed work teams.

Section four presents three theories pertaining to external leadership in self-

managed organizations. This section is presented in four parts. The first part describes the supervisor's technical and phenological boundary maintenance functions based upon Susman's (1979) Socio-Technical Theory. The second part presents the Manz and Sims (1989) Superleadership Theory as it applied to external leaders in self-managed organizations. Part three discusses the application of Susman's (1979) Socio-Technical Theory and the Manz and Sims (1989) theories regarding the role of the management team leadership. Current literature is also presented in part three. Part four presents Burns (1978) and Bass' (1985) Transactional and Transformational Leadership Theories. The characteristics of transactional and transformational leaders are explored in this section. In closing of section four the effects of transformational leaders on followers and the application of the Transformational Leadership Theory in self-managed organizations are explored.

Section five presents a review of case study methodology. Section five is presented in three major parts. Part one describes the various types of case studies, and how case studies are designed. Part two explores three data collection methods. The first data collection method described is the questionnaire. Issues addressing the planning and administration of a questionnaire are presented. The second data collection method presented is the focus group interview. Determining the number and size of focus groups and the focus group structure are presented. The design of an interview schedule, moderator involvement, the conduct of focus group, and focus data analysis are also presented. The third data collection method described is document analysis. The issues presented addressing document analysis include the following: a) content analysis, b) coding system, c) sampling methods, and d) data

analysis. Part three addresses case study data analysis and presentation of conclusions. Section six presents the summary of the literature review.

Organizational Trends

In order to effectively meet and adapt to market demands, American corporations are reorganizing. Corporate reorganization is being influenced by increased global competition and economic pressures. To effectively address these pressures, corporations are now adopting revolutionary concepts, values, and strategies. Naisbitt and Aburdene (1985) suggest that these concepts, values, and strategies are reflected in three current organizational trends. The first trend is illustrated by the shift in corporate strategic resources.

The strategic resources during the industrial era focused on capital gain. Today, in the information age, corporations are relying on human resources to obtain the strategic advantage. This is because corporations currently recognize that people and profit are inexorably linked. As a result, corporations realize that gaining the strategic advantage depends upon developing employee potential. Employees can help corporations gain the strategic advantage by providing the information, knowledge, and creativity needed to compete nationally and globally. This trend is exhibited by the strong emphasis on developing human resources.

Human resource development is further being emphasized by the second trend which Naisbitt and Aburdene (1985) credit with transforming the corporations. This trend is the changing demographics of the work force in United States. The work force is changing in quantity, composition, and capabilities. The quantity of the new

workers will greatly decline in the future because of the lower birthrate in the United States. As Dychtwald (1990) explains, 28 percent of the baby boomer generation will have no children and another 25 percent will have only one child. The size of the work force will also decline because the last of the baby boomers are entering the work force. This will not only create labor shortages, but also what Dychtwald (1990) refers to as the "senior boom" in the coming decades. The aging of the baby boomers will create the "senior boom" as the baby boomers become the largest aging population in history. In the year 2000 the largest age group in the work force will be the 30 to 44-year olds, with the amount of 45 to 64-year olds increasing rapidly (Hodgkinson, 1986). In addition, the baby boomers' generation has brought a new set of psychological demands to the work place. Baby boomers are looking for more interesting and challenging work with more control and autonomy (Kinlaw, 1991). Moreover, increased cultural diversity is affecting the work place.

Increased cultural diversity in the work place is reflected by the changing composition of workers. It is estimated that the composition of the work force in the future will include a larger number of women and minorities, such as blacks and hispanics, than ever in history. More than 47 percent of the new work entrants will be women through the year 2000 (Dreyfuss, 1990). Many of these new entrants will also come from economically distressed environments. This will affect the capabilities of the work force because the new workers will enter the work force educationally, socially, or emotionally disadvantaged. As a result, this will create a fundamental mismatch between jobs and workers because jobs are growing increasingly more technologically advanced and complex, while workers' skill levels are declining. These factors will necessitate a substantial expansion in corporate

training and human resource development in order to create competitive organizations. Consequently, corporate policies are changing in an effort to adapt to the new work force. This is evident in the increasing attention to family concerns, worker motivation, (Naisbitt & Aburdene, 1985) inter-generational issues, (Dychtwald, 1990) and organizational "restructuring" (Naisbitt & Aburdene, 1985).

Organizational "restructuring", the third trend transforming organizations today, is reflected in the reduction of middle management (Naisbitt & Aburdene, 1985). Corporations are flattening management structures in an effort to respond quickly to external changes and to increase effectiveness, flexibility, and productivity (Peters, 1987; Naisbitt & Aburdene, 1985). Computers are also influencing the reduction of middle management by allowing top executives immediate access to information. Organizational "restructuring" is further evident by the utilization of self-managed work teams.

Self-Managed Work Teams

Self-managed work teams are currently being used among companies such as Digital, Frito-Lay, General Electric, General Foods, General Motors, Hewlett-Packard, Honeywell, 3M, Xerox, and Pepsi-Cola (Barry, 1991; Orsburn et al., 1990). Self-managed work teams have been credited with increasing productivity, flexibility, quality control, and employee commitment (Orsburn et al., 1990), saving millions of dollars, achieving conceptual breakthroughs, and introducing unparalleled numbers of new products to the market (Barry, 1990). Self-managed work teams make these improvements possible by capitalizing on the synergy of the group collectively in

order to achieve goals that could not have been achieved through individual efforts (Rees, 1991). Susman (1979) suggests that work teams are more efficient because a group can deal with the total variance of work conditions by quickly allocating resources when and where required, as opposed to an aggregate of individuals, each of whom is assigned only a part of the project (Susman, 1979). As Mills (1983) explains, self-management should be conceptualized as an organizational strategy to maintain predictability. Organizational predictability is maintained by shifting part of the control process from the domain of the formal leader to lower organizational levels.

Work teams operating under this rationale are referred to by various names such as self-regulating (Cummings, 1978), self-directed (Orsburn et al., 1990), autonomous (Susman, 1979), or self-managed (Manz & Sims, 1989). Throughout this review of literature the term self-managed work teams will be used. Self-managed work teams are generally defined as a group of 6 to 18 highly trained employees fully responsible for offering or producing a well-defined segment of finished work, whole task, or service (Orsburn et al., 1990; Cummings, 1978). The organizational design of self-managed work teams is based upon the Socio-Technical Systems Theory.

The socio-technical design assumes that any work site contains two interdependent systems, a technical system and a social system (Trist, 1977). The technical system is organized around rational principles of efficiency (Susman, 1979) and deals with the physical aspects of the "objective" world (Trist, 1977). The objective world includes the equipment and methods of operations used to transform raw materials into products or services (Susman, 1979). These raw materials can

extend over a geographical area and are joined together by the timing and movement of raw materials and information. The social system, on the other hand, consists of values, beliefs, expectations, and emotions held by organizational members (Susman, 1979; Cummings, 1978). The social part of the production system relates people to technology and to each other. Both the technical and social system world jointly influence a work team's performance and behavior. The Socio-Technical Theory attempts to design work structures that are responsive to both the technical task requirements of the job and the social and psychological needs of employees. However, there are certain organizational conditions that must be present before self-managed work teams can operate effectively.

There are three organizational conditions necessary for the successful implementation of self-managed work teams (Cummings and Griggs, 1977). These organizational conditions are task differentiation, boundary control, and task control. Task differentiation refers to the extent the work team's task is itself autonomous. The work team's task forms a self-completing whole. The second organizational condition necessary for self-managed work teams is boundary control. Boundary control represents the extent to which employees can influence transactions within their task environment such as the types and rates of inputs and outputs. Cummings (1978) proposes three factors which contribute to boundary control. These factors include 1) a well-defined work area that allows individuals to identify their own territory; 2) competent work team members who possess an adequate repertoire of skills; and 3) work team responsibility for boundary control decisions (e.g., quality assurance). These factors reduce dependence on external boundary regulators such as inspectors and supervisors. In addition, Emery and Trist (1973) and Susman

(1979) propose that work teams operate based upon the redundancy principle. The redundancy principle requires that all work team members have the capabilities to perform many or all of the required work team tasks. This requires work team members to have redundant skills. Possessing redundant skills enables the work team to alter their procedures and work operations to meet changing circumstances. The last organizational condition necessary for self-managed work teams is task control.

Task control refers to the extent to which employees have the ability to regulate their behavior when converting raw materials into finished products. Task control allows work team members to have discretion over decisions such as work methods, task schedules, and task assignment. Cummings (1978) asserts that task differentiation, boundary control, and task control provide the work team with task boundaries, autonomy, and feedback. As a result, goal attainment can be controlled within the work team or unit rather than externally. This allows the work team to assume many of the traditional leadership responsibilities. Consequently, the leadership external to the work team becomes vastly different from the leadership in traditionally managed organizations.

Leadership in Self-Managed Organizations

Leadership in self-managed organizations is different in terms of the numbers of people who act in leadership roles, the behaviors expected of leaders, and the duties and results for which the leaders are held accountable (Herrick, 1990). For example, traditionally external leaders such as supervisors serve to direct, control,

and plan the activities for the group or work unit. However, in self-managed organizations the work teams often become responsible for many of the traditional supervisor's responsibilities. Studies conducted by Wellins et al. (1991) that examined 500 organizations utilizing self-managed work teams indicate that work teams can assume 80 percent of a supervisor's job responsibilities. This is because self-managed work teams are designed to give employees "ownership" of the product or services. Ownership of the product or services stems from production activities (doing the job), production control (coordinating the job), to leadership (group support and governance).

In addition, self-managed work teams are often responsible for coordinating work assignments, allocating resources, and some decision making. Many other leadership functions are transferred over time as the work team learns to assume more responsibilities (Barry, 1990). For instance, experienced self-managed work team members conduct team member selection and evaluation, plan and set work priorities, schedule leave, and handle work team discipline problems (Orsburn et al., 1990). Transferring these leadership responsibilities to the work team changes the role of the external leaders who occupy supervisory and administrative positions. As Rees (1991) explains, the roles of those who remain in management positions change because managers will be confronted with new situations and responsibilities. Administrators will no longer be able to delegate tasks or communications through intermediaries. In many instances, administrators direct large groups without a middle-management buffer. As a result, managers and administrators who occupy management team positions must acquire new skills and behaviors. However, transferring leadership responsibilities to the work team can cause role clarity

problems for external leaders (Wellins, Byham, & Wilson, 1991).

Role ambiguity and confusion about the external leader's role in directing self-managed work teams is one of the most troublesome issues regarding the implementation of self-managed work teams (Manz & Sims, 1984). Role ambiguity occurs when leadership roles are not clearly defined. This makes it difficult for the leaders to identify their responsibilities and effective leadership behaviors. Leadership role definition is important because it affects the pattern of work interactions and the distribution of work. As Stogdill et al. (1956) explain, this becomes more evident when considering the fact that organizational members do not behave randomly or operate in isolation, but always with reference to other organizational members. Moreover, the leader's own accomplishments and the achievement of organizational goals are dependent upon the role expectations of organizational members. The role of the external leaders in self-managed organizations is further problematic because existing leadership theories are inadequate for guiding self-managed teams (Barry, 1990; Manz & Sims, 1986).

The research addressing the role of the external leader in self-managed organizations is further limited to research based upon those leaders who occupy positions analogous to supervisors and foremen. This research provides no distinction between leadership at various organizational levels. What is needed now is research that differentiates the leadership behaviors exhibited by leaders who occupy administrative positions in organizations utilizing self-managed work designs. The term "management team members" will be used to describe those leaders who occupy administrative and supervisory positions in self-managed organizations. As Cummings (1978) asserts, the lack of comprehension regarding leadership roles in

self-managed organizations often leads organizations to apply self-regulating designs inappropriately. This results in confusion and other unintended consequences. Specifically, self-managed work designs often fail because leaders do not understand their role in self-managed organizations. Knowledge of leadership behaviors appropriate for self-managed organizations is further needed if self-regulating designs are to emerge from loose metaphors for worker autonomy to scientifically sound and practical operational strategies for work design.

Furthermore, research differentiating management team leadership behaviors also has definite pragmatic application. It would provide new information for training, selecting, and evaluating management team members (Herrick, 1990; Manz & Sims, 1986). This information could help prepare executives to assume and adapt leadership roles in self-managed organizations. As McCoby (1990) asserts, if leaders are trained to use the short-term management methods of the past, then only a brand of dysfunctional leadership will be perpetuated. This fails to serve the economic interests of individual firms and the country (Herrick, 1990). Moreover, current literature indicates that external leadership does not disappear in self-managed organizations. In contrast, the self-managed work teams need a close association with the leader for support and ongoing redefinition of subordinates' zone or boundary authority (Mills, 1983). There are three theories that currently have application regarding the role of the external leaders in self-managed organizations. The three theories that suggest external leaders' roles in self-managed organizations are Susman's (1977) Socio-Technical Theory, Manz and Sims' (1989) Superleadership Theory, and Bass' (1985) Transformational Leadership Theory.

External Leadership Theories Pertaining to Self-Managed Organizations

Susman's (1979) Socio-Technical Theory

Susman (1979) uses the Socio-Technical Theory to recommend a role for the supervisor who occupies the organizational position directly over the work group. According to Susman (1979), the supervisor's role revolves around mediating the activities between the work group and work environment. In the work environment this role requires the supervisor to adopt a boundary-maintenance function in both the technical and phenomenal worlds.

The technical boundary function requires the supervisor to reduce the work team's external and internal uncertainty that affects the work team's goal achievement. A major source of external uncertainty that affects work team goal achievement is boundary-transaction uncertainty (Cummings, 1978). Boundary-transaction uncertainty interferes with scheduling input and output exchanges. The supervisor controls boundary-transactions uncertainty through buffering, leveling, forecasting, or rationing activities. This might include activities such as negotiating delivery dates, coordinating inventories, or combining the work team outputs with other work teams' outputs. Boundary-transaction uncertainty is usually high when the organization's task environment is relatively complex and changing. The internal technical boundary-maintenance function requires the supervisor to reduce the conversion uncertainty within the work group itself. Conversion uncertainty affects the work group's ability to convert raw materials into finished outputs such as operating production technology (Susman, 1979, Cummings, 1977). Conversion

uncertainty often interferes with goal attainment because internal task-environment elements such as technology, information processing, and the nature of the raw materials are often beyond work team control. When this occurs the supervisor's main responsibility is to regulate the variance within and between the work teams. This allows the work teams to plan and operate effectively. Conversion uncertainty is high when there is incomplete technical knowledge regarding the production of desired outcomes.

The boundary-maintenance functions for the supervisor in the phenomenal world revolve around facilitating the work team's social development. The supervisor facilitates the work team's social development by assisting the work team in establishing commitment, accepting the primary tasks, setting goals and objectives, and learning effective planning and problem solving strategies. The external leader establishes commitment of the work team by helping the work team to define and accept desired primary tasks.

The primary task represents the task or goal the work team has agreed to achieve such as producing a product with certain characteristics within a given time period (Susman, 1979). The acceptance of a primary task allows the work team to focus their emotional and intellectual efforts towards achieving future measurable outcomes. In this instance, the supervisor facilitates the work team in defining and setting goals and objectives. Specifically, the supervisor helps the work team to achieve consensus by clarifying issues, exploring information, insuring all members have input, and determining whether the work team is ready to reach a decision. The supervisor then assists the work team in developing plans for achieving and evaluating their goals.

The final social boundary-maintenance function of the supervisor is assisting the work team in developing problem solving skills. The supervisor teaches work team members problem-solving skills by observing and providing feedback regarding the work team's work processes. This is done in a climate where work problems are freely expressed and explored. Therefore, the supervisor must treat errors as learning opportunities and encourage work team members to share ideas that would avoid future errors (Susman, 1979).

In summary, Susman (1979) believes the supervisor's role is to mediate the activities of the work team. This requires the supervisor to adopt both technical and social boundary-maintenance functions. The technical boundary maintenance function involves reducing the work team's external and internal uncertainty, while the supervisor's social boundary-maintenance function involves developing the work team's ability to complete the work team's primary tasks through goal setting, planning, and problem solving. However, Manz and Sims (1986, 1989) argue that the role of the external leader also involves developing self-management skills in employees. Consequently, Manz and Sims (1986 & 1989) view the role of the external leader much more broadly.

Manz and Sims' Superleadership Theory

Manz and Sims (1986 & 1989) expand on Susman's (1979) work by utilizing both the Social Learning Theory and the Socio-Technical Theory to describe the role of the external leader in self-managed organizations. By combining the Social Learning Theory and the Socio-Technical Theory, Manz and Sims (1986, 1989) have

developed the Superleadership Theory. According to Manz and Sims (1989) the Superleadership Theory provides a conceptual framework for defining the role of managers and executives who occupy leadership positions and are responsible for leading others. Manz and Sims (1986) propose that the Social Learning Theory aids in understanding the external leader's role in self-managed organizations because the Social Learning Theory recognizes the processes that interact to influence human behavior. Manz and Sims (1986, 1989) use the Social Learning Theory to identify "within-group" boundary behaviors. Similar to Susman (1979), Manz and Sims (1989) use the Socio-Technical Theory to identify the external leader's boundary behaviors.

Primarily, Manz and Sims (1989) propose that Superleaders are responsible for designing and implementing a work system that allows and teaches employees to be self-leaders. Self-leadership represents what people do to lead themselves and can be viewed as form of responsible followership. The Superleader employs these boundary and within-group behaviors to provide followers the behavioral and cognitive skills necessary to exercise self-leadership (Manz and Sims, 1989).

The within-group boundary behaviors presented by Manz and Sims (1986, 1990) describe the role of external leaders such as foremen and general foremen role, in regulating intra-group work team behaviors. Manz and Sims (1986, 1984) have identified five external leadership behaviors within-group boundary behaviors utilized by these external leaders. The first within-group boundary behavior exercised by the external leader is encouraging internal work team communication such as stimulating idea exchange and addressing concerns and issues that influence work team functioning. Second, the external leader encourages group problem solving. Group problem solving is encouraged by facilitating the work group in evaluating and

problem solving. Third, the external leader encourages within-group job assignment. Within group job assignment allows the work team to allocate work tasks and human resources effectively. Fourth, the external leader encourages and guides the work team in planning and coordinating work activities. The final within-group behavior exhibited by the external leader is encouraging the training of inexperienced employees, thereby ensuring that all members have the skills and abilities to make a significant contribution to the group.

Manz and Sims (1986) also suggest five external leader boundary behaviors. The first boundary behavior exhibited by the external leader is serving as a communication link with different parts of the work system. In this role the external leader communicates management's views and decisions to the work group and communicates the work group's needs and viewpoints to management. In addition, the external leader acts as a communication link between different work groups in the organization. This is necessary when the technology involves substantial interdependence between work groups. Second, the external leader establishes flexible task boundaries for the work groups. Flexible task boundaries allow the work group members to assume whatever responsibilities needed to complete the job promptly, even if the task is not the member's normal job. Third, the external leader facilitates equipment and supplies availability, as well as facilitating the production flow between groups. Fourth, the external leader enhances communication between other external leaders. This includes working with other external leaders and coordinating work teams' efforts. Fifth, the external leader boundary behavior includes assisting external inexperienced employees with training. As mentioned before, in addition to the within-group and boundary maintenance behaviors, Manz

and Sims (1989) believe the external leader is responsible for developing self-leadership skills in employees.

The external leader develops self-leadership skills in employees using behavioral modeling. However, Manz and Sims (1989) argue that the Superleader's application of behavioral modification differs from the basic behavioral modification model because the Superleader's model focuses on the external environment and the cognitive aspects of self-control that influence behavior. Furthermore, the behavioral modification model is utilized because leaders and subordinates share a reciprocal relationship. Leaders and subordinates share a reciprocal relationship because leaders serve to create the world that is relevant to subordinates. Leaders influence subordinates' behavior. The Superleader's application of behavioral modification is described by Manz and Sims (1989) using the A-B-C model. The A-B-C model consists of three parts, the antecedent (A), the behavior (B), and the consequence (C).

In brief, the antecedent represents the event that precedes behavior and establishes an occasion for the behavior. The antecedent provides clues about what is expected or what kind of behavior might be reinforced. An antecedent that is used by Superleaders is goal setting. The Superleader teaches subordinates how to set goals and follow goals. The Superleader teaches goal setting by modeling goal-setting behaviors and by guiding the subordinates goal setting until the employee learns self-goal-setting.

The behavior represents the subordinate's target behavior that a Superleader wants to change or modify. Therefore, to change or modify the subordinate's behavior the leader must identify and develop subordinate's capabilities. The last

part of the model, the consequence, represents the result of the subordinate's behavior. Both reward and punishment can serve as consequences. In this instance, the Superleader develops a reward system that emphasizes self-administered reward and deemphasizes external rewards. The Superleader applies these behavioral modification techniques using behavioral and cognitive strategies that stimulate individual and group self-management (Manz and Sims, 1989).

There are five behavioral strategies utilized by external leaders to develop self-management in employees. These behavioral strategies are: 1) encouraging self-observation, 2) encouraging self-goal-setting, 3) providing incentive modification, 4) encouraging employees to use rehearsal strategies, and 5) modeling self-leadership. The cognitive strategies utilized by external leaders to encourage self-management are focused on teaching subordinates to use constructive thinking patterns. This involves teaching employees to build natural rewards into tasks, focusing subordinates' thinking on natural rewards, and facilitating subordinates in establishing constructive thought patterns. The external leader helps employees to manage thought patterns by helping employees deal with beliefs, experiences, and controlling self-talk. Manz and Sims (1984, 1987, 1989) propose that the Superleadership Theory is supported by their research in self-managed organizations.

Manz and Sims' (1987) have conducted research in which the coordinators (i.e., external leaders) in self-managed organizations occupy organizational positions analogous to the foreman or general foreman. This research provides evidence that coordinators use more Superleader behaviors than team leaders within the work team. Using the Self-Management Leadership Questionnaire, Manz and Sims' (1987) study indicated that coordinators were perceived to be significantly higher on

encouraging self-management leadership behaviors such as encouraging self-reinforcement, self-criticism, self-goal-setting, self-observation/evaluation, self-expectation, and rehearsal than were the team leaders. Team leaders were much higher on facilitating equipment and supplies, training inexperienced employees, and working alongside employees than the coordinators.

According to Manz and Sims (1987) these results indicate that team leaders serve as an additional team member who facilitates the team's organization and job assignment coordination, while also ensuring materials are available. In contrast, the coordinator's fundamental responsibilities revolve around getting the work team to become self-managing. The coordinator employs self-management leader behaviors to ensure that result. Furthermore, the coordinator's self-management behaviors correlated with their effectiveness. Self-management behaviors such as encouraging group self-reinforcement, self-observation/evaluation, and rehearsal were correlated with team leader ratings of the coordinators' overall effectiveness (Manz and Sims, 1987).

Manz and Sims (1984) propose that there is very little agreement among different supervisory levels regarding the coordinator's role. In another study investigating the coordinator's role, Manz and Sims (1984) found that upper plant management view the coordinator's role as that of a facilitator, while coordinators placed more emphasis on task orientation. Upper plant management indicated that coordinators' primary responsibility was helping the work team manage themselves. Upper plant management believed coordinators should encourage group problem solving, setting performance goals, and communicating with the work team about performance. In contrast, the coordinators reported their facilitative role as less

important. The coordinators viewed their role with more emphasis on task orientation such as promoting corporate policies and effective work procedures, assuming financial responsibility, and scheduling production. The team leaders, on the other hand, reported that the coordinator's job was a balance between a facilitator and a resource to provide direction, guidance, and assistance. Research by Manz, Keating, and Donnellon (1990) further indicates that managers have trouble adapting to their new role because of initial suspicion, uncertainty, and resistance to change. In a separate study, managers in a self-managed organization reported feeling threatened by the change to self-management. The mangers reported three reasons why they felt threatened by self-management. These reasons were that managers believed the system would fail, managers' personal performance failings might be recognized, and that the consultants might be credited with the success of self-management. Manz , Keating, and Donnellon (1990) reported that before managers adapted to their new role, managers had to realize the benefits of self-management, wrestle with the new role, and learn new ways to interact with subordinates.

In summary, Manz and Sims (1989) utilize the Superleadership Theory to describe the role of managers and executives in self-managed organizations. Primarily, the Superleader is responsible for maintaining the within-group and boundary behaviors of the work team. In addition, the Superleader is responsible for developing self-leadership in subordinates. The Superleader develops self-leadership in subordinates by using behavioral modification to apply behavioral and cognitive strategies that develop self-management in subordinates.

Although Manz and Sims (1989) purport that the Superleadership Theory

applies to managers and executives responsible for leading others, their research provides support for the leadership behaviors exhibited by coordinators. These coordinators occupied supervisory positions analogous to the foreman in self-managed organizations. Thereby, Manz and Sims (1984, 1987, 1989) research fails to empirically identify or differentiate the roles of external leaders occupying management team member or work team member positions in organizations self-managed organizations. Furthermore, current leadership literature describing the role of management team leaders in self-managed organizations moves beyond the boundary maintenance functions suggested by Susman (1979) and the boundary and self-management behaviors identified by Manz and Sims (1989).

Current leadership literature suggests that executives who provide leadership in self-managed organizations also energize employees by introducing an expounding and guiding vision. Trist, Susman, and Grant (1977) provide merit to this argument by pointing out that the successful implementation of self-managed teams requires much more than creating new roles for foreman and workers. When comparing the safety and accident rate of autonomous and non-autonomous work teams, Trist, Susman, and Grant (1977) found that changes in values and redefinition of familiar situations were as critical as structural changes in achieving positive results from sections of the coal mines practicing autonomy. Their research demonstrates value changes must become pervasive throughout the entire management structure and the work force before organizational transformation can occur. These value changes were achieved when leaders discussed and used their vision to guide organizational achievements. This indicates that management team leaders also play a substantial role in implementing self-managed work teams.

As DePree (1989) proposes, organization momentum comes from a clear vision of what an organization ought to be, well thought-out strategies, and careful communication of this vision. As a result, everyone in the organization participates and becomes accountable for achieving organizational goals. This type of leadership exemplifies much more than a contractual relationship that covers the quid pro quo of working together. This type of leadership develops a covenantal relationship that rests on shared commitment to ideas, issues, values, and goals. The covenantal relationship enables corporations to be hospitable to new ideas, risk, and innovations. These leaders develop inspired employees with contagious enthusiasm who will challenge conventional wisdom in order to deliver quality services and products. This leadership requires a new mindset and different skills and values that will hold and build employee commitment (Stowell, 1988).

The literature suggests that the investigation of management team leadership in self-managed organizations must examine leadership theories that incorporate and move beyond boundary maintenance and self-management functions addressed by Manz and Sims (1989) and Susman (1979). Investigation of leadership in a self-managed organization must focus on leadership behaviors that instill employee commitment and self-management. This type of leadership drives employees to achieve organizational goals. One such leadership theory is the Transformational Leadership Theory described by Bass (1990).

According to Bass et al. (1990) transformational leaders articulate revolutionary new ideas about what may be possible by changing the contextual framework of followers. Followers' contextual framework changed by encouraging groups to value modern approaches. The transformational leader also influences a

perceptual change in followers by reversing what is the figure and what is the ground. For example, one leader may berate or criticize followers for making a mistake while the transformational leader might respond that great discoveries may occur as a consequence of serious or fortuitous failures. In this instance the transformational leader applies what Bennis (1985) refers to as the Spinozan principle.

According to Bennis (1985), Spinoza argued that one who responds to others' failure with anger are themselves slaves to passion and learn nothing. As Burns (1978) explains, the transforming leader looks for potential motives in followers and seeks to satisfy higher needs and then engages the full person of the follower. This results in a relationship of mutual stimulation and elevation that converts followers into leaders and perhaps leaders into moral agents.

The transforming leader as a moral agent is reflected in that leaders and followers have a relationship of mutual needs, aspiration, and values. The followers have adequate knowledge of alternative leaders and programs, with the capacity to choose among those alternatives. The transforming leader also takes responsibility for their commitments (Burns, 1978). As proposed by Bass (1985) transformational leadership introduces a new paradigm in leadership that expands beyond first order changes exemplified in transactional leadership, which views leadership only as an exchange process. With transformational leadership the performance of followers results in performance beyond expectations.

Burn's (1978) Transformational Leadership and Transactional Leadership Theories

Burns (1978) revolutionary work on political leadership provided the basis for investigating transformational leadership. Burns (1978) identified transformational and transactional leadership as two different types of political leadership. The transactional leadership approaches followers with the intent of exchanging one thing for another such as jobs for votes or subsidies for campaign contributions. Burns (1978) suggested these transactions comprise the bulk of leader and follower relationships.

For Burns (1978) transactional leadership is the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict. These transactions occur so that both leaders and followers can realize goals held independently or mutually. Consequently, modal values that deal with honoring qualities such as honesty, responsibility, fairness, and reciprocity are the chief monitors of transactional leadership. As Yukl (1989) explains, transactional leadership motivates followers by appealing to their self-interest.

In contrast, Burns (1978) believed the transformational leader is more concerned with end-values, such as liberty, justice, and equality. This is because the transformational leader raises followers to higher levels of morality by activating higher order needs. Based upon Maslow's Hierarchy of Needs, Burns (1978) proposed that the transformational leader raises followers' needs from lower level needs such as security and affiliation to higher order needs such as self-actualization.

In essence, followers become elevated from their "everyday selves" to their "better selves" (Yukl, 1989). The premise that transformational leadership is based upon is the belief that whatever the separate interests persons might hold, they are presently or potentially united in the pursuit of "higher" goals. As a result, leaders have a vital teaching role because leaders shape, alter, and elevate followers' motives, values and goals in pursuance of higher order goals.

However, transformational leadership is not reserved only for leaders. According to Burns (1978), transformational leadership is common and may be exhibited by anyone in any organizational position. This is because transformational leadership involves people influencing one another. This occurs in the day-to-day acts of ordinary people since peers, superiors, and subordinates influence each other. In addition, transformational leadership is common because acts of leadership occur in the day-to-day pursuits of collective goals. These collective goals are pursued through the mutual tapping of leaders' and followers' motive bases and in the achievement of intended change. As Yukl (1989) explains, transformational leadership is both a microlevel influence process between individuals and a macrolevel process of mobilizing power to change social systems and reform institutions. As a macrolevel process transformational leadership involves shaping, expressing, motivating, and mediating conflict among individuals. Although Burns (1978) suggested a bipolar relationship between transactional and transformational leadership, Bass (1985) presents a newer paradigm and applies the Transformational Leadership Theory to the organizational setting.

Bass' Transformational Leadership and Transactional Leadership Theories

Bass (1985) proposes that transformational leadership is augmented by transactional leadership, instead of the two being separate forms of leadership. Bass (1985) also conceives transactional and transformational leadership as having independent dimensions. Each dimension is further composed of several factors. The factors that characterize the transactional leader are contingent reward and management by exception. The factors that characterize the transformational leader are charisma, intellectual stimulation, and individual consideration.

Contingent reward is exhibited when the transactional leader enters into contractual exchange of rewards for effort, promises rewards for good performance, and then recognizes accomplishments. Bass (1985, 1990) proposes that the transactional leader uses two types of management by exception. The first is active management by exception. Active management by exception is evident when the leader watches and searches for deviations from rules and standards. Once the deviation from standards occurs the transactional leader takes corrective action. The second type of management by exception is passive management by exception. Passive management by exception is exhibited when the transactional leader intervenes only when procedures and standards for accomplishing the tasks are not being met (Bass, 1990). However, Bass (1990) argues that sole dependence on transactional leadership, especially passive management by exception, can encourage organizational mediocrity. Organizational mediocrity is encouraged because pure transactional leaders often use disciplinary threats to improve performance. This

technique is ineffective and often counterproductive. Furthermore, promising rewards or withholding penalties is suitable only when the leader has controls over rewards or penalties and if the employees are motivated by the rewards and penalties identified by the leader. According to Bass (1990) transactional leadership may be effective for developing lower level changes, but for secondary higher order changes transformational leadership is necessary. This is because the transformational leader recognizes followers' needs, but then surpasses the exchange process by elevating followers' needs and interests to higher levels of maturity.

Bass (1990) suggests that the transformational leader utilizes three primary behaviors to elevate followers' needs and interests to higher levels of maturity. These behaviors are charisma/inspiration, individualized consideration, and intellectual stimulation (Bass, 1990). The first two transformational leadership behaviors are charisma and inspiration. Charisma is utilized by the transformational leader to instill a sense of vision and to communicate high expectations to subordinates. Inspiration is a subfactor of charisma, but inspiration is utilized by the transformational leader to develop followers. According to Bass (1985), charismatic leaders are unique in their ability to establish emotional attachment and enthusiasm among their followers for themselves and their missions. This emotional attachment is developed because of followers' perceptions. As Conger and Kanungo (1988) explain, charismatic leadership is based upon followers' perceptions of their leaders' behavior. Charismatic leadership qualities are attributed to a leader when followers accept and submit to that leader's influence. Leaders are charismatic when the leader's vision represents an embodiment of the perspectives shared by followers Consequently, the leader's behavior impacts followers motivation and productivity.

Charismatic leaders' effects on followers' motivation and productivity has been investigated by Howell and Frost (1989). Their research demonstrated that participants working under a charismatic leader experienced a significantly higher adjustment to their leader and easier adjustment to new work settings. Moreover, charismatic leaders were able to increase followers' performance more than leaders demonstrating structuring and considerate leadership styles. Although charisma affects followers' performance, the charismatic transformational leader is different from a pure charismatic leader. This is because the transformational leader seeks to develop followers, in contrast to the false messiah who relies on emotional appeals to promote the belief that the leader is a celebrity, miracle worker, or mystic (Bass, 1985). The false messiah does not seek to develop followers.

As Bass and Avolio (1990) explain, the transformational leader is a socially oriented charismatic. The transformational leader gains greater levels of long-term performance by developing a higher level of autonomy, achievement, and performance in followers. This is done by changing followers' mission and vision, and most importantly, by ensuring that each follower develops the skills and abilities to achieve his/her highest level of potential. The transformational leader influences the development of followers.

As mentioned before, the transformational leader develops followers through inspirational leadership (Bass, 1985). Inspirational leadership behavior employs or adds nonintellectual, emotional qualities to the influence process. The transformational leader utilizes inspirational talks and emotional appeals to arouse motivation. Inspirational leadership is also used to influence subordinates to exert themselves beyond their own expectations and self-interests for the good of the

group. The transformational leader inspires followers by using symbols, images, persuasive language, and appealing visions. Other inspirational techniques identified by Bass (1985) when investigating the transformational leadership behaviors of ROTC officers were that transformational leaders instill pride in individuals, provide personal encouragement, and build morale through inspirational speeches.

In addition, the transformational leader relies on the Pygmalion effect to inspire followers by raising and arousing followers' confidence in their capabilities and expectations. As Peters and Waterman (1982) suggested, inspirational practices such as introducing followers to new projects, encouraging volunterism and involvement, and encouraging experimentation help to develop followers. These practices foster the belief that subordinates have worthwhile ideas and can contribute to achieving organizational goals. However, the extent to which charismatic leaders have a transforming or inspirational influence upon followers will depend on how their charisma combines with the other transformational factors of individual consideration and intellectual stimulation. The second characteristic exhibited by the transformational leader is individual consideration. The transformational leader exhibits individual consideration toward followers by adopting the role of teacher, mentor, or coach. The transformational leader demonstrates individual consideration by giving attention to employee differences. The transformational leader then coaches and advises subordinates according to subordinates' differences. Individualized consideration also represents an attempt to recognize and satisfy followers' current needs and expand and elevate followers' needs. This is done in order to maximize and develop followers full potential (Bass & Avolio, 1990).

In Bass' (1985) study of U.S. Army officers individual consideration was

exhibited frequently by officers receiving promotions. Subordinates reported these officers utilized individual consideration by giving special attention to neglected members, treating each subordinate as an individual, and expressing appreciation for well done work. However, individual consideration can also be used by transformational leaders to identify weakness constructively. The transformational leader helps subordinates overcome weaknesses by assigning special projects that will promote self-confidence, utilize the subordinates' special talents, and provide opportunities for learning (Bass, 1985).

The third transformational leadership behavior is intellectual stimulation (Bass, 1985). The intellectually stimulating leader encourages careful problem solving by showing subordinates new ways to solve and identify problems. The transformational leader encourages followers to question their own beliefs, assumptions, and values using this behavior. The leader also encourages followers to question the leader's values, assumptions, and methods. By using intellectual stimulation, the followers learn to tackle and solve problems on their own by being creative and innovative. The transformational leader demonstrates intellectual stimulation at the dyadic (one-to-one), group, and organizational levels. It is by promoting intellectual stimulation that followers begin to question the status quo, and as a result, followers create new methods to accomplish the organization's mission. Leaders become transforming and intellectually stimulating to the extent that they can comprehend and articulate the opportunities and threats facing their organization.

It is when the transformational leader establishes goals and objectives with the intent of developing followers into leaders that the leaders shifts from being purely

transactional. It is because of this developmental orientation the that transactional leader becomes transformational. For example, both the transactional and the transformational leader can help followers recognize their needs and clarify the followers' task requirements. However, the transformational leader surpasses the transactional leader by providing high performance standards and inspires followers to reach such standards. The transformational leader seeks to develop follower's capability to determine their own course of action (Bass, 1985). In essence, the transformational leader helps subordinates set and follow goals until the subordinates own actions become self-reinforcing. Each goal performance reward cycle becomes a developmental strategy for the transformational leader. According to Bass (1985) this is the relationship that suggests transformational leadership is augmented by transactional leadership.

Transformational leadership augments transactional leadership by influencing the achievement of leaders', followers', groups', and the organization's goals (Waldman, Bass, and Yammarion, 1989). Support for this augmentation effect was presented by Waldman, Bass, and Einstein (1985). In a study of the transactional and transformational leadership behaviors of U.S. Army officers, transformational leadership had an incremental effect over and above transactional leadership. The incremental increases ranged from 9 to 48 percent for two different samples. In each sample transformational leadership had a significant incremental effect over transactional leadership. As Bass (1985) explains, the transactional leader pursues a cost-benefit, economic exchange to meet subordinates' current material and psychic needs in return for "contracted" services. This gives the subordinates sufficient

confidence; if the subordinate exerts the necessary effort, the subordinate's desired outcomes will be achieved (Bass, 1985).

As Bass et al. (1990) argues, the success of a transformational leader is measured not only by outcomes such as unit performance and productivity, but also by how well the leader has developed followers into effective transformational leaders. The transformational leader develops followers who are more capable of leading themselves, taking responsibility for their own actions, and gaining rewards through self-reinforcement. Consequently, the followers become self-directing and self-reinforcing. Transformational leaders basically work themselves out of a job by elevating subordinates into becoming self-actualizers, self-regulators, and self-controllers. As a result, followers become like their leaders. This outcome can be thought of as the "falling dominoes effect."

The falling dominoes effect suggests that the pattern of leadership cascades from one level of management to another. This is because followers' behaviors and attitudes are associated with the behaviors and attitudes of their leaders (Bass et al., 1987). Support for the falling dominoes effect was provided by Bass et al. (1987). When comparing the relationship between the transactional and transformational leadership behaviors exhibited by supervisors and their administrators, Bass et al., (1987) confirmed significant correlations. Significant correlations were found between the transformational leadership behaviors of charisma, intellectual stimulation, and individualized consideration. However, mixed results were found for transactional behaviors of contingent reward and management by exception. Apparently, the amount of transactional leadership behaviors exhibited by administrators was different for supervisors. This research suggests that a consistent

theme underlying the falling dominoes effect is that the followers have a sense of taking charge. The followers feel empowered to exercise effective leadership with their own followers or colleagues (Bass et al., 1990). However, the organizational environment may affect the degree that transactional and transformational leadership emerges.

Bass (1985) suggests that transformational leadership is more likely to appear in organizations that deal with a turbulent marketplace. This is because in unpredictable situations leaders need to provide new solutions, stimulate rapid response, develop subordinates, and provide reasons for coping. On the other hand, transactional leadership is more likely to appear in organizations embedded in a stable marketplace. This is because the focus of stable organizations is on long-term agreements and contracts. Furthermore, departures from the norm can be easily monitored and controlled by contingent rewards.

In addition, Bass (1985) speculates that more transformational leadership behaviors would be exhibited by leaders in organic organizations because goals and structure are unclear, but warmth and trust are high. Whereas, more transactional leadership would appear in mechanistic organization where the goals and structures are clear and where members work under formal contracts. Naisbitt and Aburdene (1985) give credence to this speculation by noting that leaders such as Thomas Watson, IBM Corp; James Renier, Honeywell; and John Welch, General Electric utilize similar behaviors to guide self-managed organizations. These leaders recognize that creating an environment that fosters positive attitudes, commitment, and self-management are crucial to guiding companies in a competitive and ever-changing marketplace.

In summary, both transactional and transformational leadership involve sensing followers' felt needs, but it is the transformational leader who raises consciousness about higher considerations (Bass et al., 1990). The transformational leader may use transactional leadership behaviors to guide employee behavior. However, when the leader seeks to develop employees, leaders become transformational in nature. The transformational leader uses charisma/inspiration, individual consideration, and intellectual stimulation to develop employees. As a result, followers become self-directed and they themselves are transformed into leaders. Furthermore, the Transformational Leadership Theory has application in self-managed organizations because organizational goals are often unclear, but trust and employee commitment are high. One method for examining transformational leadership in self-managed organizations is the case study methodology.

Case Study Methodology

A case study is a multifaceted investigation of a single phenomenon (Feagin et al., 1991). Guba and Lincoln (1981) explain that case studies are not to be interpreted as accounts of the whole because they are, in fact, only a part of a slice of life. What makes an inquiry a case study is particularistic property. Specifically, it is the decision to focus inquiry around an instance or a particular phenomenon (Merriam, 1988). The phenomenon studied in case studies can vary in nature. What is identified as a case is based upon the researcher's presupposition regarding the proper unit of analysis. The case study investigates the characteristics of or a configuration of a particular unit of analysis. This unit of analysis can be an

organization (Feagin et al., 1991), an individual, an event, a concept, a program, (Merriam, 1988) a community, or a social unit (Sjoberg et al., 1991). A principal argument for case study research is that case studies provide a way of studying human events and actions in their natural surroundings. Through case study research a greater empirical and theoretical understanding of a social complex can be gained (Feagin et al., 1991).

Types of Case Studies

Case studies can be descriptive, evaluative, or interpretive (Merriam, 1988). Descriptive case studies present specific details about a phenomenon under study. They are entirely descriptive and are not motivated by a desire to formulate a general hypothesis. The aim of descriptive research is to describe specific events or phenomena. The purpose of most descriptive research is limited to characterizing something as it is (Merriam, 1988). Descriptive research normally selects variables for investigation from a theory or conceptual model before the study. The nature and frequency of relationships among variables are then identified in descriptive studies. Descriptive case studies are useful because they provide information about phenomena for which little information and research exist. The information obtained from a descriptive study can then be used to develop a data base for future comparison and theory building (Moore, 1986; Merriam, 1988). Understanding and interpreting the findings of a case in light of an established theory serves to test the theory. These studies allow the theory to become more credible. A case study that tests a theory begins with reference to a theory from which deductions are made.

The investigator then examines the theory in reference to the occurrence of a specific event or action (Merriam, 1988). Empirical evidence then confirms or refutes the theory. The importance of this type of case study lies in the validation or invalidation of a theory (Merriam, 1988).

Evaluative case studies are done to produce a final judgement. They may involve description, explanations, but judgement is the final outcome of evaluative case studies. An evaluative case study may also seek to explain the causal links in real-life context or interventions. Interventions may also be explored using evaluative case studies (Merriam, 1988, Yin, 1984).

Interpretive case studies are used to develop conceptual categories, to illustrate support, or challenge theoretical assumptions which are held prior to the data gathering. An interpretive case study gathers as much information about the problem as possible to interpret or theorize about the phenomenon. The level of abstraction and conceptualization in interpretive case studies ranges from suggesting relationships to constructing theory. Merriam (1988) suggests that interpretive case studies are qualitative.

Qualitative case studies focus on gaining insight, making discovery, and generating theory. Qualitative case studies have little or no theory to aid in designing the study, so there is little or no manipulation of variables and no predetermined outcomes. Merriam's (1988) description of qualitative case studies is based upon Glaser's and Strauss' (1967) grounded theory concept. According to Glaser's and Strauss' (1967) grounded theory concept, a theory or theories emerge out of and are derived from data. These theories are supported and illustrated by characteristic examples of data.

In contrast to Merriam (1988), Glaser and Strauss (1967) stress that qualitative procedures are not necessarily inductive and grounded in exploration and, while quantitative procedures are always deductive and ungrounded confirmation. Glaser and Strauss (1967) believe that both qualitative and quantitative forms of data are useful for both verification and generation of theory. Glaser and Strauss (1967) point out that although there is great historical debate over the purposes of methodology, there is no fundamental clash between the purposes and capacities of qualitative and quantitative methods of data collection. The clash really concerns the primacy of emphasis on verification or generation of theory. Glaser and Strauss (1967) propose that the primacy of emphasis should only depend upon the circumstances of research, on the interest and training of the researcher, and on the information needed for the study. This proposition is supported by Reichardt and Cook (1979).

Reichardt and Cook (1979) do not agree that qualitative methods must be used to discover questions, while quantitative procedures are used only to answer them. Reichardt and Cook (1979) argue is that the debate over quantitative and qualitative research methods is not merely a disagreement about the relative advantages and disadvantages of these methods, but it is a fundamental clash between methodological paradigms. These methodological paradigms represent how one views the world and present the world in profoundly differing ways and are naturally in conflict with each other. Both qualitative and quantitative data are both interpretations of experience. The qualitative paradigm suggests experience is mediated through words while the quantitative paradigm argues a situation is mediated through numbers (Merriam, 1988).

Because of these differences, the quantitative paradigm is said to have an obtrusive, positivistic, and hypothetico-deductive view. Quantitative studies place an emphasis on measuring the extent to which an event or behavior exists and how it is distributed rather than describing the nature of a belief, attitude, event, or behavior (Merriam, 1988). In contrast, the qualitative paradigm supposedly subscribes to the naturalistic, phenomenological, inductive, holistic, subjective, and process oriented world view. The researcher does not know whom to interview, what to ask, or where to look next for data because the qualitative paradigm is emergent. Nor does the researcher know what will be discovered, what or whom to concentrate on, or what the final analysis will be like while using the qualitative paradigm (Reichardt and Cook, 1979; Merriam, 1988).

Each of these contrasting paradigms is often supported with what Reichardt and Cook (1979, pg. 9) call a "shopping list" of attributes. These attributes are proposed to distinguish the qualitative and quantitative world views. These paradigmatic characterizations are based upon two assumptions. The first assumption is that the research method-type is irrevocably linked to a paradigm; therefore, an allegiance to a paradigm provides the appropriate and sole means of choosing between method types for research. The second assumption is that qualitative and quantitative paradigms are rigid and fixed and the choice between them is assumed to be the only choice available for researchers. Reichardt and Cook (1991) argue that actually both of these assumptions are false. The qualitative versus quantitative paradigms are not cast in stone. It is Reichardt's and Cook's (1979) view that the paradigmatic perspective which promotes incompatibility between research method types is in error. In short, researchers should not have to choose research

method types based upon these paradigms. The research situation is the critical factor in selecting research methods. This is because research is conducted under many different circumstances. These circumstances may require modification in traditional practice. Therefore, linking paradigms and research methods it is not necessary or even wise. Reichardt and Cook (1979) suggest that researchers should mix and match the attributes from the two paradigms to achieve the combination which is most appropriate for the research questions, setting at hand, and situation. This may require using a combination of methods. Using a combination of methods can help correct the biases that are present in each method through triangulation (Reichardt and Cook, 1979). Triangulation involves examining the same phenomenon or dimensions of the research problem using two or more methods (Denzin, 1970). This method of triangulation is the between or across method. The rationale for this strategy is that the flaws of one method will be neutralized by the strengths of another method (Denzin, 1970).

Triangulation of methods also increases the generalizability of a study (Merriam, 1988; Goetz and LeCompte, 1984). Traditionally the generalizability of a study is linked to a study's external validity. External validity suggests that the results of the study are generalizable, or applicable, to groups and environments outside the study (Gay, 1981). However, Feagin et al., (1991) proposes that case study research is much different than experimental research. Therefore, a distinction should be made about what is being generalized in case study research. It is the phenomenon being studied which is generalized to the population and not a population of people being generalized to groups or environments outside the research setting in case study research (Feagin et al., 1991). Reichardt and Cook (1979) also point out that

the fact a study is limited to a single case does not make the study ungeneralizable. Generalizability depends on more than sample size. Usually generalization is far more informal and, therefore, much more inductive and potentially fallible. Generalizations are potentially fallible because researchers are usually generalizing to populations which have not been sampled. Therefore, these generalizations are never fully justified logically. It is only in cases where survey sampling is used with random selection that generalization from sample data to a population is based upon statistical reasoning (Reichardt and Cook, 1979).

Goetz and LeCompte (1984) suggest that in application case studies should aim for comparability and translatability of generated finding, rather than for outright transference to groups not investigated. Translatability assumes that the research methods, analytic categories, and characteristics of phenomena are identified. Identifying research methods, analytic categories, and characteristics provides a "rich description" of the case. This "rich description" allows comparisons to be conducted confidently and used meaningfully across different groups and disciplines. Comparability involves using standard and nonidiosyncratic terminology and analytic frames for data collection and description. Comparability is also established by clearly delineating the groups or constructs studied in a manner that they can serve as a basis for comparison with other groups (Goetz and LeCompte, 1984). Describing the case which is being studied enables others to judge whether or not the conclusions drawn about the phenomenon studied are a true gauge of the population. This description of the case allows theoretical generalizations to be made from case study research (Feagin et al., 1991). Another way of viewing generalizability in case study research is reader or user generalizability. According to Wilson (1979), reader

or user generalizability requires readers to determine the extent to which research findings apply to their own situations. The description of the population, situation, and research design aids the reader in establishing the generalizability of a case study. The description will further reflect the design decisions that were made by the researcher.

Case Study Design

The research design represents a plan of assembling, organizing, and integrating information. When designing a case study, the researcher should consider the following information: 1) the nature of the research questions, 2) the amount of control a researcher has over the phenomenon, 3) the desired end product, and 4) whether or not a bounded system can be identified as the focus of investigation (Merriam, 1988).

The first step in designing a case study is determining the problem to be investigated. The problem can be generated or deducted from theory or experience (Gay, 1981). The research problem may be a matter involving doubt, uncertainty, or difficulty (Merriam, 1988). The problem then serves as a basis for the research questions. The research questions represent the topics of interest. Research questions vary in scope, abstractness, and precision. The specificity of the research questions will depend upon the level of theory which exists to guide the study and upon the purpose of the study.

Goetz and LeCompte (1984) explain that theories may guide the development of research problems and questions in one of three ways. First, a theory may serve

as a theoretical model to design the study and to interpret the findings. Second, a theory may be used to explain some aspect of the phenomenon chosen for examination. The theory may then be reformulated based upon the research findings. Third, an established theory can be used to generate research questions and problems. The research questions then establish the parameters for the study (Goetz and Lecompte, 1984).

Once the problems and questions have been identified Spirer, (1980) suggests the next step in designing a case study is establishing the boundaries for the study. The boundaries for the study are determined by the information needs of the study. They may be set around geographical areas, themes, or theoretical and substantive interests (Spirer, 1980). The bounded system represents the case (Merriam, 1988) or the specific phenomenon or population under investigation (Goetz and LeCompte, 1984). The case or population represents the theoretical universe (Sjoberg et al., 1991). The bounded system or case may be selected because it is an instance of concern, issue, or hypothesis (Merriam, 1988). The bounded system may be studied in one of three ways. First, the bounded system may be selected for the study in its entirety. Second, a subset of the bounded system may be selected for examination. Third, a sample from the bounded system may be drawn for analysis. Sampling is usually undertaken because studying an entire population is too unwieldy, too expensive, time consuming, or simply unnecessary (Goetz and LeCompte, 1984).

Samples may be drawn in a variety of ways. The two basic types of sampling are probability and nonprobability sampling. Both probability and nonprobability sampling methods are used in case study research (Goetz and LeCompte, 1984). Probability sampling specifies for each element of the population the probability that

each element has of being included in the sample. The most common form of probability sampling is random sampling. Random sampling allows the investigator to generalize results of the study from the sample to the population from which it was drawn. With nonprobability sampling there is no way to estimate the probability that each element has of being included in the sample. Nor is there any way to ensure that every element has some chance of being selected by using nonprobability sampling (Merriam, 1988).

Goetz and LeCompte (1984) point out that statistical sampling may be inappropriate in case study research under any of seven circumstances: a) when the characteristics of the larger population have not yet been identified, b) when the group possess no naturally occurring boundaries, c) when generalizability is not a salient objective, d) when populations are composed of discrete sets and characteristics may be distributed unevenly among them, e) when only one or a few subsets of characteristics of a population are relevant to the research problem, f) when some members of a subset are not attached to the population from which the sampling is intended, or g) when researchers have no access to the whole population from which the sample is drawn. In addition, statistical sampling may even be irrelevant where initial description of a singular phenomenon is desired or where the subject of an investigation is an entire population. This is because the findings from these studies may later be used to compare and contrast with other groups. Also, selecting some members of a group and not others for a study may be obtrusive or offensive (Goetz and LeCompte, 1984). When these circumstances arise a census of the population is appropriate.

A census attempts to describe the features of an entire population of people

(Feagin et al., 1991). A census is usually conducted when a population is relatively small and readily accessible (Gay, 1981). A census of the population possesses special advantages. These advantages include: a) data from small units can be obtained, b) public acceptance is easier to secure for completed data, c) compliance and response may be better secured, and d) bias of coverage may be easier to check and reduce (Kish, 1965). Kish (1965) also points out that theoretically a 100 percent census can be regarded as a sample for two reasons. First, the population is still subject to errors of observation, so the population value of a census is only one of many that could have resulted from essentially the same operations. Second, the particular population is arbitrarily specified from a universe of interest. This universe of interest is usually greater as to time, space, and perhaps other dimensions (Kish, 1965). However, the selection of sample design should be oriented to the research objectives, tailored to the survey design, and fitted to the research conditions. These decisions are based upon research questions and relate to the data collection methods selected (Kish, 1965).

The data collection methods used in case study research are based upon the purpose of the study and research questions. Choosing methods for data collection is a process of considering available alternatives (Spirer, 1980). The primary criterion for selecting the data collection procedures is whether or not the data collection procedures allow the researcher to effectively address the research goals and questions (Goetz and LeCompte, 1984). The case study design can accommodate a variety of disciplinary perspectives, as well as philosophical perspectives upon the nature of research itself. Case study research does not claim any particular methods for data collection or data analysis. Case studies commonly

use a combination of data collection methods to gather information. Common data collection strategies in the social science include interviews, questionnaires, and documents and products.

Data Collection Strategies

Questionnaires

A questionnaire is ordinarily used to collect data from all members of a population or from a sample. The current status of the population with respect to one or more variables is usually assessed through the questionnaire. These variables may include a variety of types of information such as attitudes, opinions, characteristics, and demographic information (Gay, 1981). Questionnaire inventories attempt to evaluate one or more aspects of an individual's behavior. Questionnaire inventories have been used in educational research to obtain trait descriptions of defined groups and to examine the interrelationships of certain variables (Key, 1991). Quantitative data from questionnaires can aid in case study research in a number of ways. First, these data can be used in support of generalizations made from a single or limited observation. Second, these data can verify data obtained from other methods which are used in conjunction with questionnaires (Spirer, 1980; Merriam, 1988).

Planning a Questionnaire

Long (1986) suggests that before a researcher selects a questionnaire as a data collection technique the researcher should determine if the questionnaire or survey is necessary, appropriate, affordable, and feasible. These determinations can be made by exploring five considerations. First, a researcher may determine if a survey is necessary and appropriate by asking the following questions: 1) What data are needed? 2) Are these data available elsewhere? 3) When are the data needed? In many instances, data may be already available or the data may be obtained in a more efficient manner. Second, it is important to consider how the data will be used. Survey data may be used to describe the situation, gain insight, or serve as a preliminary source of data. Third, respondent knowledge and participation should be considered. A researcher should feel confident that respondents both have the knowledge to answer the questions accurately and are reliable sources of information. In addition, Gay (1981) suggests that a researcher should establish whether respondents are willing to share their knowledge regarding the subject of the study. The fourth consideration to be made involves the data analysis. Data analysis should be planned prior to the study. When planning data analysis, the researcher should consider not only the techniques but also computer access and foreseeable time constraints. Lastly, the cost of the survey and administration must be considered. Once the decision to use a questionnaire as a data collection technique is made, Dillman (1978) explains that planning, timing, supervision, and control are the fundamental requirements for using questionnaires successfully. Addressing these questions serves as the basis for the administrative plan. There are four steps in

developing an administrative plan: 1) identifying all tasks to be accomplished, 2) determining how each task is dependent on others, 3) determining in what order the tasks must be performed, and 4) deciding how each task is going to be accomplished.

In case study research questionnaires are often administered on-site and in person. Administering a questionnaire in person has some advantages. Administering a questionnaire in person provides the researcher an opportunity to establish rapport with respondents, explain the purpose of the study, and clarify individual items (Long, 1986). Questionnaires are also an efficient means of data collection. They require less time, less expense, and permit the collection of data from a larger sample (Gay, 1981). Long (1986) suggests questionnaires also increase the accuracy of the responses because all respondents receive the exact same questions in printed form. Giving each respondent the same question helps to reduce the bias that face-to-face interviews are susceptible to because the questions are not posed using different wording.

Key (1991) has identified the characteristics of a good questionnaire. Key (1991) suggests that a good questionnaire should deal with a significant topic. A good questionnaire is also as short as possible with an attractive appearance. The directions on a good questionnaire are clear and complete, while the questions are objective with no leading suggestions as to the response desired.

Questionnaire Administration

When planning to administer a questionnaire on-site, it is important to get approval for the project. Once approval has been granted, the purpose of the study

should be explained to the participants in a courteous manner, using a cover letter or solicitation letter. This explanation should also address the participants' anonymity (Key, 1991). The questionnaire should then be administered using standardized procedures. These standardized procedures should ensure that each question is administered in the same way, using the same directions, and in similar environmental conditions (Gay, 1991). If multiple researchers are used they should receive training to ensure standardized administration.

Once the questionnaire is administered, the researcher may analyze the data. These data can then be compared with data collected using other data collection methods. One data collection method often used in conjunction with questionnaires is the interview method.

Focus Group Interviews

Interviews are used to uncover many diverse and relevant responses. Interviews are normally conducted with individuals who possess special knowledge about a particular topic or subject. The topic or subject may be conducted on a one-on-one basis with key informants or with groups of individuals. When group interviews are conducted they are often called focus group interviews (Merton et al., 1990).

Focus group interviews are useful either as a self-contained data collection method or as a supplement to both quantitative and other qualitative methods. A danger occurs when the assumption is made that focus groups must be limited to preliminary data collection and exploratory purposes (Morgan, 1988). This is

because focus groups may be used to gather a wide variety of research data. Focus groups are useful for generating hypotheses, comparing responses from different groups, or examining research questions (Morgan, 1988). Stewart and Shamdasani (1990) suggest that focus group data may also be used as a confirmatory tool. The simplest test of whether focus groups are appropriate for a research project is to ask how actively and easily participants would discuss the topic of interest (Morgan, 1988). If participants will discuss the topic openly, the focus group method offers many advantages.

One advantage of group interviews is that interaction between participants replaces the interaction of the interviewee and interviewer which occurs in one-on-one interviewing. Participant interaction leads to a greater emphasis on participants' points of view. Another strength of the focus group lies in its ability to address a topic in a holistic manner. The holistic manner of focus group is evident by the way focus groups can bring forth material that would not come out in an individual interview or participants' own causal conversations. This is because the researcher can interact directly with the respondents. Through this interaction the researcher can clarify responses and use follow-up questions. Because of these interactions, the researcher may obtain a large amount of rich data in the respondents' own words (Morgan, 1988). In addition, the synergistic effect of the group setting results in the production of data or ideas that might not have been uncovered in an individual interview. In the focus group, respondents have the opportunity to react to and build upon the other group members' responses (Stewart and Shamdasani, 1990). However, since the material shared during the focus group is also shared with the other group participants there are certain ethical considerations which are unique to

focus groups. These ethical considerations affect the issues that can be explored during the focus group. It is important to limit focus group discussions to issues that the participants would be comfortable in discussing in public (Morgan, 1988). Once the decision to use focus group interviews is made, the researcher begins to plan the focus groups. The first decision to be made in planning a focus group discussion is determining the number and size of the focus groups.

Number and Size of Focus Groups

There is no general rule concerning the optimal number of focus groups. When the population of interest is relatively homogeneous in terms of background and role perspectives and the research questions are relatively simple, a single group may be sufficient. However, the application of most focus groups involve more than one, but seldom more than three or four groups (Stewart and Shamdasani, 1990). For most research only a relatively narrow range of groups is practical. Morgan (1988) explains that the number of focus groups held for a research project is primarily a dimension of variability among the different subgroups of the populations. The variability of the groups is reflected in the research goals. Research that is aimed at getting someone's perspective will probably take only a few groups.

Because it is inappropriate to generalize far beyond the focus group's members, the identification of a representative sample from the population is more crucial in large scale survey research than it is for focus groups (Stewart and Shamdasani, 1990). In selecting focus group participants the issue is sample bias rather than generalizability (Morgan, 1988). Morgan (1988) points out that twenty

or forty participants will never be representative of a whole population. The typical model used in selecting focus group samples and the size of the focus groups is to select theoretically chosen subgroups from the total population. A researcher should concentrate on those population segments that are going to provide the most meaningful information (Morgan, 1988). Once the actual theoretical subgroups have been identified, a sample may be selected using standard sampling techniques such as purposive sampling, stratified random sampling or cluster sampling. Using a standard sampling technique will help extinguish the possible effect of a researcher's personal bias. A researcher's personal bias is evident when the researcher selects samples that might welcome and reinforce the researcher's own point of view or the unconscious need to please clients (Stewart and Shamdasani, 1990; Morgan, 1988).

When determining the size of the groups, there are both practical and substantive considerations. On the practical side there are some economies of scale in running larger groups. Three participants (Rossett, 1987) is usually the smallest number used for a focus group, while 12 appears to be the upper boundary (Morgan, 1988). The usual conclusion is to use moderate sized groups consisting of between six and ten participants. The substantive consideration involves considering the purpose of the research. When the researcher desires a clear sense of each participants' reaction to a topic, smaller groups are more likely to satisfy this goal (Morgan, 1988). The number of participants and the goals of the research will further influence the structure of the focus group interview.

Focus Group Structure

There are three basic structures that may be selected for the focus group discussion. These structures are the standardized structured interview, the semistructured interview or nonscheduled interview, or the unstructured interview (Merriam, 1988; Goetz and LeCompte, 1984). In a standardized structured interview the questions and the order in which the questions are asked are determined prior to the interview. During the course of a standardized structured interview the researcher does not vary from the standardized application of questions. All participants are asked the same questions in the same order using the same standardized probes. The standardized structured interview is basically an oral administration of a questionnaire (Goetz and LeCompte, 1984). Structured interviews are used when hypotheses are being tested or when quantification of results is important (Merriam, 1988).

In a semistructured interview (Merriam, 1988) or nonscheduled standardized interview (Goetz and LeCompte, 1984) the same questions and probes are used for all respondents, but the order in which the questions are posed varies according to the situation. The topics are explored in whatever order or context they happen to arise. In this instance, the interview is guided by a list of questions or issues to be explored, but the format allows the researcher to respond to the situation at hand. In an unstructured interview general questions are used, but the topics are informally discussed during the interview. Totally unstructured interviews are particularly useful when the researcher does not know enough about a phenomenon to ask relevant questions (Merriam, 1988). Denzin (1978) explains that the standardized structure

of the interview should meet four assumptions: 1) the respondents must have a common vocabulary, 2) the questions that are devised are equally meaningful to every respondent, 3) the context in which the questions are asked has a common meaning, and 4) these assumptions can be examined using a pilot investigation. Regardless of the structure selected for the focus group, the primary goal of the focus group is to construct an interview that covers the topic (Morgan, 1988).

Focus Group Questions

Since most focus groups are conducted in a two-hour period, usually four or five topics with preplanned probes are all that can be covered in the discussion. To ensure that all the topics are covered in the discussion, it is useful to organize the discussion topics into an interview guide. The moderator can then follow this interview guide in more or less the same order from group to group. The interview guide can be developed by preparing a list of questions. These questions may then be organized into a logical order (Morgan, 1988). The questions asked in a focus group discussion play an important role not only in getting answers to research problems, but also in setting the tone or climate for the interaction. When designing the interview guide, there are two general principles that should be observed. The first principle suggests that the questions should be ordered from more general to more specific. The second principle suggests the questions should be ordered by their relative importance (Stewart and Shamdasani, 1990). These questions should also be phrased in the simplest language that the participants will understand.

Basically all questions fall into one of two categories (Stewart and

Shamdasani, 1990). These categories are open-ended questions and closed-ended questions. Both open-ended and closed-ended questions are appropriate for focus group discussions. Open-ended questions tend to be broad and allow the participants a great deal of freedom in the amount of information they share. Open-ended questions are usually sequenced using the funnel approach to questioning. Using the funnel approach, the broad questions are followed by gradually more narrow questions. The funnel approach is generally most appropriate for topics that are considered fairly sensitive or when the participants are quite knowledgeable about the subject (Stewart and Shamdasani, 1990). Closed-ended questions are more restrictive and limit the answer options available. Closed-ended questions are used as the basis for further discussion rather than for closing discussion on topics in focus group discussions. The inverted funnel sequence is normally used with closed-ended questions. Using the inverted funnel sequence the closed questions are followed by open-ended questions. The objective using the inverted funnel is to motivate participants to talk more freely about the topic or subject of discussion (Stewart and Shamdasani, 1990). The structure and sequence of the questions will reflect the level of moderator involvement used to lead the focus group.

Moderator Involvement

Morgan (1988) explains that the level of moderator involvement should be determined before the focus groups occur. Low levels of moderator involvement are important for goals that emphasize exploratory research. This is because with exploratory research very little is known about the topic. Higher levels of moderator

involvement are more appropriate when there is a strong externally generated agenda or when exploring specific research questions. Using a higher level of moderator involvement ensures that the desired set of topics is covered. The following are the most frequent reasons given for using a higher level of moderator involvement: 1) to get irrelevant discussion back on the track, 2) to restart discussion when the group begins to stop discussion, and 3) to ensure that groupthink does not stifle opinions that differ from those of the majority (Morgan, 1988). The level of involvement of the focus group sets the stage for the focus group session.

Conducting the Focus Group

The focus group interview usually begins with an introduction of the participants and topic. The focus group participants are usually asked to introduce themselves by making a statement of an autobiographical nature. This serves as a icebreaker by getting everyone to speak at least once and by providing everyone some basic information about each other (Morgan, 1988). During this time the moderator should attempt to create an atmosphere of trust and openness. Trust may be encouraged by reassuring the participants of their confidentiality and by presenting a few ground rules for the discussion. These group rules may emphasize the following: 1) only one person should speak at a time, 2) there should be no side conversation among neighbors, and 3) everyone is encouraged to participate (Morgan, 1988). After the introduction is finished the moderator generally introduces the topic of discussion.

How the moderator moves from the opening to the body of the discussion

will depend in large part upon the level of moderator involvement selected. With a low level of moderator involvement, there will be a presentation of an initial topic followed by a relatively unstructured group discussion. When a higher amount of moderator involvement is used, the topics are explored individually in a fairly consistent order (Morgan, 1988). During the discussion, participants should be encouraged to speak. This can be accomplished by asking participants direct and probing questions. Participant nonverbal cues, such as stopping in mid-sentence or making facial expressions, may indicate further probing is needed in order to get complete responses (Stewart and Shamdasani, 1990).

Stewart and Shamdasani (1990) explain that probes can take a variety of forms. Probes may involve continued eye contact, a simple "uh huh", or telling another participant who is getting ready to speak that another participant hasn't quite finished his/her thoughts. Another type of probe involves reflecting the participant's thoughts back to him or her. For example, the moderator may say, "What I heard you say was....". The moderator may also ask the participant for more information by saying, "Tell me more," or "I don't quite understand." Other probes may be directed at the group at large such as asking if anyone else has an example of the subject under discussion. Probes are a crucial part of extracting information in focus groups. Good probes ask for more information without suggesting specific answers or making respondents defensive (Stewart and Shamdasani, 1990). Using probes will help ensure the focus group is successful.

Merton et al. (1956) present four broad criteria for effective focus groups: 1) The focus group should cover a maximum range of relevant topics. 2) It should provide data that are as specific as possible. 3) It should foster interaction that

explores the participant's feelings in some depth. 4) It should take into account the personal context that participants use in generating their responses to the topic. The extent to which participants feel comfortable about communicating their ideas, views, and opinions will affect the data obtained from the focus group.

The variables that may influence participant comfort zones have been categorized into intrapersonal, interpersonal, and environmental (Stewart and Shamdasani, 1990). Intrapersonal or individual variables may include demographic, physical, and personality characteristics. These intrapersonal variables predispose individuals to certain modes of behavior. These behavioral dispositions are used by other group members to determine their reaction or responses to other individuals. However, the influence of these factors upon group dynamics is difficult to determine. In general, interaction is easier when individuals with similar socioeconomic and demographic backgrounds make up the group. To help alleviate the influence of intrapersonal variables, the moderator should quickly assess the individual characteristics and try to make adjustments accordingly. This may involve using a more or less structured approach to maximize the interactions of the group.

In a group situation, interpersonal interaction is affected by group participant expectations about how other participants will act or behave. Beliefs about demographic characteristics, personality traits, physical characteristics, and past experience influence participant expectations. Focus group moderators have important roles in establishing the expectations of their groups. Moderators should take a firm hand to assure that group member expectations are consistent with the purpose of the research. This can be done by occasionally reassuring the group that it is achieving the purpose of the discussion. One technique that can be used to

reassure participants is to comment occasionally about the quality of the discussion. Moderators can also spend time early in the group discussion seeking common experiences among group members. Group interactions may also be influenced by the environment.

Environmental influences such as territorality, personal space, and spatial arrangements can shape the interaction of the group. The shape and size of the room, lighting, ventilation, and furniture are some of the more obvious environmental factors that can influence the group. It is important that the group members are spaced a comfortable distance apart. Seating arrangements should allow all group members to easily see one another and the moderator. These physical arrangements will help ease territorial and personal space influences (Stewart and Shamdasani, 1990). The most basic element of the site is a table for the participants with comfortable chairs. In addition, the focus group site must balance the needs of the participants and the needs of the researcher (Morgan, 1988).

Once all of the interview questions have been explored, the focus group discussion is generally closed. To close a session using low moderator involvement the moderator may only need to return to the table. The moderator's return to the table will indicate the session should come to a close. With high moderator involvement, a final summary statement is usually given by the moderator (Morgan, 1988). After the focus groups have been conducted, the data are analyzed.

Focus Group Data Analysis

Kruger (1988) explains that the first step in analyzing focus group data is to write down summary comments as soon after the focus group interview as possible. If an assistant has been used to take notes during the focus group interview a debriefing session is normally held. The purpose of this debriefing session is to arrive a short summary that describes the findings and interpretation of the key issues in the study which is mutually agreeable to both the researcher and assistant. If tape recording have been used the data is then transcribed for further analysis (Kruger, 1988).

There are two basic approaches for analyzing focus group data. The first approach is to conduct an ethnographic summary. The second approach is to carry out a systematic coding technique such as content analysis (Morgan, 1988). The principle difference between these two methods is that the ethnographic approach relies more upon direct quotations from the group discussion. In contrast, content analysis typically produces numerical descriptions of data. These are not, however, conflicting means of analysis and there is generally an additional strength in combining the two methods. The ethnographic approach may benefit from a systematic tallying of one or two key topics, while a basic numerative summary is improved by including quotes that demonstrate the points being made (Morgan, 1988).

With either mode of analysis it must be recognized that the group is the fundamental unit of analysis. Therefore, the analysis will begin with a group by group analysis (Morgan, 1988). If the focus group has been conducted from a

moderator guide, the topics in the guide will provide a practical structure for organizing the analysis. This will allow each group's responses to be analyzed topic by topic and across various groups. The fact that the guide has organized each group's discussion around the same set of topics in the same order is a strong point of focus groups. The order of the focus group reduces the complexity of comparisons across groups.

The complexity of comparing discussion across several groups has led to several techniques for facilitating group comparisons. One technique is the scissor and sort. The basic idea of the scissor and sort technique is that relevant passages in each transcript are marked and copied. Then the transcripts are cut apart and sorted (Stewart and Shamdasani, 1990). A more recently developed alternative is the use of multiple shades of colored highlighter (Morgan, 1988). Stewart and Shamdasani (1990) suggest that a researcher should go through transcripts and identify those sections that are relevant to the research questions first. The material should then be coded and cut apart. All relevant topics may then be placed together and analyzed. Frequency counts can then be used to identify trends and patterns in the data. Data by group and across groups can then be summarized. Kruger (1988) suggests that the researcher should give consideration to five factors when analyzing focus group data. The factors include: 1. the words, 2. the context, 3. the internal consistency, 4. specificity of responses, and 5. the purpose of the report. Kruger (1988) suggests that the researcher should think about both the actual words used by the participants and the meaning of those words. The words and phrases can be used to determine the degree of similarity between responses. This can be done by making a frequency count of commonly used words and similar concepts, then

arranging the responses according to categories. The context of responses should be examined by finding the triggering stimulus such as a comment from the moderator or a comment from another participant. The tone and intensity of the oral comment may also be important during analysis. The researcher may review the tone and intensity of the comment by listening to audio tapes verify interpretation. The internal consistency of the focus group responses can be examining if the participants changed or reversed their position after interaction with others. Internal consistency is important if opinion shifts are relevant to the purpose of the study. Kruger (1988) suggests that the specificity of responses should be considered. Responses that are specific and based on personal experience should be given greater attention that responses that are vague and impersonal. Specific responses are answered in the first person as opposed to hypothetical third-person answers. The purpose or objective of the report should be reflected in the analysis. The type and scope to the final report will guide the analysis process. Analytical reports should highlight the key trends or findings and include selected comments as examples (Kruger, 1988). In addition, the actual reporting of the data may be structured around the structure of the interview guide (Stewart and Shamdasani, 1990). These data may then be compared with data collected through other methods. One such method that you may compare focus group and questionnaire data document analysis.

Document Analysis

There is a wide range of written and physical materials that are often examined in case study research. Public or archival records, physical trace materials,

researcher prepared documents, and personal and written documents are the four major types of documents used in case study research (Merriam, 1988; Goetz and LeCompte, 1984). Public or archival records include records such as census data, birth and death records, and government documents. Physical trace materials represent the changes in the physical environment caused by people. Documents prepared by the researcher may represent a diary or activity log that the researcher requests participants to keep. Personal and written documents or artifacts (Goetz and LeCompte, 1984) result from how people behave. They indicate people's sensations, experiences, and knowledge, and connote their opinions, values, and feelings. Written documents represent the material manifestations that constitute a culture's beliefs and behaviors (Goetz and LeCompte, 1984). These written documents may be correspondence, organizational rules, memoranda, and other unofficial documents.

Written documents are a good source of data for numerous reasons. Data found in documents can furnish descriptive information, verify emerging hypotheses, advance new categories, and advance hypotheses. One of the greatest advantages in conducting documentary material is its stability. Document stability is intact because the researcher does not alter what is being studied by his/her presence. This makes documentary data an objective source of data (Merriam, 1988). Content analysis may be used to analyze written documents.

Content Analysis

Content analysis is a multipurpose research method developed specifically for investigating problems in which the content of communication serves as the basis of inference (Holsti, 1969). A researcher examines artifacts of social communications (Berg, 1989) using content analysis.

Content analysis of documents is appropriate for at least three general classes of research problems (Holsti, 1969). First, content analysis is useful when data accessibility is a problem and the investigator's data are limited to documented evidence. Second, content analysis is useful when the restriction of time or space does not permit direct access to the subject for research. Third, content analysis of documents is useful when one wishes to get repeated measures of the subjects' values, attitudes, and behaviors. In this instance, content analysis serves as a very useful source of supplemental data. The investigator may check the results of other data collection methods by comparing them with the findings of the content analysis of written documents.

Holsti (1969) explains that all communication is composed of basic elements: a source or sender, an encoding process which results in a message, a channel of transmission, and a detector or recipient of the message. Content analysis is always performed on the messages of the communication. The results of content analysis may be used to make inferences about all other elements of the communication process. However, content analysis is used most frequently to describe the attributes of a message, without reference to either the intention or the sender or the effect of the messages (Holsti, 1969). There are five basis steps in performing content

analysis: 1) finding relevant material, 2) establishing the authenticity of the documents, 3) establishing the codes and coding procedures, 4) selecting the sample, and 5) conducting data analysis.

Finding relevant material is the first step in document analysis. Relevant material generally evolves from identifying the topic of inquiry. Materials are then selected based upon this topic. The authenticity of documents must be assessed after the documents are located. Establishing the authenticity of a document involves determining the conditions under which these data were produced (Merriam, 1988; Goetz and LeCompte, 1984). Goetz and LeCompte (1984) suggest that the researcher assess the authenticity of a document by answering a series of questions. These questions include "What is the history of the document's production and use?" "How is the document use allocated?" "Was the selection of the document biased?" "How much information in the document might be distorted or falsified?"

After assessing the authenticity and nature of documents, the researcher must adopt a system for coding for document analysis. Coding allows the researcher to establish basic descriptive categories. Coding also allows easy access to information for analysis and interpretation.

Coding and Categorization of Data

Coding is the process in which raw data are systematically transformed and aggregated into units (Holsti, 1969). These units permit a precise description of relevant content characteristics (Holsti, 1969). The rules by which the coding is accomplished serve as the operational link between the investigator's data, theory,

and hypothesis. Establishing coding procedures requires a number of decisions to be made by the researcher. Holsti (1969) explains that these decisions include the following: 1) "How are the research questions defined in terms of categories?" 2) "What unit of content should the material be classified?" and 3) "What system of enumeration should be used?"

The categories selected for coding should reflect the purposes of the research. To ensure that the categories reflect the purposes of the research, the variables of investigation should be defined. This requires that each category be given an operational definition. A good operational definition satisfies two requirements. First, the definition is a valid representation of the concept. Second, the definition sufficiently guides the coder to produce reliable judgments. The categories identified should also be exhaustive, mutually exclusive, and derived from a single classification principle (Holsti, 1969). Exhaustive means that all relevant items in the sample of documents are capable of being placed into a category. Mutual exclusiveness stipulates that no content datum can be placed in more than a single cell. The independence of categories reflects the rule that assigning a datum into a category does not affect the classification of other data. Finally, the rule that each category is derived from a single classification principle stipulates that conceptually different levels of analysis must be kept separate (Holsti, 1969).

The categories used in content analysis can be determined inductively or deductively, or by combining inductive and deductive methods. Using a deductive approach, the researcher uses a categorical scheme which is based upon a theoretical perspective. The documents then provide a means from which to assess the theory or hypotheses. When using the inductive method, the researcher assigns codes

throughout the data analysis as they emerge. A disadvantage of the inductive method is that a researcher may be developing codes throughout the study, so documents may need to be recoded several times (Berg, 1989).

There are three major ways that can be used to identify categories in standard content analysis (Miles and Huberman, 1984). These are common classes, special classes, and theoretical classes. Common classes are classes of a culture. Common classes are used to distinguish between and among various persons, things, and events such as age and gender. These common classes are essential when certain demographic characteristics are important to interpretation of findings. Special classes are those labels used by members to distinguish among things, persons, and events within their environment. Theoretical classes represent the overreaching pattern occurring in the analysis. These classes are related to the specific theory used in the research (Miles and Huberman, 1984). Another approach to identifying categories is suggested by Lofland (1971). Lofland (1971) believes the categories and codes used in any study can deal with phenomena from the microscopic to the macroscopic levels. These microscopic and macroscopic levels may be identified through six primary categories. The primary categories include: 1) acts which represent the action is a situation that is usually very brief; 2) activities which represent the action in a setting of much longer duration such as a day, week, or month; 3) the meaning of the verbal communications that define the direct actions; 4) the people involved in the action; 5) the relationships among the people involved; and 6) the setting in the entire study or where the communication takes place. Lofland (1971) proposes that any particular study may focus on one or only a few categories.

In addition to defining the categories into which content analysis data are to be classified, the researcher must designate the recording units to be coded. The recording unit is the specific segment of content that is coded for analysis (Holsti, 1969). Almost all content analysis uses one of five recording units: 1) the single word or symbol, 2) the theme or subject, 3) a character such as a person, 4) the sentence or the paragraph, and 5) the item. A sample from the recording unit may then be drawn for content analysis.

Sampling Data

Because of the overwhelming amount of possible data that could be analyzed, content analysis usually requires sampling procedures to help reduce the amount of data. The findings are then discussed implicitly or explicitly as being relevant to some larger body of documents. The first step in sampling is to list all members of the recording units about which generalizations are to be made. Second, the sampling design is selected based upon the recording unit identified. Sampling may occur at any of the following levels: words, phrases, sentences, paragraphs, books, subjects, items, or themes (Berg, 1989). Third, a sample is drawn using any of the standard sampling procedures. Some of the commonly cited techniques are simple random sampling, systematic sampling, stratified sampling and purposive sampling (Berg, 1989).

Once the categories and recording units are identified, they are assigned a code. A code is an abbreviation or symbol applied to a segment of words or items (Miles and Huberman, 1984) These codes are used to identify the categories. Miles

and Huberman (1984) offer the following suggestions for using codes to their best advantage: 1. create codes prior to fieldwork to tie research questions or conceptual interest directly to the data; 2. make certain that all the codes fit into a structure and that they relate or are distinct from other codes in a meaningful way; 3. keep the codes semantically close to the terms they represent; 4. have the codes on a single sheet for easy reference; 5. use a single code for a single segment. Spirer (1980) suggests that the coding system should be one in which the data are easily available for analysis and the least time consuming, easy to implement, and cost effective.

To organize a coding system, Miles and Huberman (1984) suggest a researcher should develop a coding list. This list should be organized into three columns. The first column provides a short descriptive label for the general categories. The second column lists the individual codes. The third column represents a key which links the codes to the research questions. Once the coding system has been developed, the content analysis may be conducted.

Conducting the actual document analysis requires the researcher to carefully read the documents and assign codes to the data. Throughout the coding process the researcher may write marginal remarks. These marginal remarks suggest interpretation, leads, or connections with other data. Double coding may also be used to check reliability of coding. Double coding is done by having two researchers code data independently. Double coding ensures that the same codes are used to describe a block of data (Miles and Huberman, 1984).

Intercoder reliability should be checked after independent coders have separately coded 5-10 pages of the data. Miles and Huberman (1984) suggest that researchers should strive for 70 percent intercoder reliability. Thorndike and Hagen

(1969) suggest that when using two raters 71 percent intercoder reliability should be established. After coding the data, the researcher may begin to identify and interpret the various patterns found in data (Berg, 1989). How the patterns are identified will reflect the enumeration system the researcher has selected.

Data Analysis

The most widely used method of enumeration is measuring the characteristics of content by frequency. The occurrence of each given category is tallied (Holsti, 1969). Berg (1989) suggests three primary reasons to count frequency. First, counting allows a researcher to see what is happening in a large slice of data, to verify hypotheses, and to keep a research analytically honest. Second, numbers permit a researcher to look at distributions in a more economical way. This helps to note patterns and occurrence. In addition, reporting the frequency at which a given concept appears suggests the magnitude of the observation. Third, quantification provides a powerful set of tools not only for summarizing findings but also for improving the quality of interpretation and inference.

Frequency counts may be strengthened when used in combination with ethnographic techniques. Ethnographic techniques may provide support for the findings by using actual quotes from the documents. The researcher is most likely to gain insight into the meaning of the data by moving back and forth between these approaches that. The data analyzed with content analysis may then be compared with data collected through other data collection methods (Holsti, 1969). This complete data analysis allows the researcher to draw conclusions from the study.

Case Study Data Analysis

After all data have been collected, the research activity focuses on analysis and interpretation. Data analysis is the process of making sense out of the data gathered from the study. The amount of interpretation one strives for depends upon the purpose of the study as well as the end product desired. These end products can be descriptive, evaluative, or interpretive (Merriam, 1988). Interpretation of data varies according to the purpose of the study, conceptual and theoretical frameworks, researcher experience and background, and the nature of the data collected and analyzed (Goetz and LeCompte, 1984). The first step in data analysis is reviewing the research proposal. The analysis is shaped by the research questions addressed. The second step in data analysis is scanning and reading the data. The scanning allows the researcher to begin organizing, abstracting, integrating, and synthesizing the data. These activities permit the researcher to describe what they have found (Goetz and LeCompte, 1984). The data may then be sorted and organized topically or chronologically. Organizing the data will allow comparisons to be made across the data. Patterns and regularities are then identified (Merriam, 1988; Goetz and LeCompte, 1984). These patterns and regularities are then categorized for description. Categorization requires a researcher to describe what he/she found, to divide phenomena into units, and to indicate how units are similar and different.

Presentations of Conclusions

Once the data have been sorted into categories, the researcher may examine the data to draw conclusions about the findings. The conclusions of the findings are generally presented in four stages. First, a summary of data is presented. The summary represents descriptive statements that specify the attributes of the phenomena under study. The summary presentation of data is characterized by concrete descriptors or enumerations that address only the subject under investigation. The second stage in the conclusions of findings is the interpretation of data. The interpretation of data requires the research to specify what the data mean in reference to the questions asked in the study. The interpretation includes a discussion of how categories of phenomena and their attributes are related empirically to one another. The third stage of the conclusions is the integration stage. During the integration stage the researcher specifies how the data relate to broader areas of interest. These areas of interest may be data from other studies, research theories, or they may be placed within the context of normative implications. For predominantly inductive studies, the integration of the findings should demonstrate how the data and theories identified explain or convey the meaning of the study. In more deductive studies, the researchers should demonstrate that the evidence collected support or prove or disprove the theories from which the study is conducted. The last stage of the conclusions is discussing the significance of the findings. In this stage the researcher must indicate what the results mean and how the results advance a particular line of investigation, add to the body of knowledge, or modify existing theories or hypotheses (Goetz & LeCompte, 1984).

Chapter Summary

This chapter presented a review of literature relevant to the investigation of management team leadership in self-managed organizations. The review of literature was presented in six major sections. The first section presented an overview of the current trends influencing organizations. These trends were the emphasis on human resources as an organizational strategic advantage, changing work force demographics, and organizational reorganization. The second section described the system design of self-managed work teams and the work team responsibilities. Section three presented the problems associated with the external leader's role in self-managed work teams. Role ambiguity was identified as the major problem facing external leaders occupying leadership positions in self-managed organizations. The rationale for studying external leadership in self-managed organizations was also presented. By studying leadership in self-managed organizations, information could be attained regarding the training, selection, and promotion of leaders. Furthermore, information defining the role of external leaders would provide new information regarding the design and functioning of self-managed work teams.

Section four presented three theories pertaining to external leadership in self-managed organizations. This section was presented in four parts. The first part described the supervisor's technical and phenological boundary maintenance functions based upon Susman's (1979) Socio-Technical Theory. The second part presented Manz and Sims (1989) Superleadership Theory as it applied to external leaders in self-managed organizations. Part three discussed the application of Susman's (1979) Socio-Technical Theory and Manz and Sims (1989) theories

regarding the role of the management team leadership. Part four presented Burns (1978) and Bass' (1985) Transactional and Transformational Leadership Theories. The characteristics of transactional and transformational leaders were explored along with the augmentation of transactional and transformational leadership. In closing of section four the effects of transformational leaders on followers and the application of the Transformational Leadership Theory in self-managed organizations were explored.

Section five presented a review of case study methodology. Section five was presented in three major parts. Part one described the types of case studies and the case study design. Part two explored three data collection methods. The first data collection method described was the questionnaire. Issues addressing the planning and administration of a questionnaire were presented. The second data collection method presented was the focus group interview. Determining the number and size of focus groups and the focus group structure were presented. Designing an interview schedule, moderator involvement, conducting the focus group, and focus data analysis were also presented. The third data collection method described was the document analysis. The issues presented addressing document analysis included the following: a) conducting content analysis, b) designing a coding system, c) sampling methods, and d) data analysis. Part three addressed case study data analysis and presentation of conclusions. Section six presented the summary of the literature review.

CHAPTER III

METHODOLOGY

The purpose of this study was to identify the transformational leadership behaviors and the transactional leadership behaviors performed by management team members and self-managed work team members.

This chapter is divided into seven sections. The first section introduces the research questions that guided the study. The second section discusses the research methodology used for this study. Section three describes the population and organizational structure. Section four describes the data collection instruments used for the study. Section five describes the data collection procedures. The data analyses are described in section six. Section seven presents a summary of the chapter.

Research Questions

1. What transactional leadership behaviors are performed by management team members and by self-managed work team members?

2. What transformational leadership behaviors are performed by management team members and by self-managed work team members?

3. What are the differences between the transactional leadership behaviors performed by management team members and the transactional leadership behaviors performed by self-managed work team members?

4. What are the differences between the transformational leadership behaviors performed by management team members and the transformational leadership behaviors performed by self-managed work team members?

Case Study Method

A case study method was used for this study to provide a description of the transformational leadership behaviors and the transactional leadership behaviors performed by management team members and self-managed work team members in one organization implementing a self-managed work design. A case study method promoted an accurate description of the transformational leadership behaviors and transactional leadership behaviors used by management team members and work team members in a self-managed organization because it allowed the use of three distinct data collection methods. Three methods of data collection provided vehicles for cross validating the research questions. These methods were a written survey, focus group discussions, and document data analysis. The employee ratings on the Multifactor Leadership Questionnaire Self-Rater Form were cross validated using

data gathered from focus group discussions with strategic team members and tactical team members who represented the management team members and operations team members who represented the self-managed work team members. In addition, a content analysis of document data was conducted.

The focus group discussions were utilized to compare the transformational leadership behaviors and transactional leadership behaviors used by management team members and self-managed work team members. As Zemke and Kramlinger (1988) point out, the objective of a focus group discussion is to acquire a set of responses from individuals familiar with the topic being discussed. The value of the focus group discussion lies within the richness of the data generated from the discussion. From the discussion data the response patterns of participants can be determined.

The three data sources reduced the self-bias associated with self-report methods and provided greater confidence in the results. As a result, the information may be used as a basis for selecting and training management team members and self-managed work team members in organizations implementing self-managed work designs.

Selection of Population

The population or case selected for this study was 195 employees working in a nonunionized vinyl flooring manufacturing plant located in a midwestern state. The organization was selected because it was a greenfield site that utilized functioning self-managed work teams throughout the organization. Greenfield sites

are organizations which implement self-managed work designs from the inception of the organization. The use of a greenfield site reduced the influence of factors such as pre-established norms, expectations, and procedures that affect traditional organizations attempting to implement new work designs (Kemp et al., 1983). Investigating the leadership behaviors used at a greenfield site offered a valuable opportunity to examine transformational leadership behaviors and transactional leadership behaviors performed by management team members and self-managed work team members.

Organizational Structure

The organization under investigation used a self-managed work design since it opened in 1988. The organizational structure of the plant included three organizational team levels. These levels were the strategic team, tactical team, and operating teams. The strategic team and tactical team represented the management team for the organization. The strategic team members and tactical team members were combined to represent the management team members because they serve in administrative and supervisory role over the self-managed work team members.

The strategic team was composed of six members. The strategic team members were responsible for long-term planning, policy making, and reviewing recommendations of the tactical and operating teams. Each strategic team member directed the activities of one of the five departments in the organization. The five departments were: 1) information control, 2) production, 3) human resources, 4) technical services, and 5) materials.

The tactical team was composed of 17 members who coordinated the work assignments of the operating teams. The operating team was composed of 159 members, each team member assigned to one of the 11 self-managed work teams in the plant. These self-managed work teams performed production, distribution, or maintenance functions in the plant.

Instrumentation

This study utilized three data sources. The Multifactor Leadership Questionnaire (MLQ) Self-Rater Form, four focus group discussion sessions, and document analysis were used to collect the data.

Multifactor leadership Questionnaire (MLQ)

Instrumentation

The Multifactor Leadership Questionnaire Self-Rater Form (MLQ), designed by Bass and Avolio (1989), was used to assess four transformational leadership factors and two transactional leadership factors. To protect the validity and reliability of the instrument, Consulting Psychologist Press, INC prohibited a full publication of the questionnaire. However, sample questions from the MLQ Self-Rating Form are shown in Appendix A. Permission to reproduce sample items from the MLQ Self-Rating Form from Consulting Psychologist Press, INC is shown in Appendix B. The transactional leadership factors measured by the MLQ were contingent reward and management by exception. Charisma, inspiration, individual

consideration, and intellectual stimulation were the transformational leadership factors measured by the MLQ. Table I summaries the factors measured by the MLQ and number of items for each factor. The alpha reliability coefficients for MLQ Self-Rater Form yielded a range of .60 to .92 (Bass & Avolio, 1990). Table II summarizes reliability data for the MLQ.

Bass (1985) provided support for construct validity by reporting the findings of a study in which the Multifactor Leadership Questionnaire was applied to the biographical accounts of 67 world leaders. In this study students read biographies and periodical accounts of leaders. Then the students completed the MLQ to describe the leader. Each student adopted the role of a follower when describing the leader. Bass (1985) established construct validity by examining the variance among followers' descriptions of different and the same leaders. Bass (1985) used eta coefficients to express the extent each scale value was a meaningful discrimination of leader behavior. Eta coefficients range from 0 to 10. The eta coefficients for this study were as follows: charisma, .79; individualized consideration, .77; intellectual stimulation, .77; contingent reward, .66; and management by exception, .69. Support for the differential validity of the measures of transformational and transactional leadership was presented by Hater and Bass (1988). In that study, Hater and Bass (1988) found that managers labeled as high performers were evaluated as being more transformational and active transactional than passive transactional by their subordinates than those labeled as low performers (Bass and Avolio, 1990).

TABLE I

DESCRIPTION AND NUMBER OF ITEMS FOR EACH MULTIFACTOR LEADERSHIP QUESTIONNAIRE FACTOR

FACTOR LABELS & DESCRIPTORS	NUMBER OF ITEMS
TRANSFORMATIONAL LEADERSHIP FACTORS	
1. Charisma: Builds confidence and trust; attracts a following; has referent power	10
2. Inspiration: Raises expectations and beliefs concerning the mission and vision	7
3. Intellectual Stimulation: Challenges old assumptions and stimulates new ideas	10
4. Individualized Consideration: Determines individual needs and raises needs to higher levels	10
TRANSACTIONAL LEADERSHIP FACTORS	
1. Contingent Reward: Clarifies objectives and exchanges rewards for performance	10
2. Management by Exception: Takes corrective action when mistakes occur; disciplines when necessary	10
	Total 57

TABLE II

RELIABILITY COEFFICIENTS FOR MULTIFACTOR LEADERSHIP QUESTIONNAIRE SELF-RATING FORM

LEADERSHIP FACTOR LABELS	RELIABILITY COEFFICIENTS STUDY 1	RELIABILITY COEFFICIENTS STUDY 2
Charisma	.83	.92
Inspiration	.60	.83
Intellectual Stimulation	.72	.89
Individualized Consideration	.71	.75
Contingent Reward	.82	.89
Management by Exception	.62	.75

Note: Study 1 represented reliability coefficients from a sample of 251 business and industrial leaders. Study 2 represented reliability coefficients from a sample of 169 industrial leaders.

Individuals completing the MLQ Self-Rating Form evaluated how frequently, or to what degree, they believed that they engaged in specific transformational, transactional, or nonleadership behaviors.

A five-point rating scale was used for rating the frequency of leadership behaviors. Each rating anchor was assigned a scale value. The anchors and point value for each variable used to evaluate the leadership items were: 1 = Not at all , 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, and 5 = Frequently, if not always.

Focus Group Discussion Instrumentation

An interview guide was developed for focus group discussions with strategic team members, tactical team members, and operating team members. The focus group discussion questions were developed based upon Bass and Avolio's (1990) description of transactional and transformational leadership behaviors. The guidelines suggested by Delbeqc and Gustafson (1975) were also used to formulate the discussion session questions.

1. The questions must have immediate relevance.

2. The questions must be appropriately phrased to assist the participants in understanding its parameters and implications.

3. The questions must be related to the participant's knowledge or be participant centered.

4. The questions must be defined by the major goals of the session.

The drafts of the focus group discussion interview guide were reviewed by the researcher's graduate committee at Oklahoma State University and the Oklahoma State University Institutional Review Board. The focus group discussion interview guide is shown in Appendix C. Appendix C also shows the researcher's interview guide with prompts. The focus group discussion questions were also pilot tested

using 15 operating team members from the organization studied one month prior to the study. Minor wording changes were made based upon the finding of the pilot study.

Data Collection Procedures

Focus Group Discussion Data Collection Procedures

To establish initial contacts at the organization, a meeting was conducted with the Human Resource Manager to discuss the organization's participation in the research study. A written proposal was then developed and presented by the researcher to the strategic team to obtain approval of the organization's participation in the research. Once approval was received the focus group discussion sessions were conducted.

Four focus group discussion sessions were held. The first focus group discussion was held with all six members of the strategic team. The second focus group discussion was held with six tactical team members who were selected using a stratified random sampling method. The subgroups of the population from which the tactical team members were selected represented the five departments in the organization. These departments included: 1) information control, 2) production, 3) human resources, 4) technical services, and 5) materials. One tactical team member was selected from each department except the production department. Two tactical team members were selected from the production department. The third focus group discussion was held with four operations team members who were also selected using a stratified random sampling method. The fourth focus group discussion was held

with three operations team members who were also selected using a stratified random sampling method. The subgroups of the population from which the operating team members were selected included the production, distribution, and maintenance divisions in the plant.

Four operating team members from the production, distribution, and maintenance divisions were randomly selected from each division to participate in the two operating team focus group discussion sessions. Although participants confirmed their participation, only four attended the first focus group session, while three attended the second. Responsibilities on the production line prohibited operating team member participation the day of the focus groups. A sample of five participants were selected from the tactical team and a sample of twelve participants where selected from the operating teams. Table III summarizes the number of focus group participants. The number of participants for each group was selected in an effort to avoid disrupting the work flow and production of the self-managed work teams and organization.

TABLE III

FOCUS GROUP PARTICIPANTS

Focus Group Participants	Total # of Participants	Total # of Participants Selected
Group 1. Strategic Team	6	0
Group 2. Tactical Team	6	6
Group 3. Operating Team	4	6
Group 4. Operating Team	3	6

After the random selection was made, each participant was contacted in writing and invited to participate in a focus group discussion. In the invitational letter each participant was instructed to read and sign a Participant Consent Form. A sample of the Participant Consent Form and invitational letter are shown in Appendix D. After participants returned Participant Consent Forms to the Human Resource Manager, the dates and locations of the focus group discussion sessions were determined. Each participant was then mailed a written letter to confirm the meeting dates and location for the discussion sessions. A sample confirmation letter is shown in Appendix E.

The focus group discussion sessions were facilitated by the person conducting the study. The facilitator had four years of research experience. In addition, previous experience leading focus group discussion sessions helped to prepare the facilitator to guide the discussions. The facilitator further conducted the pilot test to practice facilitation skills. A court reporter was hired to audio tape and take written notes during the focus group discussion. Prior to the first focus group discussion session, the court reporter was given an overview of the study, a listing of participants names, and the questions. In addition, the researcher internalized guidelines for which to lead the discussion sessions prior to data collection. The guidelines suggested by Zemke and Kramlinger (1988) and Rossett (1987) were used to guide the focus group discussion sessions.

1. Specific questions were used to follow up participant responses for clarification.

2. Technical terms, local jargon, and complex ideas were clarified with follow-up questions.

3. When a participant made a strong statement, or had an interesting but novel idea, the other participants were asked how they felt about the idea.

4. Everyone in the group was given opportunity to comment to every topic or question.

The focus group sessions were held at an on-site conference room. To begin the discussion session a welcoming statement that clarified the purpose of the study was presented to the participants. The clarifying statement was as follows:

> I would like to begin by introducing X. X is a certified court reporter who will be taking notes and audio taping our discussion. X's transcripts will allow me to capture important information from our discussion.
>
> Now, I would like to have everyone introduce themselves. Z why don't you start. Please give your name and tell us what team you represent and what your responsibilities are.
>
> Today we're going to discuss issues that explore leadership in your organization. Before we get into our discussion, let me make a few requests of you. First, as I mentioned earlier, we are tape recording the session so that I can refer back to the discussion if I need to when I write my report. If anyone is uncomfortable with being recorded please let me know now.
>
> I want everyone to have the opportunity to respond to each question. Please feel free to speak up during the discussion, but let's try to have only one person speak at a time. Also we would appreciate it that if you need to speak with your neighbor that you conduct any side conversations in a low voice. This will help X as she is taking notes. Finally, please say exactly what you think. If you agree with comments that are being made during the discussion please nod your head in agreement or slightly raise your hand.

> You are the experts here. I am only here to learn from your experiences and to obtain your views. Your responses will be confidential, your name will not be associated with your responses.
>
> Do you have any questions or concerns before we begin?

Each focus group discussion question was then presented to the participants. To conclude the focus group discussion, participant responses were summarized. The participants were asked if the summary was an appropriate representation of their comments. Appreciation was then expressed to the participants for their involvement in the study. Directly after the focus group discussion session the facilitator and court reporter compared their notes to confirm the facilitator's understanding of responses. Each focus group discussion participant was mailed a "thank you" letter. A sample of the "thank you" letters is shown in Appendix F.

Multifactor Leadership Questionnaire

Data Collection Procedures

Two hundred Multifactor Leadership Questionnaire (MLQ) Self-Rating Forms were purchased from Consulting Psychologists Press, INC. Before the study began the Oklahoma State University Institutional Review Board also assessed the data collection instruments and approved of the study.

The MLQ Self-Rater Form was administered to 166 employees by the person conducting the study. Employees were administered the MLQ Self-Rater Form at

the end of weekly team meetings in an on-site conference room during regularly scheduled work hours.

After reading the Volunteer Solicitation Form (see Appendix G), employees read and signed two Participant Consent Forms (see Appendix H). Employees were then given the questionnaire and read the questionnaire instructions. In addition, each employee was instructed to place their completed questionnaire and one copy of the Participant Consent Form in the envelope provided by the researcher. The employees were then instructed to seal the envelope and place the sealed envelope on the table by the exit as they left the conference room. The room, temperature, and lighting were standardized for the study to control treatment error caused by environmental factors.

Document Analysis Data Collection Procedure

The recording unit used for the document analysis were items, paragraphs, and articles. The items which were used for the document analysis were the organization's newsletters. Team meeting notes and the organization's policy and procedure manual were requested by the researcher, but these requests were denied.

Once the documents were located their authenticity was assessed by answering four questions about the documents. The questions used to assess the document's authenticity were: What was the history of the document's production and use? How was the document's use allocated? Was the selection of the document biased? How much information in the document was distorted or falsified?

A coding system was used for the document analysis. The coding system was

developed based upon the research questions for the study. Three categories of codes were developed from the research questions. These code categories include: 1) special class codes, 2) theoretical class codes, 3) common class codes. The special class code categories consisted of the labels used by the members to distinguish among the organizational members. The special class code categories were labeled the strategic team members, tactical team members, and operations team members. The theoretical code categories related to the specific theories used in the research. The theoretical code categories were the transformational and transactional leadership behaviors identified by Bass and Avolio (1990). The transformational leadership behaviors were charismatic, inspirational, intellectual stimulation, and individual consideration. The transactional leadership behaviors were management by exception and contingent reward. Bass' and Avolio's (1990) description of transformational and transactional leadership behaviors are shown in Table I. The common class codes related to the nature of each newsletter articles. The common class codes used were person and information. The document coding descriptors are shown in Appendix I. Appendix J shows the document analysis code list.

Once the coding system had been established, a sample of the newsletter articles items were selected for the study. The sample of the newsletter articles were selected by a stratified random sampling technique. The articles in the newsletters served as subgroups of the population. Each article in the newsletter was assigned a number. Articles were then randomly selected for analysis using the table of random numbers. The 95 percent level of confidence was used to determine the sample size. The Krejcie and Morgan formula for estimating the sample provided in Issaac and Michael's book Handbook in Research and Evaluation for Educational

and Behavioral Science was used to determine the sample sized need for a 95 percent confidence level. For this study 92 newsletters were randomly selected for analysis.

Two independent coders were used in the study to assign codes to the paragraphs and articles in the newsletters. The researcher served as one coder for the document data. The second coder was a Research Specialist employed by the Oklahoma Department of Vocational and Technical Education. The Research Specialist had five years of research experience and was familiar with the organizational terms and concepts used because the researcher had once been employed by the organization under study. As suggested by Krippendorff (1980) when dual coders are used each coder should 1) be familiar with the nature of the material to be recorded and 2) be capable of handling the categories and terms of the data language. Prior to the document coding the second coder was trained on document coding by the person conducting the study. The training elements suggested by Spirer (1980) were used to train the second coder. These elements included: 1) background information on the purpose of the study, 2) definitions of terms and concepts to be used, 3) an explanation of the coding system, 4) and practice in using the coding system. An intercoder reliability of .90 or above was established prior to the content analysis.

A photocopy of each item was made for each coder. Each coder was provided the document coding descriptors in Appendix I and the document analysis code list in Appendix J.

The first codes assigned were the common class codes. The common class codes were assigned to the articles in the newsletters. Newsletter articles were

assigned the common class code "person," when the communication described an activity or accomplishment of one or more individuals or a specific team in the communication. For example, if the paragraph focused on Jane Doe and her accomplishments that lead to receiving the Management Award for Excellence, the newsletter article was assigned the "person" common class code. When the focus of a newsletter article focused on communicating general information that was not related to specific individuals or teams, the article was assigned the "information" common class code. For example, a newsletter article explaining safety procedures was assigned the "information" code. The special class codes were then assigned based upon the common class codes. When a newsletter article was assigned the "person" common class code, the special class code was assigned based upon the team position occupied the individual(s) or team who were the focus of the newsletter article. For example, if an individual who had received the Management Award for Excellence and the same individual was also the operating team, the article was give the operating team special class code. When an newsletter article was assigned the "information" code, the special class code was assigned based upon the team position that the author occupied in the organization. For example if a tactical team member wrote an newsletter article on safety, the article was given the special class code of tactical team member. A listing of employee positions was used to identify the team position that each individual occupied.

A binary or dichotomous decision method was used to assign the theoretical codes to document data. Using the dichotomous decision method coders are given two exhaustive possibilities. The proposition each coder must consider for each item is "This item X has the Property C" (Schutz, 1952, pg 120). The coder examines the

item and judges whether the proposition is true or false (Schutz, 1952) or present or absent (Krippendorff, 1980). The binary decision method was selected to increase the intercoder reliability. Krippendorff (1980) points out the binary decision method reduces complex judgement into several simple decision and thereby achieves levels of reliability not obtainable otherwise. In addition, the binary decision method is appropriate when research focuses on special entity, persons, ideas or concepts or events. Using an attribution approach allows characteristics pertaining to individuals to be identified. The documents may then yield a profile consisting of frequencies of attributes (Krippendorff, 1980). Schutz (1952) further points out the binary decision method assures logicality of choices and is psychologically easier to attend to one decision at a time.

To assign the theoretical class codes each coder used the common class code as a guide for assigning the theoretical code to the newsletter articles. If the newsletter article had been assigned the common class code of "person", the coder assigned the theoretical class code based upon the behavior performed by the individual(s) or team(s) who were the focus of the newsletter article. If the newsletter article had been assigned the common class code of "information" the coder assigned the theoretical class code based upon the behavior performed by the author in the article.

Each coder used the document coding descriptors to determine the presence or absence of transformational leadership or transactional leadership behaviors. For each paragraph the coders were asked to indicate the presence of charismatic, inspiration, intellectual stimulation, individual consideration, contingent reward, or management by exception by writing the corresponding code of those behaviors

performed by the author, team, or individuals in the right margin of the document. If one of these characteristic were present the coder assigned the single most appropriate code among those given for each paragraph. If no transformational leadership behavior or transactional leadership behaviors were indicate in the paragraph the coder did not assign a code. If a coder felt that a paragraph characterized more than one transformational or transactional leadership behavior the coder selected the code which described the behavior that occurred most frequently in the paragraph. The coders then counted the number of times each code appeared in the newsletter article. The code that appeared the most frequently was used to assign the final code. The final code was used to identify the behavior performed in the article. Figure 1. illustrates the coding process. Miles and Huberman (1984) point out that any block of data such as a clause, sentence, or paragraph is usually a candidate for more that one code, but assigning multiple codes can confuse coders and inhibit analysis. Multiple codes per recording unit are most appropriate for exploratory studies.

Intercoder reliability was assessed using the newsletter articles during the training session, assessed again after the coders had rated five items, and assessed again once the coders completed coding. The intracoder reliability was assessed one week after coding had been completed. Intercoder reliability and intracoder reliability were determined using the formula suggested by Miles and Huberman (1984). This formula was:

$$\text{reliability} = \frac{\text{number of agreements}}{\text{total number of agreements plus disagreements}}$$

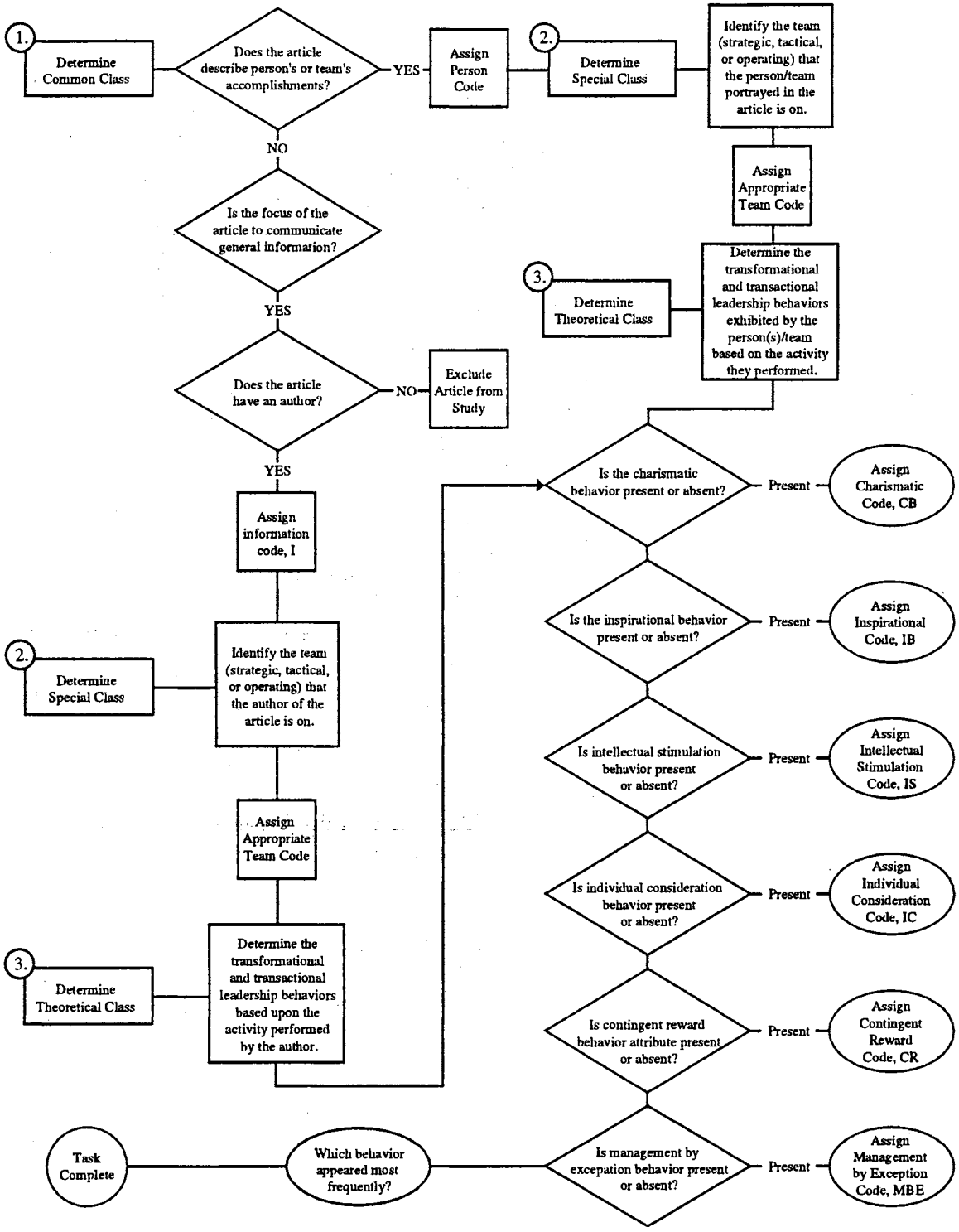

Figure 1. Decision Making Model Used for Assigning Content Analysis Codes

Treatment of Data

Multifactor Leadership Questionnaire (MLQ) Data Treatment

The data analysis for the Multifactor Leadership Questionnaire (MLQ) Self-Rater Form was analyzed using the SAS system software program. The data identifying the transformational leadership behaviors and transactional leadership behaviors performed by management team members and work team members were summarized using descriptive statistics. The descriptive statistics were means and standard deviations. To interpret the means each rating anchor was assigned a scale value. The anchors and point value for each variable used to evaluate the leadership items were: 1 = Not at all , 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, and 5 = Frequently, if not always. The point value for the anchors were multiplied by the number of questions on the questionnaire which addressed each individual leadership value to determine the total possible points for each leadership variable. The total possible point for each leadership variable and anchors are shown in Table IV. A mean score of 10 - 20 points was interpreted that the behavior was not performed at all. A mean score of 20 - 29 points indicated that the behavior was performed once in a while. A mean score of 30 - 39 points was interpreted that the behavior was performed fairly often. A mean score of 40 - 50 points was interpreted that the behavior was performed frequently, if not always.

The differences in the transformational leadership behaviors and transactional leadership behaviors used by management team members and self-managed work team members were determined using two split plot analysis of variances (ANOVA)

TABLE IV

MULTIFACTOR LEADERSHIP QUESTIONNAIRE
VARIABLES AND POINT VALUES

Leadership Variable	Total Possible Points
Charisma	50
Inspiration	35
Individual Consideration	50
Intellectual Stimulation	50
Contingent Reward	50
Management By Exception	50

for unequal samples. For the first split plot analysis of variance the independent variables were the organizational members' team level and the transactional leadership behaviors. For the second split plot analysis of variance the independent variables were the organizational member team level and the transformational leadership behaviors. The strategic team and tactical team represented the management team level. The operating teams represented the self-managed work team level. The dependent variable for the study was the organizational member transformational leadership scores and transactional leadership scores on the MLQ Self-Rating Form. The alpha level was established prior to the study at the .05 significance level. The split plot analysis of variances were selected because it allowed a of comparison between and within variables to determine whether or not a significant difference existed between the two means (Keppel, 1982). The random

sampling assumption for the ANOVA was violated for this study by conducting a census of the population.

However, as Keppel (1982) points out, the ANOVA is robust to deviations of randomization and normality. In addition, the generalizability of findings depends on past research in the field and the extent to which extrapolations beyond the particular subjects tested have been successful in the past (Keppel, 1982). Furthermore, when no cause or effect conclusions are drawn from the data, problems associated with deviations from the randomization assumption are reduced (Williams, 1992). Keppel (1982) also notes that there will not be severe deviation of normality if the there are 12 or more subjects per cell. In addition, using a .05 significance level, even for the most deviant comparisons reduces the risk of Type I errors. The homogeneity of variance and homogeneity of covariance were examined for violations.

Focus Group Discussion Data Treatment

The treatment of data for data compiled using the focus group discussions was based upon procedures suggested by Spirer (1980) and Zemke and Kramlinger (1998). As suggested by Spirer (1980), a data coding system was established prior to the study. For this study, the data was coded by identifying the team level and the leadership behaviors. The team levels were strategic, tactical, and operating teams. Each focus group question was coded by the transactional leadership behavior or transformational leadership behavior it represented prior to the discussion. Focus group question number one was coded to identify the transformational leadership

behaviors associated with charisma. Focus group question number two was coded to identify the transformational leadership behaviors associated with inspiration. Focus group question number three was coded to identify the transformational leadership behaviors associated with intellectual stimulation. Focus group question number four was coded to identify the transformational leadership behaviors associated with individual consideration. Focus group question number five was coded to identify the transactional leadership behaviors associated with contingent reward. Focus group question number six was coded to identify transactional leadership behaviors associated with management by exception.

To analyze the focus group data, written transcripts of the focus group discussions were developed by the court reporter. Focus group question responses were then analyzed to determine the transformational and transactional leadership behaviors identified in the focus group sessions. The frequency of responses were calculated for each group. Trends that emerged from the data were then identified by the researcher. The transformational leadership behaviors and transactional leadership behaviors identified by the strategic team members, tactical team members, and operating team members were compared to determine similarities and differences among the management team members and self-managed work team members.

Document Data Treatment

The enumeration system selected for the document analysis was the frequency count. Using the frequency count the number of times code appeared in the items

analyzed was reported. The frequency count of each code was also complemented using actual quotes from the items analyzed. Trends and patterns in the data were then identified and compared with data collected using the Multifactor Leadership Questionnaire and the focus group discussions.

Chapter Summary

This chapter described the methodology used in the study. The chapter was divided into seven sections. The first section introduced the research questions that guided the study. The second section discussed the research methodology used for this study. Section three described the population and organizational structure. Section four described the data collection instruments used for the study. Section five described the data collection procedures. The data analyses were described in section six. Section seven presented a summary of the chapter.

CHAPTER IV

PRESENTATION OF FINDINGS

Introduction

The purpose of this study was to identify the transformational leadership behaviors and the transactional leadership behaviors performed by management team members and self-managed work team members.

This chapter is organized into five sections. First, the research questions which guided the study are presented. Second, an introduction to data collection methods is presented. These data collection methods included the Multifactor Leadership Questionnaire, newsletter article document analysis, and focus groups discussions. Fourth, data collected which pertain to transactional leadership behaviors are presented. Fourth, data collected which pertain to the transformational leadership behaviors are presented. A chapter summary including major findings concludes the chapter.

Research Questions

There were four research questions which were used to guide this study.

1. What transactional leadership behaviors are performed by management team members and by self-managed work team members?

2. What transformational leadership behaviors are performed by management team members and by self-managed work team members?

3. What are the differences between the transactional leadership behaviors performed by management team members and the transactional leadership behaviors performed by self-managed work team members?

4. What are the differences between the transformational leadership behaviors performed by management team members and the transformational leadership behaviors performed by self-managed work team members?

Data Collection Methods

Multifactor Leadership Questionnaire

One hundred sixty six of the 195 employees at the organization under study completed the Multifactor Leadership Questionnaire, or 86.6 percent of the n=195.

The results of the study were based upon 138 of the 159 self-managed work team members or 86.7 percent of the N = 159 and 19 of the 23 management team members or 83 percent of N = 23. There were 9 questionnaires completed by the members on the administrative services team and engineering team that were not included in the analysis because these members did not serve on the self-managed work teams or as management team members. Table V presents the Multifactor Leadership Questionnaire respondents.

TABLE V

MULTIFACTOR LEADERSHIP QUESTIONNAIRE RESPONDENTS

Organizational Team Level	Total Respondents	% of Total
Management Team	19	83%
Self Managed Work Team	138	86%
Administrative Services Team	9	69%
	N= 166	Total= 85%

Seventy-six percent of the employees completing the questionnaire were male, while 24 percent of the employees completing the questionnaire were female. The majority of the employees completing the questionnaire were high school graduates. The following statistics represent the educational levels of the participants: 47 percent high school graduates, 30 percent completed two years of college, 7 percent

four year college graduates, and 3 percent who had completed graduate work. Table VI presents the educational levels of Multifactor Leadership Questionnaire respondents.

TABLE VI

EDUCATIONAL LEVEL OF MULTIFACTOR LEADERSHIP QUESTIONNAIRE RESPONDENTS

Educational Level	% of Total Respondents
High School Graduate	47
2 Yr. College Graduate	30
4 Yr. College Graduate	7
Graduate Degree	3

The Multifactor Leadership Questionnaire gathered data regarding the transformational leadership behaviors and transactional leadership behaviors performed by management team members and self-managed work team members. The management team members and self-managed work team members indicated their responses based upon their influence on the people in the organization for whom they had regular interactions and leadership responsibilities. For example, management team members indicated their responses to the Multifactor Leadership Questionnaire based upon their interactions with the people who reported directly to them. The self-managed work team members indicated their responses on the Multifactor Leadership Questionnaire based upon their interactions with their peers.

Document Data Analysis

Ninety-two randomly selected newsletter articles were examined by content analysis. Two independent coders assigned codes to the newsletters articles. A 96 percent intercoder reliability was established. The intracoder reliabilities established were 96 percent for one coder and 94 percent for the second coder.

The results of the document analysis are presented using a frequency count for the number of time each transactional leaders behavior appeared in the newsletter articles and a frequency count of the number of times each transformational leadership behavior appeared in the newsletter articles. The document analysis results are also presented with randomly selected sample excerpts. When sample excerpts are presented, the excerpts are presented exactly as they appeared in the newsletter articles. No corrections were made for grammatical errors which appeared in the original newsletter articles. The references for each excerpt refer to coded newsletters articles.

The authenticity of the newsletters was assessed. It was established that the authenticity of the newsletter articles was intact by reviewing the history of the newsletters. A review of the history of the newsletters revealed that the newsletter articles were submitted for publication by members throughout the organization. The newsletters had been compiled by a special committee which was composed of both management team members and self-managed work team members. The newsletters had not been produced for the purpose of research. This review of the newsletter history indicated that the information in the document had not been distorted or falsified for research purposes. Further, the selection of the newsletters was

protected against bias because the newsletters which were reviewed had been randomly selected.

Focus Group Discussion Data

Focus group discussion sessions were held with six strategic team members and six randomly selected tactical team members and seven randomly selected operating team members. The purpose of the focus group discussions sessions was to identify the transformational leadership behaviors and transactional leadership behaviors used by management team members and self-managed work team members. The results of the focus group discussion sessions are presented in the descriptive summary style suggested by Krueger (1988). As Krueger (1988) explained, the descriptive summary style of reporting begins with a summary paragraph and then includes illustrative quotes. The focus group discussion data is not discussed in the same sequence that the questions were presented in the discussion sessions. These data are discussed in relation to the research questions addressing transactional leadership and transformational leadership. The references for each quotation refer to the raw data transcripts from the focus group discussion sessions. No corrections were made for grammatical errors which appeared in the speech of the focus group participants.

Transactional Leadership Behavior Results

Research Questions One and Three

> 1. What transactional leadership behaviors are performed by management team members and by self-managed work team members?
>
> 3. What are the differences between the transactional leadership behaviors performed by management team members and the transactional leadership behaviors performed by self-managed work team members?

Transactional Leadership Multifactor Leadership Questionnaire Results. A five-point rating scale was used for rating the frequency of leadership behaviors. To determine the frequency with which each leadership behavior was performed, each rating anchor was assigned a point value. These anchor and point values were: 1 = Not at all, 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, and 5 = Frequently, if not always. The possible point value for the transactional leadership behavior of contingent reward was 50. The possible point value the transactional leadership behavior of management by exception was 50 possible points.

To gather data regarding research question one, comparisons of the means were conducted by comparing the Multifactor Leadership Questionnaire means for each transactional leadership variable. A comparison of the means showed that self-managed work team members reported more frequently that they performed both the contingent reward and management by exception leadership behaviors than did the management team members. A comparison of the means also indicated that the contingent reward leadership behavior was performed the most frequently by both the management team members and self-managed work team members. Table VII

displays the means and standard deviations of the management team member and self-managed work team member transactional leadership behaviors.

TABLE VII

MEANS AND STANDARD DEVIATIONS FOR THE TRANSACTIONAL LEADERSHIP BEHAVIORS BY TEAM

TEAM LEVEL	TRANSACTIONAL LEADERSHIP VARIABLES			
Team	Contingent Reward		Management By Exception	
	M	SD	M	SD
Self-Managed Work Team	32.7	6.87	29.2	5.62
Management Team	32.3	4.09	27.2	5.09

To determine whether or not there was a significant difference in the transactional leadership behaviors performed by self-managed work team members and management team members, a split plot analysis of variance with unequal sample sizes was performed. In this analysis, teams served as the between variable (self-managed work team or management team) while transactional leadership served as a repeated factor. This analysis revealed that there was a significant main effect of the transactional leadership variable ($F = 11.91$, $p < .05$). This indicated that there was a statistically significant difference between the contingent reward and management-by-expectation transactional leadership behaviors. However, the

difference between the organizational team levels failed to reach statistical significance ($F = 0.48$, $p > .05$). Nor was there a significant interaction effect difference of the variables of interest ($F = 0.00$ $p > .05$).

Because there were only two behaviors investigated for the transactional leadership, a direct interpretation of the means was conducted. The frequency with which the contingent reward transactional leadership behavior was performed was statistically significantly. Figure 2. illustrates the difference in the transactional leadership behaviors used by management team members and work team members. Table VIII displays the output from the split plot analysis of variance for the management team members and self-managed work team members.

TABLE VIII

ANALYSIS OF VARIANCE SUMMARY TABLE FOR MANAGEMENT TEAM MEMBER AND SELF-MANAGED WORK TEAM MEMBER TRANSACTIONAL LEADERSHIP BEHAVIORS

Source	df	SS	MS	F Value	Pr > F
Team Level	1	37.07679872	37.07679872	0.48	0.4876
TA Behavior	1	332.25796178	332.25796178	11.91	0.0007 *
TA X Level	1	0.02483761	0.02483761	0.00	0.9762
Error	155	4323.21720061	27.89172387		

* $p < .05$

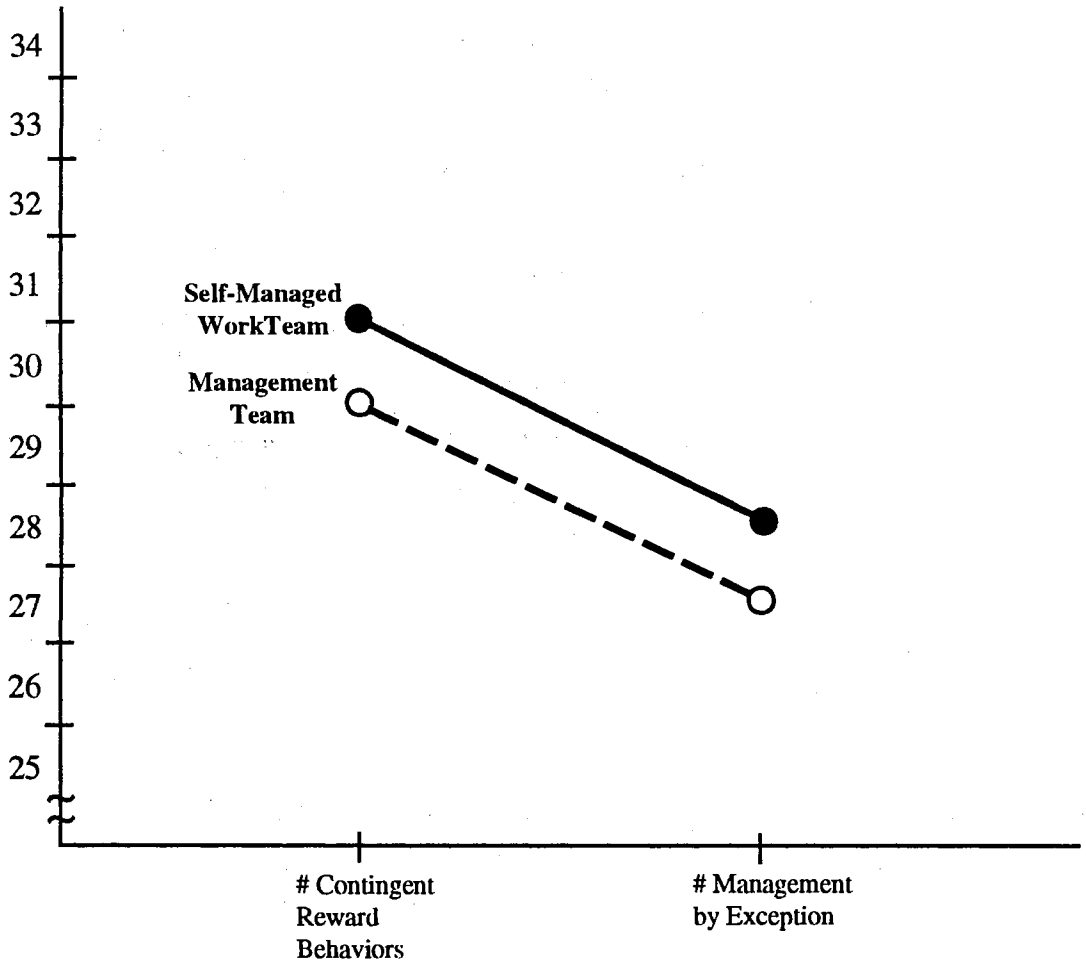

Figure 2. Transactional Leadership Behaviors Performed by Management Team and Self-Managed Work Team Members as Reported on the Multifactor Leadership Questionnaire

Transactional Leadership Document Analysis Results. Thirty-five of the newsletter articles described an activity or accomplishment of self-managed work team members. Only one transactional leadership behavior was found in these newsletter articles. There were no transactional leadership or transformational leadership behaviors identified in 10 of the newsletter articles which described an activity or accomplishment of self-managed work team members. Transformational

leadership behaviors appeared in twenty-four articles which described an activity or accomplishment of self-managed work team members.

The transactional leadership behavior of contingent reward appeared in one newsletter article which described self-managed work team member personal activities or accomplishments. There were no management by exception transactional leadership behaviors found in the newsletter articles which described self-managed work team member personal activities or accomplishments.

Thirteen of the newsletter articles were written by self-managed work team members to communicate general information. In the articles written by self-managed work team members to communicate general information, the transactional leadership behavior of contingent reward appeared in one newsletter article. There were 11 transformational leadership behaviors identified in the newsletter articles which were written by self-managed work team members to communicate general information. There were no transformational or transactional leadership behaviors identified in one newsletter article. Table IX provides a summary of the self-managed work team transactional leadership behaviors which appeared in the examined newsletter articles.

Sixteen newsletter articles described the activities or accomplishment of management team members. There were no transactional leadership behaviors identified in newsletter articles which described management team member's personal activities or accomplishments. Transformational leadership behaviors appeared seven times in these newsletter articles. There were no transactional or transformational leadership behaviors identified in nine of the newsletter articles describing the activities or accomplishments of management team members.

TABLE IX

SELF-MANAGED WORK TEAM MEMBER TRANSACTIONAL LEADERSHIP BEHAVIORS IDENTIFIED IN NEWSLETTER ARTICLES

Common Class Codes	# Contingent Reward Behaviors	Management by Exception	# Articles No Behaviors	# Transformational Behaviors	Total
Personal Activities/ Accomplishments	1	0	10	24	35
General Information	1	0	0	11	13

TABLE IX

SELF-MANAGED WORK TEAM MEMBER TRANSACTIONAL LEADERSHIP BEHAVIORS IDENTIFIED IN NEWSLETTER ARTICLES

Common Class Codes	# Contingent Reward Behaviors	Management by Exception	# Articles No Behaviors	# Transformational Behaviors	Total
Personal Activities/ Accomplishments	1	0	10	24	35
General Information	1	0	0	11	13

Twenty-eight of the newsletter articles were written by management team member to communicate general information. The transactional leadership behavior of contingent reward was identified in the two newsletter articles written by management members to communicate general information. The excerpt below provides an example of the contingent reward leadership behavior that appeared in the articles which were written by strategic team members to communicate general information. In this excerpt, a management team member modeled the contingent reward leadership behavior by identifying goals and praising for accomplishing goals.

> Employees at the X plant got off to a great start by beating the inspection yield stretch goal challenge for 1992.
>
> The previous 1991 goal was 94% inspection yield and the plant exceeded that mark only in February and December 1991. The 1992 goal support the corporate stretch. The employees ended the month of January with a remarkable 95.89% inspection yield. Not only did that beat the 1992 stretch goal, but it also set a new all time plant record. Naturally we had to celebrate with a cookout of "Joe's burgers and fowl thangs" along with the all the fixin's.
>
> The new challenge is to achieve a continuous average for a three month period above 95.5%. So far, it looks like February's numbers will beat the goal and we'll be working toward our third month above the average.
>
> Keep up the great work. We are making a difference in our corporate performance (25).

There were nineteen transformational leadership behaviors identified in the newsletter articles written by management team members to communicate general information. There were no transactional or transformational behaviors identified in seven newsletter articles written by management team members to communicate general information. Table X provides a summary of the management team member transactional leadership behaviors which appeared in the examined newsletter articles.

TABLE X

MANAGEMENT TEAM MEMBER TRANSACTIONAL LEADERSHIP BEHAVIORS
IDENTIFIED IN NEWSLETTER ARTICLES

Common Class Codes	# Contingent Reward Behaviors	Management by Exception	# Articles No Behaviors	# Transformational Behaviors	Total
Personal Activities/ Accomplishments	0	0	9	7	16
General Information	2	0	7	19	28

Transactional Leadership Focus Group Results. The focus group discussion data reported in this section indicated that the transactional leadership behavior of contingent reward was performed by both management team members and self-managed work team members. In contrast, it was reported that the transactional leadership behavior of management by exception was not performed by either management team members or self-managed work team members.

Contingent Reward

> Who in your organization clarifies task requirements and helps individuals set goals so that they may achieve the rewards that they desire?

The focus group question above was used to establish whether or not the transactional leadership behavior of contingent reward was performed by management team members and by self-managed work team members.

The majority of management team members and self-managed work team members who participated in the focus group discussion sessions indicated that there was no one individual who was responsible for clarifying task requirements in order for individuals to get the rewards they desired. What the majority of the management team members and self-managed work team members indicated was that tasks requirements were clarified by individuals at various team levels within the organization. For example, corporate headquarters provided direction for setting plant wide goals. Management team members then helped establish specific plant

goals, and self-managed work team members helped establish the means of achieving these goals. The self-managed work team members also worked with their development coordinator to determine the competencies they needed to perform their work. The following responses were reflective of the focus group participant responses.

> Corporate provides us help in determining what our goals should be, but not necessarily how to achieve them. We use what is called "stretch goals". It's a concept of where we will eliminate eighty percent of the nonconformances in five years or less. Instead of making incremental improvements, to make mega improvements (D-56).

> I would say the strategic team. Our production manger clarifies the task requirements. The coordinator sets the goals, but the teams organize their means of achieving the goals. And the reward is basically gainsharing. It's not one individual that does all this (K-36).

> Our development facilitator would actually come to me and say, what I needed to accomplish is this skill level, and what I need to learn and know to pass my test and all that (W-43).

The majority of the management team members and self-managed work team members indicated that there were no specific rewards associated with completing individual task requirements. The focus group participants explained that management team members participated in performance reviews while self-managed work team members participated in peer reviews. However, these reviews were not linked to individual rewards. The rewards for task requirements were primarily linked to team and plant wide gainsharing as opposed to individual rewards. For example, management team members frequently responded that self-managed work teams were often provided a meal as a celebration when they met goals or the self-managed work-team members were rewarded with increased decision making. The following responses were reflective of the focus groups participant opinions.

> "Individual" is a word that you won't hear often used here in terms of any reward or recognition (L-62).
>
> A lot of times it's very difficult for us to recognized an individual because there are so many people who have been a part of the job. So you will see more team level kinds of recognition than usually individuals (E-62).
>
> Some of the rewards as far as the teams is they get to make more decisions when they're pulling through and they're making the achievements and reaching the goals, then they get a little more privileges and a little more decision making responsibilities (F-60).
>
> If we meet a goal set by management, we hit that goal. "We'll say, well good job" by providing a meal like hamburgers or hot dogs (F-47).

Management By Exception

> Who in your organization intervenes only if standards are not met or if something goes wrong?

The focus group question above was used to establish whether or not the transactional leadership behavior of management by exception was performed by management team members and self-managed work team members.

The majority of management team members and self-managed work team members responded that no one individual would intervene only if problems arose or standards were not being met. What was most frequently reported by the focus group participants was that it was common for individuals at various team levels to intervene if they felt they could improve a processes. This was primarily because everyone in the organization was actively involved in continuous process improvement and it was common for members at various team levels to question processes.

However, there was a distinction made by the focus group participants

regarding the reasons that management team members or operating team members intervened. It was indicated that management team members on the strategic team typically intervened when the organizational policies or operating principles were being abused. Management team members on the tactical team members typically intervened when there were personality or discipline problems, while self-managed work team members most frequently intervened when there was a problem with work processes. Each focus group also indicated that if a serious problem arose, a quality investigation team was normally formed to investigate the problem. This quality investigation team was normally composed of individuals from each level in the organization. Responses reflective of the focus group participant responses included the following.

> I think the answer to that not only, but it's whoever observes that it's not meeting that. I mean, whether it's at an operating team level, or whether it's at a plant level or and individual level. If someone observes that a standard in not being met, then they would bring that up and make people aware of it (E-68).

> The operating team would stop the line if it's a process. They've gotten together even some problem solving sessions on the line in order to be able to start it up again (L-68).

> We don't have people that only show up whenever things go wrong (S-65).

> We have what we call quality investigations and that kind of stuff. If something happens out there that cost equipment or money of product, we have quality investigations from the teams and people from management, all areas can be involved in that (K-66).

> If any of the core beliefs are being abused, or operating principles, you'd probably have more chance of the strategic team members getting involved quicker, maybe again just for advice or as a resource for the tactical level (M-67).

> There could be personality conflicts. There could be performance problems, quality problems, safety issue, something that the team was not able to deal with successfully, then it's our responsibilities to intervene and work with the operating teams (X-68).

> It really depends on what standard is not being met. If it's in the area of conduct, then a tactical team member and a strategic team member, if it is along the lines or process it just depends on what department it is or different people that you have to answer to (K-48).

> There are individual on the line that are quality conscious. And if an individual or another department is not completing their job or doing their job just right and it affects another part of the line or department, and so they take it on themselves and go down to the a side of the line and say, 'You're not doing this just right; it's causing me problems down here.' So they kind of back and forth, they intervene at time to try to help the other person do their job or give them their opinion about how they're doing it (K-47).

Table XI summarizes the focus group participant responses and identifies the transactional leadership behaviors that were addressed by each focus group discussion question.

TABLE XI

FOCUS GROUP PARTICIPANT RESPONSES TO QUESTIONS ADDRESSING
TRANSACTIONAL LEADERSHIP BEHAVIORS

Leadership Behaviors & Focus Group Questions	Management Team Member Responses	Operating Team Member Responses
Contingent Reward Behavior: Who in your organization clarifies task requirements and helps individuals set goals so that they may achieve the rewards that they desire?	• Tasks requirements are clarified at various team levels • Goals reflect corporate headquarters, currently use 80% in Five years stretch goal • Performance reviews & peer reviews not tied to rewards • Gains sharing used in organization • Development coordinators mentioned. • Self-managed work team rewards associated with increased decision making & gains sharing. • Team recognition is used more than individual recognition. • All individuals do not have a clear understanding of performance expectations.	• Individuals at various team levels have role in clarifying task requirements. • Management team members clarifies task and monitor goals • Self-managed work team also involved in setting and monitoring goals. • Development facilitator instructs on competencies needed on the job using their competency based curriculum units
Management by Exception Behavior: Who in your organization intervenes only if standards are not met or if something goes wrong?	• No one would intervene only if standards are not being met • Individuals at all levels step in frequently to try and improve the process. • Strategic team intervene typically if operating principle is violated • Tactical team members intervene typically if personality, discipline, or housekeeping problems arose • Self-managed work team members intervene typically if process or personality problems arose.	• No one would intervene only if standards are not being met. • Individuals at various team levels would intervene if a problem arose. • Management team members would intervene if a policy was being abused or conduct was involved. • Self-managed team if process oriented • Quality investigation team

Transformational Leadership Behavior Results

Research Questions Two and Four

2. What transformational leadership behaviors are performed by management team members and by self-managed work team members?

4. What are the differences between the transformational leadership behaviors performed by management team members and the transformational leadership behaviors self-managed work team members?

Transformational Leadership Behavior Multifactor Leadership Questionnaire Results. A five-point rating scale was used for rating the frequency of leadership behaviors. To determine the frequency each leadership behavior was performed each rating anchor was assigned a point value. These anchor point values were: 1 = Not at all , 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, and 5 = Frequently, if not always. The possible point value for each transformational leadership behavior was: Charisma = 50 possible points, Inspiration = 35 possible points, Intellectual Stimulation = 50 possible points, and Individualized Consideration = 50 possible points.

To gather data regarding research question three, comparisons of the means were conducted by comparing the Multifactor Leadership Questionnaire means for each transformational leadership variable. A comparison of the means shows that the transformational leadership behavior most frequently performed by both management team members and self-managed team members was individual consideration (M=42.1 and M=36.1 respectively). The transformational leadership behavior reported as being performed the least both by management team members and self-managed work team members was inspirational leadership (M=27.1 and

M=23.0 respectively). Table XII displays the means and standard deviations of the management team member and self-managed work team member transformational leadership behaviors.

TABLE XII

MEANS AND STANDARD DEVIATIONS FOR TRANSFORMATIONAL LEADERSHIP ITEMS BY TEAM

TEAM LEVEL	TRANSFORMATIONAL LEADERSHIP VARIABLES							
Team	Charisma		Inspiration		Intellectual Stimulation		Individual Consideration	
	M	SD	M	SD	M	SD	M	SD
Self-Managed Work Team	34.4	6.48	23.0	4.80	32.8	7.26	36.1	6.75
Management Team	39.4	5.55	27.1	2.83	38.9	4.58	42.1	4.60

To establish whether or not there was a difference between the transformational leadership behaviors performed by management team members and by self-managed work team members, a split plot analysis of variance with unequal samples was performed. In this analysis, teams served as a between variable (self-managed work team and management team) while transformational leadership served as a repeated factor. The split plot analysis of variance indicated there were two significant main effects in the transformational leadership behaviors performed by management team members and self-managed work team members at the .05 significance level. A significant difference was detected for the main effects of:

organizational team level (F = 15.67, p <. 05), and the transformational leadership behaviors, (F = 11.09, p <. 05). There was no significant interaction effect between the transformational leadership behaviors for management team members and self-managed work team members. Table XIII displays the split plot analysis of variance results for the data on transformational leadership behaviors.

TABLE XIII

ANALYSIS OF VARIANCE SUMMARY TABLE FOR MANAGEMENT TEAM MEMBER AND SELF-MANAGED WORK TEAM MEMBER TRANSFORMATIONAL LEADERSHIP BEHAVIORS

Source	df	SS	MS	F Value	Pr > F
Team Level	1	2488.61434360	2488.61433436	15.67	0.0001 *
TF Behavior	155	24615.97482838	158.81274083	11.09	0.0001 *
TF X Level	3	59.92805852	19.97601951	1.40	0.2435
Error	3	6657.26620900	14.31670152		

* p < .05

The Tukey Studentized Range Distribution was utilized to locate the source of the significant main effect of transformational leadership behaviors. According to the Tukey procedure, there was a statistically significant difference across every transformational leadership behavior. According to the results of the Tukey, it appeared that management team members and self-managed work team member performed individual consideration significantly more frequently than they performed charisma, inspiration, and the intellectual stimulation transformational leadership

behaviors. In addition, the management team members and self-managed work team member performed the charismatic leadership behavior more than they performed the inspiration and intellectual stimulation leadership behaviors. Intellectual stimulation was reported as the third most frequently used behavior for both the management team members and self-managed work team members. The transformational leadership behavior of inspiration is performed significantly less than any other transformational leadership behavior. The results show in Table XIV were obtained from the Tukey procedure.

It should be noted that these results may be interpreted with confidence because the homogeneity of variance and homogeneity of covariance assumptions were met in the analysis for both the transformational leadership behaviors and transactional leadership behaviors.

TABLE XIV

TUKEY PROCEDURE RESULTS

Leadership Variable	q value	Pr > F
Individual Consideration - Inspiration	q(4,3) = 28.1	p < .01
Individual Consideration -Intellectual Stimulation	q(4,3) = 7.700005	p < .01
Charisma - Individual Consideration	q(4,3) = -4.900002	p < .01
Charisma - Inspiration	q(4,3) = 23.2	p < .01
Charisma - Intellectual Stimulation	q(4,3) = 2.800003	p < .01
Inspiration - Intellectual Stimulation	q(4,3) = -20.4	p < .01

Figure 3. illustrates the main effect differences graphically. As illustrated in the graph, the management team members reported that they performed every transformational leadership behavior more often than the self-managed work team members reported that they performed the transformational leadership behaviors.

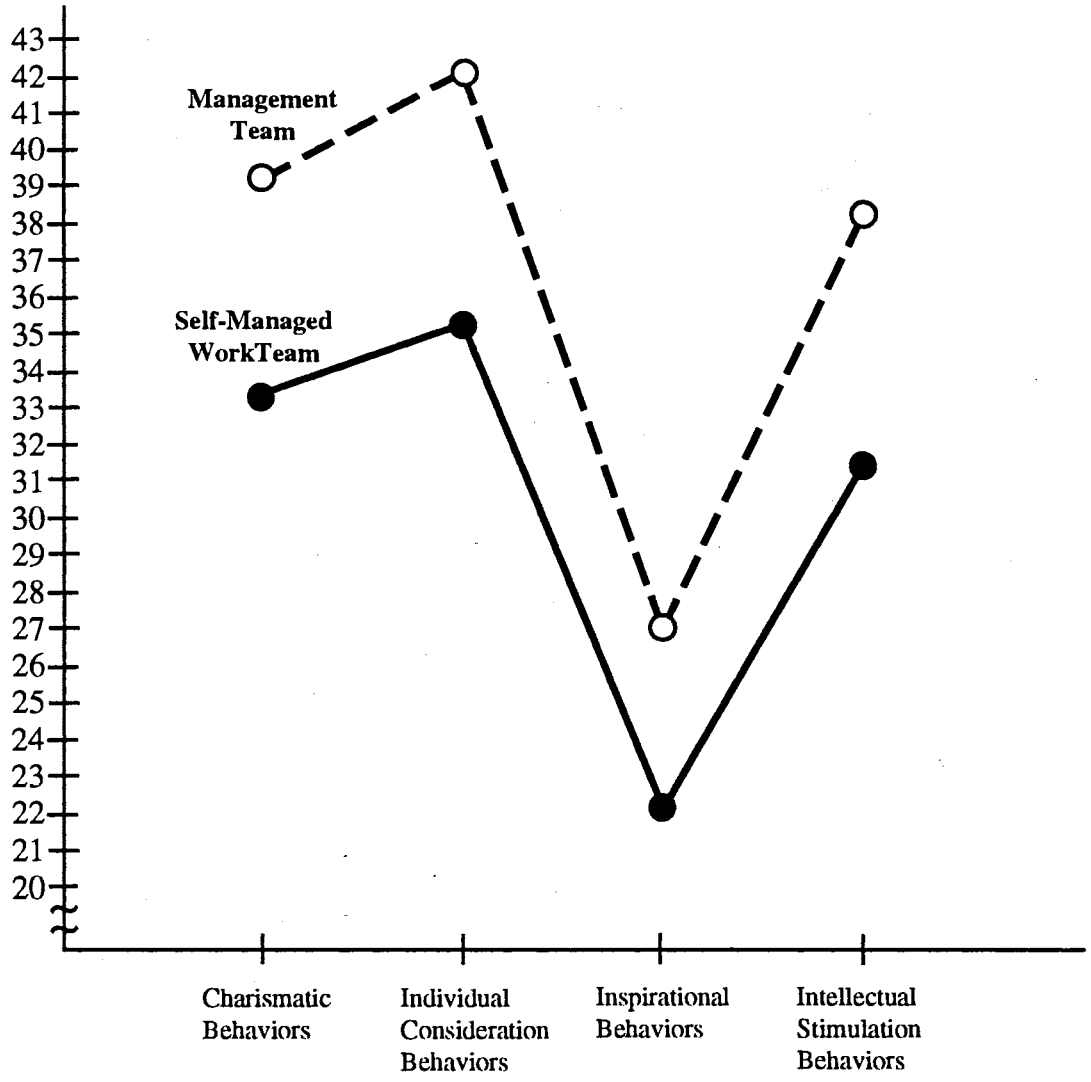

Figure 3. Transformational Leadership Behaviors Performed by Management Team and Self-Managed Work Team Members as Reported on the Multifactor Leadership Questionnaire

Transformational Leadership Document Analysis Results. Thirty-five of the newsletter articles described an activity or accomplishment of self-managed work team members. One transactional leadership behavior was identified in these newsletter articles. There were no transformational leadership behaviors or transactional leadership behaviors identified in 10 of the newsletter articles which described an activity or accomplishment of self-managed work team members.

The transformational leadership behavior which appeared most frequently in the 35 newsletter articles which described self-managed work team member personal activities or accomplishments was intellectual stimulation. Intellectual stimulation was identified in 18 of these newsletter articles. An example of a newsletter article in which an self-managed work team member modeled intellectual stimulation is presented below. In this excerpt, a self-managed work team member had modeled intellectual stimulation by using creativity and intelligence to solve a problem.

> X is known for improving a process when he/she can. This time is was the battery changing and washing area. When X was washing batteries, he/she noticed that the batteries always rolled to the back of the wash station. This made it difficult to retrieve the batteries when they were finished being washed. X knew he/she could solve this problem. X cut and installed a stop in the washing booth which now makes the job of retrieving the batteries safer and easier. But X did not stop there. X also installed steps on the end of the battery racks, making it easier and safer to exit the multi shifter when washing batteries (2).

The inspirational leadership behavior appeared in five newsletter articles which described self-managed work team member personal activities or accomplishments. The charismatic leadership behavior appeared in one of these newsletter articles.

Thirteen of the newsletter articles were written by self-managed work team members to communicate general information. As mentioned previously, one transactional leadership behavior was identified in the newsletter articles written by

self-managed work team members to communicate general information. The transformational leadership behavior which appeared the most frequently in these newsletters was individual consideration. The transformational leadership behavior of individual consideration appeared in seven of the newsletter articles written by self-managed team members to communicate general information. An example of the individual consideration transformational leadership behavior which appeared in the newsletter articles written by a self-managed work team member to communicate general information is presented in the excerpt below. In this excerpt, a self-managed work team member had modeled individual consideration by giving an expression of appreciation and making individuals feel valued and that their contributions are important.

> The dedication of "THE WALL" marks the end of one of the most spectacular, colossal events ever attempted by mere mortals. Not since World War II have so many owed so much to so few. The dedicated few gave so much work and sweat, and a Saturday of their time, to complete the mammoth mural. The mural is a larger that life rendition of the contest winning entry from the X Team. Thanks to V and X for their masterful job of outlining the mural. Their skills made the task of painting the mural much easier. The painting team, directed by Y and Z, gave their all to complete their mission (31).

Intellectual stimulation and inspirational behavior were the other transformational leadership behaviors which appeared in the newsletter articles written by self-managed work team members to communicate general information. Each of these transformational leadership behaviors appeared in two of the newsletter articles written by self-managed work team members to communicate general information. There were no transformational or transactional leadership behaviors identified in one of those articles. Table XV provides a summary of the self-managed work team member transformational leadership behaviors.

TABLE XV

SELF-MANAGED WORK TEAM MEMBER TRANSFORMATIONAL LEADERSHIP BEHAVIORS IDENTIFIED IN NEWSLETTER ARTICLES

Common Class Codes	# Intellectual Stimulation Behaviors	# Inspirational Behaviors	# Individual Consideration Behaviors	# Charismatic Behaviors	# Articles No Behaviors	# Transactional Behaviors	Total
Personal Activities/ Accomplishments	18	5	0	1	10	1	35
General Information	2	2	7	0	1	1	13

Sixteen of the newsletter articles described the activities or accomplishments of management team members. There were no transactional leadership behaviors identified in these newsletter articles. No transformational or transactional leadership behaviors appeared in nine of the newsletter articles which described management team members.

The transformational leadership behavior which appeared most frequently in the newsletter articles which described personal activities or accomplishments of management team members was intellectual stimulation. The intellectual stimulation leadership behavior appeared in four newsletter articles which described personal activities or accomplishments of the management team members. The inspirational leadership behavior appeared in three newsletter articles which described a personal activity or accomplishment of a management team member. The excerpt below provides an example of the inspirational leadership behavior that appeared in the articles which described a management team member personal activity or accomplishment. In this excerpt, a management team member modeled enthusiasm and expressed an important purpose.

> To understand the work of the X team, there is nothing better than "hands on" experience. I spent two weeks in December working in the X team, learning how our products are shipped.
>
> Since safety is the #1 priority, safety training and mobile equipment certification were the first steps needed. After completion, I moved on to various job skills.
>
> Customer satisfaction is the ultimate result of these efforts. Understanding the duties, gave me a greater appreciation for the balanced teamwork needed in the X to maintain the flow of finished goods to our customers (13).

Twenty-eight of the newsletter articles were written by management team members to communicate general information. There were two transactional

leadership behaviors which appeared in these newsletter articles. There were no transformational leadership or transactional leadership behaviors identified in seven of the newsletter articles written by management team members to communicate general information.

The transformational leadership behaviors which appeared the most frequently in these newsletters were individual consideration and intellectual stimulation. Individual consideration appeared in eight newsletter articles, while intellectual stimulation appeared six times in the newsletter articles written by management team members to communicate general information. The excerpt below provides an example of the intellectual stimulation leadership behaviors that appeared in the articles which were written by management team members communicate general information. In this excerpt, a management team member modeled intellectual stimulation by asking questions and provoking rethinking.

> What would you do if a chemical accident happen in your town?
>
> Do you know who to call? What radio station to tune-in? Your children are at home and a truck turns over, or chemical gas release happens in your neighborhood, do your children know what to do?
>
> This is where your Local Emergency Planning Community (LEPC) can help. The LEPC has published a flyer for your county (63).

Inspirational leadership behavior appeared three times in the newsletter articles written by management team members to communicate general information. The charismatic leadership behavior appeared two times in the newsletter articles written by management team members to communicate general information. The excerpt below provides an example of an inspirational leadership behavior that appeared in the newsletter articles which were written by a management team

member to communicate general information. In this excerpt, a management team member expressed an important purpose by using the organization's safety slogan as a symbol to focus efforts.

> We've come a long way in reducing the number and severity of injuries since our plant opened. The fact remains, however, that we're still having too many people injured. While we're happy that we have been able to avoid having serious injuries for quite a while, our objective is to eliminate ALL injuries. (Remember: Any injury is serious to the person who was injured!).
>
> One purpose of our 1993 awareness campaign is to help us eliminate the many small injuries we continue to experience. We realize that the more small injuries we have, the more potential we have of a much more severe injury. Now, to eliminate the small injuries, we've got to learn how to eliminate unsafe habits and conditions. Those unsafe habits and conditions, if not eliminated, will one day catch up with us and someone will be injured.
>
> Let's be safe -- all of us together -- one day at a time -- and have ZERO INJURIES TO PEOPLE TODAY -- all through the year (93)!

The excerpt below provides an example of the charismatic leadership behavior that appeared in the articles which were written by management team members to communicate general information. In this excerpt, a management team member modeled charismatic behavior by communicating a vision and a sense of mission.

> With the level of demands on each employee within the plant, it is imperative that we focus our energies on activities that support these key areas of emphasis. The single most important contribution we as the X plant can make to building the bridge to our future is to 'consistently exceed our financial objectives and customer requirements.'
>
> Each of us plays a vital role in our success and contribution to our corporate performance. Throughout 1993 let us encourage ourselves each and every day to be ready to answer the question, 'What have I done today to build the bridge to our plant's future?' As we progress throughout 1993 you will continue to hear how we are performing against the challenge that has been give to us. There is no challenge that together we cannot overcome (92).

Table XVI provides a summary of the management team member transformational leadership behaviors identified in the newsletter articles examined.

TABLE XVI

MANAGEMENT TEAM MEMBER TRANSFORMATIONAL
LEADERSHIP BEHAVIORS IDENTIFIED IN NEWSLETTER ARTICLES

Common Class Codes	# Intellectual Stimulation Behaviors	# Inspirational Behaviors	# Individual Consideration Behaviors	# Charismatic Behaviors	# Articles No Behaviors	# Transactional Behaviors	Total
Personal Activities/ Accomplishments	4	3	0	0	9	0	16
General Information	6	3	8	2	7	2	28

Figure 4. illustrates the frequency for which the transformational leadership behaviors appeared in the newsletter articles which described the self-managed work team member and management team member personal activities or accomplishments. Figure 5. illustrates the frequency for which the transformational leadership behaviors appeared in the newsletter articles written by self-managed work team members and management team members to communicate general information.

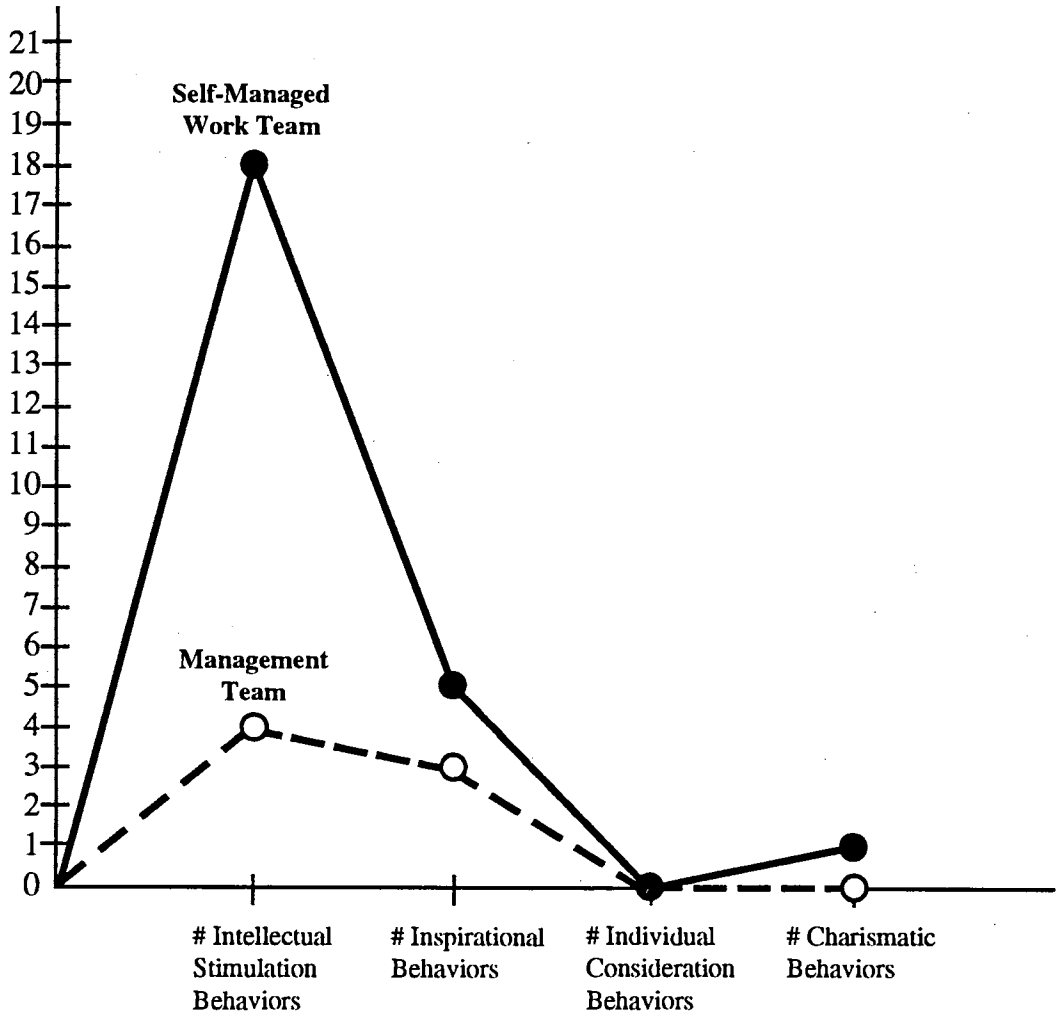

Figure 4. Management Team Member and Self-Managed Work Team Member Transformational Identified in Articles Describing Personal Activities or Accomplishments

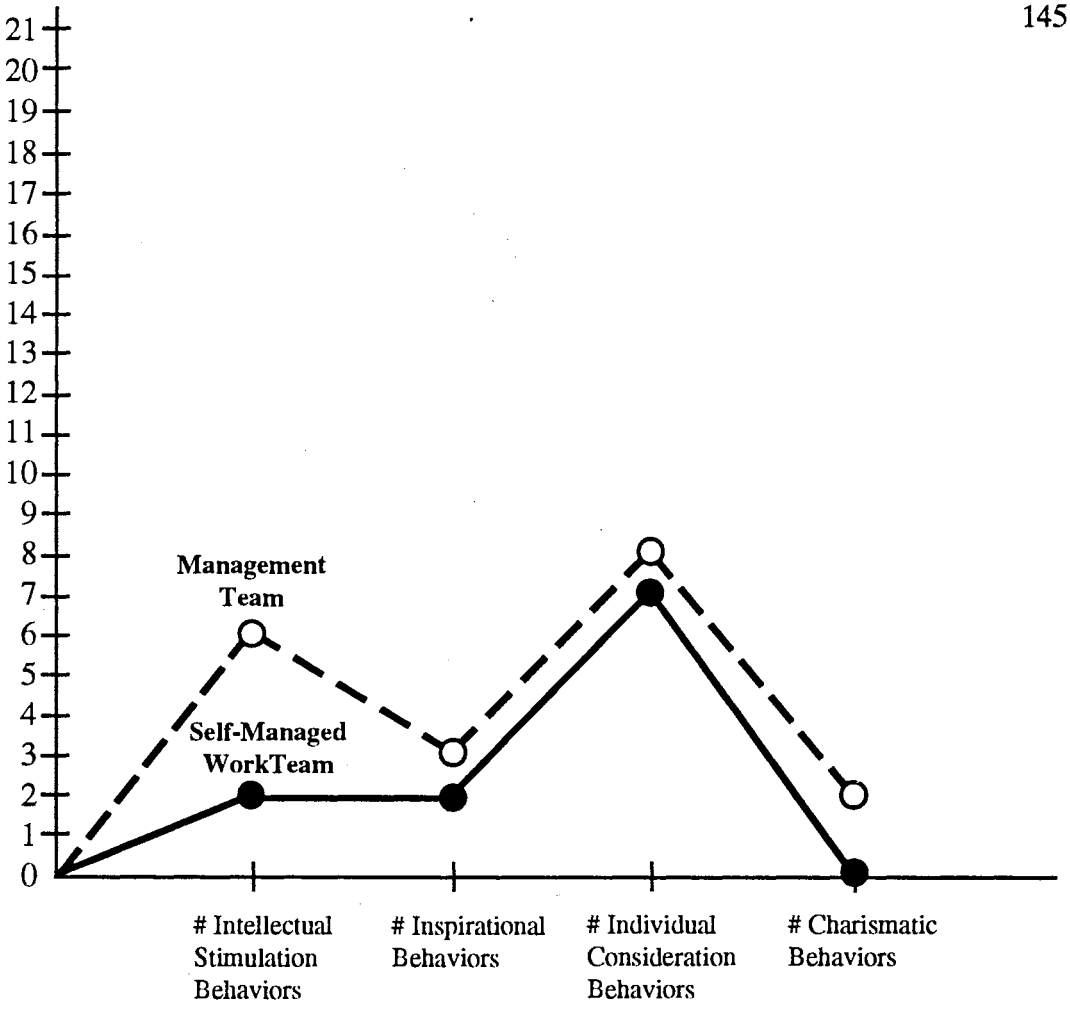

Figure 5. Management Team Member and Self-Managed Work Team Member Transformational Identified in Articles Communicating General Information

Transformational Leadership Focus Group Results. The results the focus group discussion sessions presented in this section indicated that transformational leadership behaviors were performed by both management team members and self-managed work team members. The transformational leadership behaviors performed by both management team members and self-managed work team members included: 1) charismatic leadership behaviors, 2) inspirational leadership behaviors, 3) intellectual stimulation leadership behaviors, and 4) individual consideration leadership behaviors.

Charisma

Who has a vision that you share in the organization?

The focus group question above was used to establish whether or not the transformational leadership behavior of charisma was performed by management team members and self-managed work team members.

The majority of the management team members and self-managed work team members responded that there was no one individual who had a vision that they shared for the organization. What was most frequently indicated was that there were many individuals at each level in the organization who had a vision that they shared. It was also frequently reported by the focus group participants that the organization's vision was promoted throughout the organization. The majority of the focus group discussion participants further reported that there were individuals at various team levels in the organization in whom they had trust and confidence. The following comments were reflective of the focus group participant responses.

> I don't think an individual has a vision. It's the plant. We all helped develop our vision" (U-17).

> My answer to your question, "Who has a vision that we share?" I would say we do. By we, I mean the 207 people who work here. We may have a different level of understanding of what it means depending on our involvement, but I think we all have a vision (T-22).

Management team members frequently reported that they promoted the organization's vision by reducing it and the operating principles to day-to-day practices, while the self-managed work team members were reported as promoting the organization's vision by demonstrating ownership in the vision and by using the

operating principles to guide their work. This belief was supported by comments made by both management team members and self-managed work team members. Comments which were reflective of the focus group participants' responses included:

> What is really interesting to see the operating teams in action. For instance, we use operating team people in the interviewing process for new employees, and they are actually interviewing, selecting, and hiring the people they're going to be working with. And they get up in preemployement meeting, and they explain how this plant operates and what the operating principles mean. And frankly, they do a better job that any of us could ever do in telling these potential new employees what the expectations are going to be of them (F-25).

> We and tactical team members get day-to-day questions on our operating principles. "What does this mean with respect to vacation today or overtime." So we're out there trying to take the vision and help reduce it to day-to-day practices and really have a set of expectations that people can live by and know and understand so that we really don't have to have a whole lot of rules and regulations and policies (Q-15).

> The organization's vision was instilled in me when I got hired. I was told that I'm not just a person working underneath an individual, but I am a person working with other individuals underneath an organization, basically to all have the same focal point and share the same goals and same concepts. I try to carry that concept on today with my peers (J-9).

> In the early days, everybody didn't have a full understanding of the process. Even though the self-managed team were being instilled and promoted, we were very much top down driven. Today, it's more bottom up driven by far more than what it was when we began (X-15).
>
> You see a number of people rise to the occasion at different times for different reasons to help. And it's not always the same person (Q-28).

It was also frequently mentioned by some management team members and some self-managed work team members that the management team members who originally started the plant had a vision that they shared. In addition, management team members and self-managed work team members indicated that the organization was in a period of transition because there were several new members were currently to adjusting to the self-managed team concept. The following comments were reflective of the management team member and self-managed work team member responses.

> I think the management team, has gone through a big change, and they have a lot of new members, so they're not quite sure which way this plant should go (T-16).
>
> I'd say periodically teams go through changes, and I just feel like management right now is going through change. They've had turnovers and things like that and it takes a while to get everyone accustom to this climate (D-15).

Inspiration

Who increases your optimism and enthusiasm for your work?

The focus group question above was used to establish whether or not the transformational leadership behavior of inspiration was performed by management team members and self-managed work team members.

According to the management team member and self-managed work team

member responses inspirational transformational leadership behavior was performed by both management team members and self-managed work team members. What the management team members and self-managed work team members indicated was that there were individuals at various team levels in organization who increased their optimism and enthusiasm for their work.

The primary difference in the management team member and self-managed work team member responses was how their optimism and enthusiasm was increased. For example, the management members frequently reported that their optimism and enthusiasm was increased by watching operating team members achieve their goals. The management team members also reported that other management team members used strategies such as "emotional bank deposits" and "reality talking" to increase organizational members' optimism and enthusiasm for their work. Additionally, the management team members reported that their optimism and enthusiasm was increased by the support they were given by other management team members and self-managed work team members. The following comments were reflective of the management team member opinions.

> The most enthusiasm I would get would very definitely be coming from one direction and that would be the operating teams rather than from peers. There is absolutely nothing in this world that generates more enthusiasm that seeing the things that you believed were possible happening at the operating team level. And having people challenge you every single day to go the next step, to be in the position of following rather than leading and realizing that if you're not careful, "Boy, you're going to slow this thing down (T-32)."

> Reality talking takes place during the week with department manager's team meetings and at the plant manager's quarterly meetings. During this time the plant manager presents the facts and maybe draws some conclusions around those or ask the team to draw some conclusions around those. He doesn't say, "Let's go out there and really work hard," but shares information about any subject, from new product development to issues that have come up through employee surveys, and "Just here's what it is." Not right or wrong, good or bad (J-34).

> Using this concept we'll sit around in meetings a make emotional deposits by saying something good about the people in the room to the point where we consciously try to be positive rather than negative (T-35).

> Things like mutual support and helping each other, you'll really get that here. I know that I have the support to keep going from the strategic team folks above me, from the operational team that I work with all around the plant and from others on the tactical team. We're just headed for the same destination. We might have different ideas from time to time, but at least we still help each other get there (T-30).

Although the self-managed work team members identified members at various team levels in the organization who increased their optimism and enthusiasm, they most frequently mentioned that other self-managed work team members increased their optimism and enthusiasm for their work. The self-managed work team members reported that their optimism and enthusiasm was frequently increased when other self-managed work team members complimented them on their performance, built their confidence, and worked together and accomplished mutually shared goals. The self-managed work team members also reported that current and previous management team members also increased their optimism and enthusiasm by making them feel that they were important to the organization and involving them in decision making. Gainsharing was also reported as currently increasing self-managed work team members' optimism and enthusiasm for their work. The following comments were reflective of the self-managed work team member responses.

> We create that optimism more or less by good comments. A pat on the back and working together effectively, getting the job done right. It seems to me that the better job we do, the more our optimism increases. I get kind of enthused whenever things are going real well and we're able to accomplish all these task and keep up with production (K-18).

> He/She would come to our meetings and make you feel good about your job. He/she made you feel like you were someone who was important to this outfit (E-17).

> When I was first hired my enthusiasm and optimism was created by the feeling that we the teams, had ownership and were involved in decision making, but currently we are less involved in decision making. So we have turned to gainsharing as a way the generate our enthusiasm (K-18).

Intellectual Stimulation

> Who encourages you to look at the methods you use to perform your work in new ways?

The focus group question above was used to establish whether or not the transformational leadership behavior of intellectual stimulation was performed by management team members and self-managed work team members.

The majority of the management team member and self-managed work team member responses indicated that the transformational leadership behavior of intellectual stimulation was performed by both management team members and by self-managed work team members. However, the self-managed work team was the group most frequently mentioned as the group as encouraging other members to look at their work methods in new ways. The following comments were reflective of the focus group participant responses.

> I think it's the operational teams for me. Because if you try to just do the standard old operational things, whatever everybody else is doing, they'll call you on it and say, "Why are you doing what your doing?" If you're going to give them a legitimate answer, you have to back off and think about what you're doing and why you're doing it, and is there a better way to do it. And if you don't think of it pretty soon, one of them will suggest something to you, which is the way it ought to be (S-34).

> Operating team members are not afraid to come up with ideas. they have no fear of talking about a new idea. They're not going to be shot down or laughed at (X-43).

> The strategic team cuts me loose and says, do whatever I feel like that needs to be done to get my job accomplished. The operational teams are the ones that are coming up with the ideas. I just sort of mesh it together and let it come out and it makes the whole organization look better (S-34).

> At the operating team level every line is more or less a supplier or a customer to the next line and we have to meet their needs. And we also have wholesalers that are our customers, and if they're having problems with the way we're loading their material or if there is damage, we have to see what type of process we can do to correct the errors and stuff. And the same thing goes with our suppliers. If the suppliers bring things over that create more work, we try to work that out (E-31).

> On a day-to-day basis, in terms of doing work differently or doing it in new ways, it could be a person who is on a piece of equipment on the line and a technician saying, you know, if we do 1,2,3, that's going to help this thing work, and we'll have to do less manual work and the machine will do more for us. And I'd hate to try and count how often that goes on. That is just continuous from my perspective (Q-39).

In addition, each focus group also indicated that having support and resources encouraged them to look at the methods that they used to perform their work in new ways. For example, the management team members responded that special purpose teams and the statistical process improvement and continuous process improvement techniques encouraged them look at the methods they used to perform their work in new ways. Additionally, it was frequently reported that other management team members encouraged them to look at the methods that they used to perform their work in new ways with their supporting attitudes and the training they provided. Similarly, the self-managed work team members also frequently reported that management team members encouraged them to look at the methods that they used in new ways by providing them support and resources. The self-managed work team members also frequently reported that other self-managed work team members encouraged them to look at the methods they used to perform their work in new ways by encouraging problem solving. The following comments were made by the focus group participants.

> In almost all of our meeting we use different techniques such as brainstorming types of techniques, the basic tools of problem solving, cause and effect, manpower, materials, machines. I think we all use those basic techniques as they're appropriate (L-41).

> A lot of the process improvement efforts are cross functional. For example, take a production opportunity where they are trying to achieve a certain objective. They need resources beyond the people that are directly a part of their team. The many need maintenance resources, engineering resources, industrial engineering or they may need training. So they'll pull a team of people together and write a QIP, a quality improvement plan. The quality improvement plan will identify where they are, where they need to be and the things that they're going to have to do to get there and the various resources that will be required (L-43).
>
> There is also a form called a process change form that one person can initiate that says basically, "Here is a change I think we ought to make in the process (K-39)."
>
> Lots of training goes on here. Give the people the right training tools. And you can say, here's the goals and here's the tools to get there, and let them go at it (F-41).
>
> One of the things that was originally done were open meeting with people on the floor. People could just come into the room and the teams could ask the plant manager any questions they wanted to ask, and nothing was out of bounds. So it kind of gave them the sense that, "Yeah my thoughts do count, my opinions are important." So now it's just pretty much common place (G-43).
>
> Operating team members are not afraid to come up with ideas. They have no fear of talking about a new idea. They're not going to be shot down or laughed at (X-43).
>
> We have performance facilitator that are on our operating teams. They deal strictly with performance, performance objectives, goals, looking at better ways, and they're involved in process improvement teams. These facilitators are always talking with us and encouraging us to look at the methods and they're working with us, saying hey, what can we do to make this better, what can we do to make this machine work better, or this process work more effectively (K-27).

Individual Consideration

> Who in your organization makes individuals feel valued and that their individual contributions are important?

The focus group question above was used to establish whether or not the transformational leadership behavior of individual consideration was performed by management team members or self-managed work team members.

The majority of management team members and self-managed work team members who participated in the focus group discussion sessions responded that there were individuals at various team levels in the organization who made members feel valued and that their individual contributions were important. The focus group

participants also frequently emphasized that team recognition was used more than individual recognition in their organization. The following comments were reflective of the focus group participant responses.

> The tactical team coordinators do a lot of that. Also I think at the team level (D-34).
>
> As far a feeling valued, I would say that management has a lot to do with it. I have never once walked in or out of this place and have passed a strategic team member or a tactical team member who hasn't had a smile on his\her face or hasn't stopped to talk to me a minute to see how things were. Just like individual contributions are important, making me feel valued (K-36).
>
> There is one thing we do here that I think makes people feel valued, and it doesn't relate to the manufacturing process or anything else, but that is getting to know each other. And that is I can go to X and ask how his daughter is doing, or anybody on the line and know their families, often know how many kids they have, and what their kids do or if they're married or whatever, and that is something I've seen that is unique to this plant. And I think that gives everybody their great basic sense of value here as a person just knowing each other (L-44).
>
> We had a situation just this week where one individual in the maintenance group who is what we call a stores administrator was in there this week in the absence of three administrators who are normally there. And if you look at the electronic mail system, there are three or four messages from peers, from operational peers complimenting her on what a fine job she did, making her feel important, making an emotional deposit. It doesn't have to come from us. It comes from all levels (T-45).
>
> I think what you're hearing from us is that there aren't individual stars here that people are looking to. We get it from a variety of sources, especially from the bottom up (D-45).

The management team members also frequently responded that organizational members at various team levels served as coaches and advisors. In contrast, the self-managed work team members most frequently responded that management team members on the tactical team members and other self-managed work team members served as coaches or advisors. The following comments were reflective the focus group participant responses.

> As tactical team members, our goal is to be a coach and that's what you try to do. And of course you are a resource for anything they need, equipment, training, whatever, to try to provide that (K-53).

> Everybody has a function which at sometime or another, they do, they serve as a coach or advisor. Somebody working with a new employee, two people that have been here for years working together, but they've had different learning experiences, so they coach or share with each other. So everybody at one time or another has the opportunity, not necessarily officially but as part of their work role, they'll do that (S-52).

> Any time the light's on and the doors unlocked, there is somebody the strategic team members' offices. There is a tremendous amount of communication that's required, I think, in our organization to allow us to be effective (F-51).

> As far as coaching in the way of your job, your team members at the operating team level do that. People that have done it and are more experienced (D-39).

Management team members reported that they believed individuals were made to feel valued by getting to know all employees as individuals, using emotional bank deposits, and through the Plant Recognition Awareness Team. Additionally, it was reported by management team members that individuals were made to feel valued and that their contributions were important by providing team celebrations and giving special assignments to demonstrate their confidence. Similarly, the self-managed work team members also frequently indicated that individual were made to feel that they were valued by stopping to speak, discussing the results of their action, through celebrations when they reach goals, and the Plant Recognition Awareness Team. Additionally, the self-managed work team members responded frequently that individuals were made to feel valued and that their individual contributions were important by providing them support for their ideas, sharing work, and being involved in decision making. The following comments were reflective of the focus group participant responses.

> There is one thing we do here that I think makes people feel valued, and it doesn't relate to the manufacturing process or anything else, but that is getting to know each

other. And that is I can go to X and ask how his daughter is doing, or anybody on the line and know their families, often know how many kids they have, and what their kids do or if they're married or whatever, and that is something I've seen that is unique to this plant. And I think that gives everybody their great basic sense of value here as a person just knowing each other (L-45).

The PRAT is our plant recognition process where operating team can nominate individuals within their team to be recognized for any particular reason that the team feels is important and then those recommendations are forwarded to the PRAT committee which reviews those for either plant level recognition or team level recognition. This information is then publicized throughout the plant. We have an EBBR, electronic bulletin board that we list the names of the individuals that have been recognized (G-46).

If we meet a goal set by management, we hit that goal, we'll say, well good job by providing a meal like hamburgers or hot dogs (F-47).

I think a lot of times when you ask people to take on assignments, and sometimes in production when you ask someone to take on a special assignment and they have to do their job plus they have to do that, too, that you're showing confidence that they can do it (K-45).

As far a feeling valued, I would say that upper management has a lot to do with it. I have never once walked in or out of this place and have passed a strategic team member or a tactical team member who hasn't had a smile on his\her face or hasn't stopped to talk to me a minute to see how things were. Just like individual contributions are important, making me feel valued (K-36).

When team members ask you to help make decisions it makes you feel like they respect what you think and that you're important and also asking you to help them with their work when they get in a jam. It makes you feel, "Hey, you're a part of them, a part of the team (H-32)."

If I have an idea or if I do something differently, my team members will support me and try to implement my idea. And if it works they say, "Hey, that's a good idea." Kind of makes you feel like you're doing something right. It's going to not only benefit you but benefit the whole team, especially if you come up with something that makes the job easier or better. Just verbally say, "You've done a good job." There are only a few individuals that do that, but that few makes it go a long way (K-32).

Table XVII summarizes the focus group participant responses and identifies the transformational leadership behaviors that each focus group discussion question addressed.

TABLE XVII

FOCUS GROUP PARTICIPANT RESPONSE SUMMARY TO QUESTIONS ADDRESSING TRANSFORMATIONAL LEADERSHIP BEHAVIORS

Leadership Behaviors & Focus Group Questions	Management Team Member Responses	Self-Managed Work Team Member Responses
Charismatic Behavior: Who has a vision that you share for the organization?	• Share & promoted at all levels • Management team members reduces to day-to-day practices • Openly promoted by using vision • Trust & confidence at all levels • Current and previous management team members • Transition • Self-managed team members promoted through ownership	• Shared & promoted at all levels • Current & previous management team members • Transition • Respect & confidence for operating, current and previous management team members
Inspirational Behavior: Who in you organization increases you optimism and enthusiasm for your work?	• Increased by individuals at all levels • Self-Managed work team members by implementing the concept • Plant manager on management team members by reality talking • Encouragement through emotional bank accounts • Increased at various team levels • Increased through support sharing the same goals	• Other self-managed work team members by complimenting them on performance, accomplishing mutually shared goals, & building confidence. • Current & previous management team members by making individuals feel important to organization & involving them in decision making. • Gains sharing
Intellectual Stimulation Behavior: Who in your organization encourages you to look at the methods that you use to perform your work in new ways?	• Promoted by individuals at all levels • Process improvement team, cross functional teams & issues committee • Intelligence promoted using statistical process improvement, continuous process improvement, QIP tools • Self-managed work team members challenge processes & generate ideas • Management team members attitude that opinions are important & training	• Self-managed team members encourage problem solving • Management team members through support
Individual Consideration Behavior: Who in your organization makes individuals feel valued and that their individual contributions are important?	• Promoted by individuals at various team levels • Promoted by getting to know each other • Plant Recognition & Awareness Team • Individuals at various team levels serve as a coach and advisor. • Management team members provide celebrations, giving assignments	• Self-managed team members training & providing support for ideas, sharing work & decision making • Management team by stopping to speak, involving in decision making, see the results of your action • Self-managed & tactical team members serve as a coach and advisor

Chapter Summary

The results of the study were tabulated and reported in this chapter. The chapter was presented in five sections. First, the research questions which guided the study were presented. Second, an introduction to data collection methods was presented. These data collection methods included the Multifactor Leadership Questionnaire, newsletter article document analysis, and focus groups discussions. Third, data collected pertaining to transactional leadership behaviors were presented. Fourth, data collected which pertaining to the transformational leadership behaviors were presented. A chapter summary was then presented with major findings. The major findings from each data collection method were the following.

Transformational Leadership Behaviors

Multifactor Leadership Questionnaire Results

1. Multifactor Leadership Questionnaire results indicated that the contingent reward and management by exception transactional leadership behaviors were performed by both management team members and self-managed work team members. The self-managed work team members reported that they performed both the contingent reward and management by exception leadership behaviors more frequently than the management team members reported performing these behaviors. A comparison of the means also indicated that the contingent reward leadership behavior was performed the most frequently by both the management team members and self-managed work team members. However, this difference was not significant.

2. There was one significant main effect difference the between the contingent reward and management by exception transactional leadership behaviors. It appeared that both the management team members and the self-managed work team members performed the

contingent reward transactional leadership behavior more than they performed the management by exception transactional leadership behavior.

Document Analysis Results

1. The transactional leadership behavior of contingent reward appeared in one newsletter article written by self-managed work team members to communicate general information. Management by exception did not appear in any of these newsletters articles.

2. There were no transactional leadership behaviors in the newsletter articles describing management team members personal activities or accomplishments.

3. The only transactional leadership behavior which appeared by the management team members to communicated general information was contingent reward.

Focus Group Results

1. Focus group data indicated that the transactional leadership behavior of contingent reward was performed by both management team members and self-managed work team members. Task clarification occurs at various team levels in the organization. Corporate headquarters set overall goals, management team members developed plant goals and self-managed work team members helped develop implementation strategies. There are self-managed work team members who serve as development facilitator at the team level to assist with skill development. There are no individual rewards for achieving tasks requirements. The rewards focus on team and plant accomplishments such as gainsharing, plant celebrations, and in some instances increased decision making.

2. Focus group data indicated that the transactional leadership behavior of management by exception was not performed by management team members or by self-managed work team members. It would not be typical for any team member to wait until a problem occurred before intervening. The organization utilized statistical process control and continuous process improvement methods to regularly improve work methods. Strategic team members address policy violations, tactical team members typically address personality

or discipline problems, while operating team members typically address work processes. Quality investigation teams are also used.

Transformational Leadership Behaviors

Multifactor Leadership Questionnaire Results

1. The transformational leadership behavior most frequently reported as performed by both management team members and self-managed team members was individual consideration, while inspirational leadership behavior was reported the least performed by both management team members and self-managed work team members.

2. There was a significant difference in the transformational leadership behaviors performed by management team members and self-managed work team members. A significant difference was detected for both main effects: organizational team level and between each transformational leadership behavior. The management team members reported that they performed every transformational leadership behavior more often than the self-managed work team members reported that they performed each transformational leadership behavior.

Document Analysis Results

1. The transformational leadership behavior which appeared most frequently in the newsletter articles which described the self-managed work team members' personal activities or accomplishments was intellectual stimulation.

2. The transformational leadership behavior that appeared most frequently in the newsletter articles written by self-managed work team members to communicate general information was individual consideration.

3. The transformational leadership behavior which appeared the most frequently in the newsletter articles which described management team member personal activities or accomplishments was intellectual stimulation.

4. The transformational leadership behavior which appeared the most frequently in the newsletter articles written by management team members to communicate general information was individual consideration.

Focus Group Results

1. Focus group data indicated that the transformational leadership behavior of charisma was performed by both management team members and self-managed work team members. There were individuals at various team levels of the organization who shared and promoted a vision similar to the focus group participants. Management team members were reported as promoting the organization's vision by reducing it to its day-to-day practices, while self-managed work team members were reported as promoting the vision by demonstrating ownership in the vision through their actions.

2. Focus group data indicated that the transformational leadership behavior of inspiration was performed by both management team members and self-managed work team members. Management team members were reported as demonstrating inspirational behavior by increasing optimism and enthusiasm by using reality talking and emotional bank deposits. It was also reported that management team members increased optimism and enthusiasm by supporting team members throughout the organization by providing resources, training and recognition of accomplishments. Self-managed work team members demonstrate inspirational behavior by building other team members confidence, working together to achieve goals, and complimenting other team members about their performance.

3. Focus group data indicated that the transformational leadership behavior of intellectual stimulation is performed by both management team members and self-managed work team members. Management team members performed intellectual stimulation leadership behaviors by providing support and resources and by demonstrating and encouraging the use of statistical process control and continuous process improvement techniques and other problem solving methods. Self-managed work team members performed intellectual stimulation leadership behaviors by demonstrating and encouraging the use of creativity and problem solving and questioning.

4. Focus group data indicated that the transformational leadership behavior of individual consideration was performed by both management team members and self-managed work team members. Management team members performed individual consideration by

demonstrating to individuals that their contributions were important, getting to know individuals throughout the organization, using the plant recognition processes, providing celebrations, and giving special assignments. Self-managed work team members performed individual consideration by demonstrating support and confidence in others by sharing work, decision making and using the plant recognition process.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains three parts. First, a summary of the study is presented. Conclusions are then presented based on the findings of the study. Third, the recommendations are presented for application and future research.

Summary

The purpose of this study was to identify the transformational leadership behaviors and the transactional leadership behaviors performed by management team members and self-managed work team members. A case study method was used to provide a description of the transformational leadership behaviors and transactional leadership behaviors performed by management team members and self-managed work team members in one organization. Three methods of data collection were used to cross validate the findings. The employee scores on the Multifactor Leadership Questionnaire Self-Rater Form were cross validated with data gathered from focus group discussion data of management team members and self-managed

work team members. In addition, a document data analysis of organizational newsletters was conducted. The research questions were the following.

1. What transactional leadership behaviors are performed by management team members and performed by self-managed work team members?

2. What transformational leadership behaviors are performed by management team members and performed by self-managed work team members?

3. What are the differences between the transactional leadership behaviors performed by management team members and the transactional leadership behaviors performed by self-managed work team members?

4. What are the differences between the transformational leadership behaviors performed by management team members and the transformational leadership performed behaviors by self-managed work team members?

Transactional Leadership Behaviors Performed by Management Team Members and Self-Managed Work Team Members

The data from the Multifactor Leadership Questionnaire indicated that the transactional leadership behaviors of contingent reward and management by

exception were performed by both management team members and self-managed work team members. However, there was a significant main effect difference between the contingent reward and management by exception transactional leadership behaviors. The management team members and self-managed work team members performed the contingent reward transactional leadership behavior more than they performed the management by exception transactional leadership behavior. Data from the focus groups and document analysis also supported this finding.

Focus group data indicated that the transactional leadership behavior of contingent reward was performed by both management team members and self-managed work team members. Task clarification occurred at various team levels within the organization. Corporate headquarters set overall goals, management team members developed organizational goals and self-managed work team members helped to develop production and implementation strategies. There were also self-managed work team members who served as development facilitator at the self-managed work team level to assist team members with skill development. It is important to note, however, that there were no individual rewards for achieving task requirements. The rewards focused on team or organization wide accomplishments such as gainsharing or organizational celebrations, and in some instances increased decision making.

The focus group data did not indicate that the transactional leadership behavior of management by exception was performed by management team members or self-managed work team members. What was most frequently reported was that organizational members did not wait until a problem occurred before they intervened. It was common for organizational members to intervene in order to

improve work methods. They frequently reported utilizing statistical process control and continuous process improvement methods to regularly improve work methods. If major problems occurred, management team members on the strategic team member would typically address policy violations, while management team members on the tactical team members would typically address personality or discipline problems. Self-managed work team members would typically intervene to improve work processes. Quality investigation teams were also frequently assembled to address problems within the organization

Transformational Leadership Behaviors Performed by Management Team Members and Self-Managed Work Team Members

All four transformational leadership behaviors identified by Bass (1985) were performed by both the management team members and by the self-managed work team members. Additionally, the results of the analysis of variance suggested that there was a statistically significant difference between the transformational leadership behaviors performed by both management team members and self-managed work team members. The results were that management team members performed each transformational leadership behavior more than the self-managed work team members performed each transformational leadership behavior.

There was also a main effect for the transformational leadership behaviors performed by the management team members and self-managed work team members. According to results of the split plot analysis of variance, both

management team members and self-managed work team members performed individual consideration significantly more frequently than they performed charisma, inspiration, and intellectual stimulation. Further, the management team members and self-managed work team members performed the charismatic leadership behavior more than they performed the inspirational and intellectually stimulating behaviors. Intellectual stimulation was reported third most frequently by both the management team members and self-managed work team members. The transformational leadership behavior of inspiration was performed significantly less than any other transformational leadership behavior, as reported on the Multifactor Leadership Questionnaire.

The finding that individual consideration was performed most frequently was also supported by the analysis of the newsletter articles which were written by management team members and written by self-managed work team members to communicate general information and the findings from the focus group data. It was reported in the focus group discussion sessions that management team members performed individual consideration by demonstrating to individuals that their contributions are important and by getting to know individuals throughout the organization. In addition, management team members used the organizational recognition process, provided team celebrations, and gave special assignments to organizational members to promote individual consideration. Similarly, it was reported that self-managed work team members performed individual consideration by demonstrating support and confidence in others, by sharing work, by involving others in decision making, and using the organizational recognition process.

Charisma was the second most frequently reported transformational

leadership behavior that the management team members and self-managed work team members reported performing. The findings from the Multifactor Leadership Questionnaire and the document data analysis both suggested that charismatic leadership was performed more by management team members than by self-managed work team members. Additionally, it was reported in the focus group data that management team members performed charismatic leadership by using techniques such as promoting the organization's vision by reducing the vision to its day-to-day practices, while self-managed work team members were reported as promoting the vision by demonstrating ownership in the vision through their actions.

Inspirational leadership was the least performed transformational leadership behavior performed by management team members and self-managed work team members, based upon the scores on the Multifactor Leadership Questionnaire. There were data, however, that suggested that the management team members and self-managed work team members did perform the transformational leadership behavior of inspiration. For example, management team members were reported as demonstrating inspirational behavior by increasing optimism and enthusiasm via techniques such as reality talking and making emotional bank deposits. Management team members also performed the inspirational behavior by providing resources, training, and recognition of accomplishments. Similarly, self-managed work team members demonstrated inspirational behavior by building confidence in other team members, working together to achieve goals, and complimenting the performance of other team members. Data from the newsletter document analysis also suggested that symbols were used to focus efforts, like the wall mural which symbolized team work and the color and sign symbols that were used to instill safety practices.

Intellectual stimulation was found to be the most frequently performed transformational leadership behavior, based upon the document data analysis of the newsletters describing management team member and self-managed work team member personal activities or accomplishments. In contrast, intellectual stimulation was the third most frequently reported transformational leadership behavior performed by both the management team members and self managed work team members, as reported on the Multifactor Leadership Questionnaire. The focus group data supported the finding that intellectual stimulation was used by both management team members and self-managed work team members. It was most frequently reported that the self-managed work team members performed the intellectual stimulation leadership behavior. Self-managed work team members were reported as performing the intellectual stimulation by demonstrating and encouraging the use of creativity and problem solving and by frequently questioning work methods. Similarly, it was further reported during the focus group discussion sessions that management team members performed the intellectual stimulation leadership behavior by providing support and resources, by demonstrating and encouraging techniques such as statistical process control and continuous process improvement, and by encouraging the use of other problem solving methods.

The management team members and self-managed work team members reported performing all four transformational leadership behaviors in the same pattern. The order in which the management team members and self-managed work team members reported performing the transformational leadership was the same. For example, individual consideration behavior was performed the most by the management team members and by self-managed work team members. The

individual consideration behavior was then followed by charismatic, intellectually stimulating and inspirational behaviors for both the management team members and self-managed work team members.

Conclusions

1. Transformational leadership and transactional leadership behaviors are not restricted to management team members or external leaders in self-managed organizations. Transformational leadership behaviors and transactional leadership behaviors were also performed by self-managed work team members in this study.

2. Self-managed work team members emulate the transformational leadership behaviors of management team members. The pattern by which management team members perform transformational leadership behaviors was the same as the pattern by which self-managed work team members performed transformational leadership behaviors in this study. This reinforces the "falling dominoes effect" introduced by Bass et al. (1987). The falling dominoes effect suggests that the pattern of leadership cascades from one level of management to another because followers' behaviors and attitudes are associated with the behaviors and attitudes of their leaders (Bass et al., 1987). The underlying theme of the falling dominoes effect is that the followers have a sense of "taking charge." The followers feel empowered to exercise effective leadership with their own followers or colleagues (Bass et al., 1990).

3. Self-managed organizations rely more on individual consideration than on the use of symbols or the emotional appeals associated with inspirational leadership to focus employee effort and performance. Management team members and self-managed work team members performed individual consideration more than they performed inspirational leadership in this study. Bass (1985) believes it is the inspirational leadership behavior that employs or adds nonintellectual, emotional qualities to the influence process. Transformational leaders utilize inspirational talks and emotional appeals to arouse motivation. Inspirational appeals were not utilized as much as individual consideration in this study.

4. Individual consideration is a necessary behavior for implementing self-managed work teams. Individual consideration was the predominant transformational leadership behavior performed by management team members and self-managed work team members in this study. Individual consideration reinforced the application of self-managed work teams by creating an atmosphere of trust and placing an emphasis on employee development.

5. Individual consideration may motivate employees to value group rewards by reducing reliance on individual rewards. There were no individual rewards used to motivate employees in this study. The organization placed an emphasis on utilizing individual consideration, while also using team and organizational reward systems. As suggested by Bass (1985), the leadership in the organization under study appeared to be based upon the belief that whatever separate interests persons might be holding individually, they were potentially united in the pursuit of "higher" goals for the

organization. This supports the Bass (1985) proposition that in an organization that fosters transformational leadership, self-interest will be abandoned and replaced with goals that promote the good of the group.

6. Intellectual stimulation is a necessary behavior for implementing self-managed work teams. Management team members and self-managed work team members were reported as using standardized techniques such as statistical process control, continuous process improvement, and problem solving techniques. Self-managed work team members were most frequently reported as performing intellectual stimulation by questioning current methods and using creativity. This suggests that the self-managed work team members have an important role in promoting the use of intellectual stimulation.

7. Contingent reward is more conducive to the support of self-managed work teams than is management by exception. Contingent reward was performed more often than management by exception by both management team members and self-managed work team members in this study. Bass (1990) argues that dependence solely upon transactional leadership, especially management by exception, can encourage organizational mediocrity. This is because purely transactional leaders use disciplinary threats to improve performance. In the organization studied, all employees assumed responsibility for intervening when problems arose with work methods, products, and services. As a result, teams and the organization as a whole were rewarded for improving performance.

8. Contingent reward in self-managed organizations is based upon team goals and team rewards. This was evident by the emphasis on team reward and organization wide reward mechanisms such as gainsharing, team celebrations and organization wide stretch goals. These mechanisms provided members with the information they needed to achieve organizational goals and thereby receive rewards desired by the team and group.

Recommendations

The following recommendations for practice and research are based on the findings and conclusions of the study.

Recommendations for Practice

1. Self-managed organizations should train employees to serve as coaches and mentors.

2. Self-managed organizations should give attention to employee differences, provide feedback for personal development, and give expressions of appreciation.

3. Self-managed organizations should develop and reinforce creativity, problem-solving, and self evaluation skills in employees.

4. Self-managed organizations should consider providing training focused in the areas of communication skills, interpersonal skills and relationship building, team work, coaching, continuous process improvement, statistical process control, quality management, problem solving, and creativity.

5. Self-managed organizations which utilize the transactional leadership behavior of contingent reward should promote team and organization wide reward systems rather than individual reward systems.

6. Management by exception should be avoided in self-managed organizations.

Recommendations for Research

1. Further studies should be conducted in organizations that are not greenfield sites to determine whether similar transformational leadership behaviors and similar transactional leadership behaviors are performed by management team members and self-managed work team members.

2. Further studies should be conducted to determine whether the predominance of specific transformational leadership behaviors or transactional leadership behaviors can be correlated with the level of maturity of the self-managed work team.

3. Further studies should be conducted to determine whether transformational leadership behaviors or transactional leadership behaviors can be correlated with organizational performance.

4. Further studies should be conducted to determine whether team reward systems affect organizational performance.

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APPENDIX A

SAMPLE MULTIFACTOR LEADERSHIP QUESTIONNAIRE SELF-RATER FORM QUESTIONS

SAMPLE ITEMS FOR THE

MULTIFACTOR LEADERSHIP QUESTIONNAIRE

SELF-RATER FORM

by Bernard M. Bass and Bruce J. Avolio

This is a questionnaire to provide a description of you. When an item is irrelevant or does not apply, or where you are uncertain or don't know, leave the answer blank. Make no more than one mark for each question.

Mark the statement below which applies best:
__ The people I'm referring to report directly to me.
__ The people I'm referring to are my peers of co-workers.
__ The people I'm referring to report directly to me and are my peers or co-workers.
__ The people I'm referring to are clients, customers or constituents of mine.
__ A combination of the above.

Directions: Listed below are descriptive statements. For each statement, we would like you to judge how frequently it fits you.

Example: "*They can discuss their problems with me.*"

They means those below you in the organization who report directly to you - your immediate subordinates or supervisees - or those at the same level in your organization - your co-workers or colleagues.

Use this key for the five possible responses:

0	1	2	3	4
Not at all	Once in awhile	Sometimes	Fairly Often	Frequently

Transformational Leadership Factors

Charisma: They trust my ability to overcome any obstacle.

Inspiration: I use symbols and images to focus their efforts.

Intellectual Stimulation: I enable them to think about old problems in new ways.

Individualized Consideration: I coach individuals who need it.

Transactional Leadership Factors

Contingent Reward: I make sure there is close agreement between what they are expected to do and what they can get from me for their effort.

Management-by-Exception: A mistake has to occur before I take action.

The Nonleadership Factor

Laissez-Faire: I don't tell them where I stand on issues.

APPENDIX B

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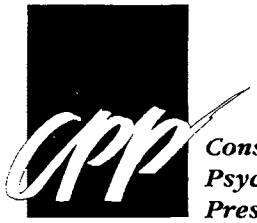

SHERYL HALE
702 South Jardot, #6
Stillwater, Oklahoma 74074

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By Lisa Sisneros
Lisa Sisneros - Permission Specialist

Date 8/5/93

I AGREE TO THE ABOVE CONDITIONS

By Sheryl Hale
Sheryl Hale

Date 7/30/93

APPENDIX C

FOCUS GROUP DISCUSSION INTERVIEW GUIDE

Focus Group Interview Guide

Who has a vision that you share for the organization?

Who in your organization increases your optimism and enthusiasm for your work?

Who in your organization encourages you to look at the methods that you use to perform your work in new ways?

Who in your organization makes individuals feel valued and that their individual contributions are important?

Who in your organization clarifies task requirements and helps individuals set goals so that may achieve the rewards that they desire?

Who in your organization intervenes only if standards are not met or if something goes wrong?

Facilitator's Focus Group Interview Guide With Prompts

Who has a vision that you share for the organization?

How do they instill this vision in you?

Have they gained your respect, trust, and confidence?

How did they gain your respect, trust, and confidence?

Who increases your optimism and enthusiasm?

How do they increase your optimism and enthusiasm?

Do they give you pep talks?

Who in your organization encourages you to look the methods you use to perform your work in new ways?

How do they encourage you to look at old methods in new ways?

Do they foster the use of creativity?

How do they foster the use of creativity?

Do they stress the use of intelligence?

How do they stress the use of intelligence?

Who in your organization makes individuals in the organization feel valued and that their individual contributions are important?

How do they make individuals in the organization feel valued and that their individual contributions are important?

Do they give personal attention to members?

Do they coach, advise, or provide feedback in ways easiest for each group member to accept, and understand?

Who in your organization clarifies task requirements and helps individuals set goals so that may achieve the rewards that they desire?

How does your organization contract an exchange of rewards for effort and agreed upon levels of performance?

Are individuals given a clear understanding of what is expected of them?

Who in your organization intervenes only if standards are not met or if something goes wrong?

Who intervenes only if standards are not met or if something goes wrong?

How do they intervene?

How would you describe leadership in your organization?

APPENDIX D

FOCUS GROUP DISCUSSION PARTICIPANT CONSENT FORM AND INVITATIONAL LETTER

April 22, 1993

Participant Name
Organization
Address

Dear Z:

I am currently conducting research on leadership behaviors used in a self-managed organization. As part of my research, I am conducting focus group discussions with strategic team, tactical team, and operation team members at X, Inc.

The purpose of the focus group discussions is to obtain information regarding the transformational leadership behaviors and transactional leadership behaviors used by employees in a self-managed organization. I am conducting the study in partial fulfillment of the requirements for my Doctor of Education degree.

You were selected to participate in a focus group discussion session because you are a member of the strategic team. The information that you will provide during the discussion session will be used to identify training needs for employees in self-managed organizations. To protect your anonymity, your name will not reported in the findings. Your responses will be kept confidential.

If you agree to participate in a focus group discussion, please sign and date the Participant Consent Forms enclosed. Keep one Participant Consent Form for your records. Please return the other signed Participant Consent Form to Y, Human Resources Manager by April 29, 1993 using the attached envelope. We will contact you once the focus group discussion has been scheduled.

Thank you for your consideration. If you have any questions about the focus group discussion, please contact me at (405) 743-5427.

Sincerely,

Sheryl Hale

Enclosures

PARTICIPANT CONSENT FORM FOR
A STUDY OF THE TRANSFORMATIONAL LEADERSHIP BEHAVIORS AND TRANSACTIONAL LEADERSHIP BEHAVIORS PERFORMED BY MANAGEMENT TEAM MEMBERS AND SELF-MANAGED WORK TEAM MEMBERS

No, I _____ do not agree to participate in the above titled research.

Yes, I _____ voluntarily agree to participate in the above titled research. I understand that:

1) The purpose of the study is to identify the transformational leadership behaviors and transactional leadership behaviors performed by management team members and self-managed work team members;

2) I will be requested to participate in a focus group discussion session. The discussion session will take approximately two hours;

3) all my responses are confidential and that my name, my organization's name, and my organization's location will not be requested to protect my anonymity or identified in any publications;

4) the discussion session will be tape recorded to aid the research in recording responses;

5) my participation is voluntary and that I have the right to withdraw from this study at any time, during the discussion session;

6) this study is being conducted by the researcher in partial fulfillment of the requirements for the Degree of Doctor of Education;

7) the data collected for the study will be utilized to provide information regarding the training of employees in organizations implementing self-managed work designs;

8) my employer will not be notified of my participation in the study;

9) I may contact Sheryl Hale at 405-743-5427 or 405-372-6128 should I wish further information. I may also contact Beth McTernan, University Research Services, 005 Life Sciences East, Oklahoma State University, telephone 405-744-5700 or William Venable, College of Occupational and Adult Education, 406 Classroom Building, Oklahoma State University, telephone 405-744-6275.

I have read and fully understand the consent form. I sign it freely and voluntarily. I have been given a signed copy of the consent form.

Signature _____ Date _____

APPENDIX E

SAMPLE FOCUS GROUP CONFIRMATION LETTER

May 3, 1993

Participant Name
Organization
Address

Dear X:

Thank you for agreeing to participate in the strategic team focus group discussion session. The purpose of the focus group discussion is to obtain information regarding the transformational leadership behaviors and the transactional leadership behaviors used by employees in an self-managed organization.

The focus group discussion will be held on May 7, 1993 at 1:00 p.m. until 3:00 p.m. in the conference room at Y.

I am looking forward to the discussion session and meeting you. If you have any questions about the focus group discussion, please contact me at (405) 743-5427.

Sincerely,

Sheryl Hale

APPENDIX F

SAMPLE FOCUS GROUP DISCUSSION THANK YOU LETTER

May 1, 1993

Participant Name
Organization
Address

Dear X:

Thank you very much for sharing your thoughts in the focus group discussion session last Friday. The information that I gained during the discussion provided me important information regarding the transformational and transactional leadership behaviors utilized in your organization. Your experiences as a strategic team member provided an unique perspective.

I am looking forward to continuing my research in your organization. If you have any questions regarding the study, please call me at 743-5427.

Sincerely,

Sheryl Hale

APPENDIX G

MULTIFACTOR LEADERSHIP QUESTIONNAIRE VOLUNTEER SOLICITATION FORM

VOLUNTEER SOLICITATION FORM
FOR
A STUDY OF THE TRANSFORMATIONAL LEADERSHIP BEHAVIORS AND TRANSACTIONAL LEADERSHIP BEHAVIORS PERFORMED BY MANAGEMENT AND SELF-MANAGED WORK TEAM MEMBERS

This study is being conducted to identify the transactional and transformational leadership behaviors used by employees in an organization implementing self-managed work designs.

This study is being conducted by the researcher in partial fulfillment of the requirements for the Degree of Doctor of Education. The data collected for the study will be utilized to provide information regarding the training of employees in organizations implementing self-managed work designs. The name and location of the organization will not be identified in any publication addressing the research conducted.

If you choose to participate, you will be asked to complete the Multifactor Leadership Questionnaire at the end of your weekly team meeting. The questionnaire will take approximately 20 minutes.

To protect your anonymity and confidentially you will not be asked to write your name on the questionnaire. In addition, your questionnaire and consent form will be returned to the researcher in a sealed envelope. The researcher is the only person who will have assess to your responses.

There is absolutely no penalty for not participating in this study. Your participation is completely voluntary. Your employer will not be notified of the names of employees who choose to participate.

If you choose to participate you will be required to complete a Participant Consent Form. The questionnaires and Participant Consent Forms will be separated before data analysis.

APPENDIX H

MULTIFACTOR LEADERSHIP QUESTIONNAIRE PARTICIPANT CONSENT FORM

PARTICIPANT CONSENT FORM
FOR
THE TRANSFORMATIONAL LEADERSHIP BEHAVIORS AND TRANSACTIONAL LEADERSHIP BEHAVIORS PERFORMED BY MANAGEMENT TEAM AND SELF-MANAGED WORK TEAM MEMBERS

I, _____ voluntarily agree to participate in the above titled research. I understand that:

1) The purpose of the study is to identify the transformational leadership behaviors and transactional leadership behaviors performed management team members and self-managed work team members;

2) I will be requested to complete the Multifactor Leadership Questionnaire. The questionnaire will take approximately 20 minutes;

3) all my responses are confidential and that my name, my organization's name, and my organization's location will not be requested to protect my anonymity or identified in any publications;

4) my participation is voluntary and that I have the right to withdraw from this study at any time, while I am completing the questionnaire;

5) this study is being conducted by the researcher in partial fulfillment of the requirements for the Degree of Doctor of Education;

6) the data collected for the study will be utilized to provide information regarding the training of employees in organizations implementing self-managed work designs;

7) my employer will not be notified of my participation in the study;

8) I may contact Sheryl Hale at 405-743-5427 or 405-372-6128 should I wish further information. I may also contact Beth McTernan, University Research Services, 005 Life Sciences East, Oklahoma State University, telephone 405-744-5700 or William Venable, College of Occupational and Adult Education, 406 Classroom Building, Oklahoma State University, telephone 405-744-6275.

I have read and fully understand the consent form. I sign it freely and voluntarily. I have been given a signed copy of the consent form.

Signature _____ Date _____

APPENDIX I

DOCUMENT CODING DESCRIPTORS

Document Coding Descriptors

Categories	Descriptors
Strategic Team	A group of organizational members responsible for long-term planning, policy making, and reviewing recommendations of the tactical and operation teams
Tactical Team	A group of organizational members who coordinate the work assignments of the operation teams
Operation Team	A group of organizational members who occupy positions in the work teams responsible for the production or distribution of vinyl flooring, or maintaining equipment used in the production of vinyl floor products.
Charismatic Behavior	Is a behavior which is exhibited when an individual(s) communicate a vision and a sense of mission, build trust and confidence in a mission, and acquire a strong individual identification from followers. The charismatic leadership behavior is illustrated when an individual(s) affiliate others with goals, encourages worthwhile goals, or challenges obstacles, beliefs in self or organization.
Inspirational Behavior	Is a behavior which is exhibited when an individual(s) increases optimism and enthusiasm. The inspirational leadership behavior is illustrate when an individual(s) gives pep talks, uses symbols or images to focus efforts, expresses important purposes, expresses a belief in organization's success.
Individual Consideration	Is a behavior which is exhibited when an individual(s) provides personal attention to all members, makes individuals feel valued and that their contributions are important. The individual consideration behavior illustrated when an individual(s) coach, advise and provide feedback for personal development, give expressions of appreciation, suggest developmental activities, or give attention to individual differences.

Intellectual Stimulation	Is a behavior exhibited when an individual(s) encourage a new look at old methods, foster creativity, and stress the use of intelligence. The intellectual stimulation leadership behavior is illustrated when an individual(s) provokes rethinking and reexamination of assumptions and contexts on which previous assessments, possibilities, capabilities, strategies, and goals were based. The intellectual stimulation leadership behavior is illustrated when an individual(s) ask questions, identifies key aspects of problems or issues, suggest solutions, or argues for reasoning behind solutions.
Contingent Reward	Is a behavior exhibited when an individual contracts exchange of rewards for effort and agreed upon levels of performance. The contingent reward leadership behavior is illustrated when an individual gives organizational members a clear understanding of what is expected of them, negotiates performance, suggests outcomes of effort, identifies goals and standards, or praises for accomplishing goals.
Management by Exception	Is a behavior exhibited when individual(s) intervene when standards are not met or if something has gone wrong. Management by exception is illustrated by statements that focus attention on irregularities, mistakes, and deviations or concentrate attention on failures to meet standards
Common Class Code Person	Is the code for a newsletter article which describes an activity or accomplishment of one or more individuals or a specific team in the article.
Common Class Code Information	Is the code for a newsletter articles that communicates general information that is not related to specific individuals or teams.

APPENDIX J

DOCUMENT ANALYSIS CODE LIST

Document Analysis Coding List

Category	Codes	Research Question
Common Class Code		
Person	P	
General Information	I	
Special Class Code:		
Strategic Team	ST	1, 2
Tactical Team	TT	1, 2
Operation Team	OT	1, 2
TC: Theoretical Class:		
Charismatic Behavior	CB	2, 4
Inspirational Behavior	IB	2, 4
Individual Consideration Behavior	IC	2, 4
Intellectual Stimulation Behavior	IS	2, 4
Contingent Reward	CR	1, 3
Management by Exception	MBE	1, 3

VITA

Sheryl Cockrell Hale

Candidate for the Degree of

Doctor of Education

Thesis: TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP BEHAVIORS PERFORMED BY MANAGEMENT TEAM MEMBERS AND SELF-MANAGED WORK TEAM MEMBERS

Major Field: Occupational and Adult Education

Biographical:

Education: Graduated for Red Rock High School, Red Rock, Oklahoma, 1977; received Bachelor of Science degree in Fine Arts from Oklahoma State University in May 1982; received Master of Science degree in Curriculum and Instruction in May 1988 from Oklahoma State University; completed requirements for the Doctor of Education degree at Oklahoma State University in December 1993.

Professional Experience: Graduate Teaching Assistant, Oklahoma State University, 1986-88; Graduate Research Assistant, Oklahoma Department of Vocational and Technical Education, 1989-92; Health Certification Specialist, Oklahoma Department of Vocational and Technical Education, 1992 to present.

Professional Organizations: Phi Kappa Phi, Phi Delta Kappa, Oklahoma Vocational Association, American Vocational Association, and America Vocational Research Association.

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Proposal Title: A STUDY OF THE TRANSFORMATIONAL LEADERSHIP BEHAVIORS AND TRANSACTIONAL LEADERSHIP BEHAVIORS PERFORMED BY MANAGEMENT TEAM AND MEMBERS AND SELF-MANAGED WORK TEAM MEMBERS

Principal Investigator: WILLIAM VENABLE/ SHERYL HALE

Date: 11-4-92 IRB # ED-93-032

This application has been reviewed by the IRB and

Processed as: Exempt [XX] Expedite [ ] Full Board Review [ ]

Renewal or Continuation [ ]

Approval Status Recommended by Reviewer(s):

Approved [XX] Deferred for Revision [ ]

Approved with Provision [ ] Disapproved [ ]

Approval status subject to review by full Institutional Review Board at next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or Disapproval:

Comment:

Please change IRB contact to Beth McTernan, University Research Services, 005 Life Sciences East (405) 744-5700.

Signature: Marcia K. Tilley Date: 11-5-92

Chair of Institutional Review Board