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## The Relationship Between Leadership Styles and Conflict Management Techniques as Reported by Hospital Middle Management Personnel in Eight of the Largest Hospitals in North Dakota

Todette LaPrairie Holt

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THE RELATIONSHIP BETWEEN LEADERSHIP STYLES AND CONFLICT MANAGEMENT  
TECHNIQUES AS REPORTED BY HOSPITAL MIDDLE MANAGEMENT PERSONNEL  
IN EIGHT OF THE LARGEST HOSPITALS IN NORTH DAKOTA

by  
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Bachelor of Science in Nursing, University of Maryland, 1965  
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This dissertation, submitted by Todette LaPrairie Holt in partial fulfillment of the requirements for the Degree of Doctor of Education from the University of North Dakota, is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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This dissertation meets the standards for appearance and conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

A. William Johnson 7/16/86  
Dean of the Graduate School

Permission

Title The Relationship between Leadership Styles and Conflict  
Management Techniques As Reported by Hospital Middle Management  
Personnel in Eight of the Largest Hospitals in North Dakota

Department Educational Administration, Center for Teaching and  
Learning

Degree Doctor of Education

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Date July 11, 1986



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## VITA

Todette LaPrairie Holt was born in York, Pennsylvania. The early and young adult years of her life were spent in the small town of York Haven. She attended elementary school in York Haven and graduated from the Manchester High School in 1957. She earned a diploma from the York Hospital School of Nursing in York, Pennsylvania, a baccalaureate degree in nursing from the University of Maryland in Baltimore, and a master of science degree in Child Development and Family Relations from North Dakota State University in Fargo.

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Her future plans include completion of a masters degree in nursing at the University of North Dakota. Her professional goal is to remain in the field of nursing as a nurse educator or administrator.



## ABSTRACT

The purpose of this study was to determine possible relationships between the self-reported leadership styles and conflict management techniques of a selected group of hospital middle management personnel. The major question studied was: Are there relationships between the self-reported leadership styles as measured by the Hersey and Blanchard LEAD-Self Instrument and the self-reported conflict management techniques as measured by the Thomas-Kilmann Conflict Mode Instrument among supervisors in selected health care institutions in North Dakota as reported by sex, age, level of education, years in current supervisory position, total years in supervisory positions, number of subordinates supervised, and hours of management training completed? The sample was comprised of 156 department heads/cost center managers from the eight largest hospitals in North Dakota.

The results of the study demonstrated that High Task and High Relationship was the dominant leadership style reported by the majority of respondents. The most frequently used supporting style was that of High Relationship and Low Task. Respondents indicated the use of Compromising as their most frequently utilized mode of handling conflict. The second most frequently used technique was that of Collaborating, although Avoiding was used almost as frequently as Collaborating.

There were no significant differences between self-reported leadership styles on the basis of the seven variables studied. There were significant differences between conflict management techniques

when the two variables of sex and age were considered. Females tended to use the Compromising mode more frequently than males. More females than males used the Competing mode and more males than females used the Accommodating mode. More respondents 35 years of age or under used the Competing mode. More respondents between 36 and 45 years of age used the Compromising mode. More respondents 46 years of age or above used the Collaborating mode. Respondents between the ages of 36 and 45 tended to use the Avoiding mode less frequently and the Accommodating more frequently than those in the other two age categories.

Hospital administrators should conduct more in-depth assessments of the conflict management techniques of middle managers through validation of these behaviors by superordinates and subordinates; develop training programs to deal with common causes of conflict and appropriate strategies for dealing with them; and emphasize to managers the consequences of the use of Avoidance, Accommodation, and Compromising as primary conflict management techniques.

## CHAPTER I

### INTRODUCTION

Conflict is inevitable in the work setting, and conflict management may require a significant amount of the manager's time (Thomas and Schmidt 1976, Araki 1983, Griffin 1984, Kraten 1982). Unresolved conflict may be disruptive to efficient functioning of an organization and frequently may lead to deteriorating employee relations, frustration, and lowered work performance among employees (Araki 1983, Baxter 1982, Dorman 1984, Lippitt 1982). Conflict itself may be constructive or destructive to the organization depending upon the way it is viewed by management (Araki 1983, Kowalski 1982, Kraten 1982, Lippitt 1982). The methods by which supervisors deal with conflict situations may vary with their management styles and may determine the outcome of the conflict situation (Araki 1983, Isherwood 1982, Kowalski 1982, Kraten 1982, Lippitt 1982).

#### Overview of the Changing Health Care Industry

Significant changes in the delivery of health care have occurred during the past decade, and the impact of many more changes will be felt by providers and consumers for the next decade. President Johnson's "Great Society" Medicare and Medicaid entitlements brought with them a rapid expansion of the health care delivery system. Increased access to health care occurred as a result of third party reimbursement by the government and through the private sector (Anderson 1984, Davis 1985).



Technological advances, although expensive, were made available to a larger segment of our society. The belief that a minimal level of health care for all citizens should be a basic human right soon became widely accepted (Anderson 1984). These altruistic beliefs and the reality of limited financial resources are now being brought together. The redesigning of the Medicare payment system from a cost-based retrospective to a cost-per-case prospective one became the impetus for much of the restructuring currently under way in the health care delivery system (Anderson 1984, Iglehart 1983). Hospitals will continue to feel the effects of this reduced income since minimal increases in Diagnostic Related Group (DRG) prices may be wiped out under the recently enacted Gramm-Rudman deficit-reduction amendment ("Gramm-Rudman: Hospitals' Budget Nightmare," 1986).

Health care providers at all levels are finding themselves in an era of competitiveness ("Ventures Show Cooperation With MDs Up," 1985; Moore 1985). Increased emphasis is being placed on efficiency and cost effectiveness of services. Cost-cutting measures have led to a recombining or deletion of former services and the forging of new partnerships for alternative delivery systems. Hospital administrators are also responding to shorter hospital stays by putting a freeze on the hiring of new personnel or, in some cases, laying off employees (Sandrick 1985; "Gramm-Rudman: Hospitals' Budget Nightmare," 1986). They are trying to compensate for the loss of revenue by offering alternative delivery systems such as surgicenters, emergicenters, ambulatory care facilities, and cardiac rehabilitation centers ("Ventures Show Cooperation With MDs Up," 1985; Norpel 1985; Moore 1985).

It is unlikely that this trend of continuing change and instability in the industry will reverse itself in the near future. Instead, the response to various external markets is likely to keep health care in a constant state of flux for years. The Arthur Anderson report (1984) predicts that reregulation in the 1990s, as opposed to the deregulation of the 1980s, will shape the new health care environment. Expansion of health services and facilities, already more restrictive for hospitals than for other health care providers, will become subject to tighter restrictions and controls. Providers will have to join together to offer new technologies and services in order to avoid costly duplication of services within a geographical region. Increasing one's market share, planning judiciously for capital financing, and integrating/affiliating to provide a full range of services are but a few of the challenges facing today's hospital administrators and managers.

Also, in an effort to deal with such rapid change, many hospital administrators are effecting internal reorganization for cost efficiency and are engaging more in the practice of participatory management. Middle managers are experiencing major changes in their roles as a direct result of efforts to improve productivity. The first change is a broadening of the span of control resulting in alterations in reporting relationships, duties, and numbers of middle managers. The second change is increased decentralization of authority giving managers more influence in decision-making, resource allocation, and organizational direction while requiring that they learn the skills of delegation and direction through participation (Hickey 1985, p. 62).

The decisions made by hospital boards require implementation by various levels of administrators. Middle management personnel are the



level of administration left with the task of implementing change--often change for which they had little or no input.

According to Fahs (1982), disagreements over already scarce resources can be expected to be a cause of conflict at all organizational levels in the 1980s. He reported that high-interaction (two-way), conflict-managed climates are rare in most organizations because management fails to assess, refine, and apply numerous communicative abilities of other staff to facilitate effective problem-solving. Fairman and Clark (1983) stated that as more and more individuals or groups in an organization get involved in the decision-making process, the amount of time needed for conflict management also increases. They go on to say that the process of managing conflict is time consuming and a high-risk activity. Assumptions which administrators make about people during the decision-making process have an influence on personal and professional relationships as well as organizational effectiveness. They suggested that managers become aware of their own conflict management strategies and seek to use the appropriate strategies to produce efficiency and effectiveness within their organization.

#### Statement of the Problem and Research Questions

Conflict, the result of incompatible views or perceptions and differing goals and values, is inevitable; a great deal of management time often is spent dealing with this conflict. The manner in which managers deal with conflict, in large part, determines its satisfactory resolution.

This study examined the self-reported leadership styles and conflict management techniques of middle management supervisory

personnel (department heads or cost center managers) in eight of the largest hospitals in the state of North Dakota. The overall purpose of the study was to identify the leadership styles and the conflict management techniques of each supervisor and then to examine the relationships between these self-reported leadership styles as measured by the Hersey and Blanchard LEAD-Self Instrument and the self-reported conflict management techniques as measured by the Thomas-Kilmann Conflict Mode Instrument. In addition, the leadership styles and conflict management techniques were analyzed on the basis of selected background variables provided by the supervisors. Seven specific questions were asked about these potential relationships.

1. Is there a relationship between the sex of the supervisors and leadership styles and conflict management techniques?

2. Is there a relationship between the age of the supervisors and leadership styles and conflict management techniques?

3. Is there a relationship between levels of education of supervisors and leadership styles and conflict management techniques?

4. Is there a relationship between either the number of years in the current supervisory position or the number of years overall in supervisory positions and leadership styles and conflict management techniques?

5. Is there a relationship between the number of subordinates and leadership styles and conflict management techniques?

6. Is there a relationship between amounts of management training and leadership styles and conflict management techniques?

7. Is there a relationship between leadership styles and conflict management techniques?



### Significance of the Study

Completion and scoring of the two instruments by individual supervisors in the latter part of the data-gathering sessions allowed them to assess their own leadership styles and conflict management techniques. This information may provide valuable insight into their managerial effectiveness and create an interest in seeking further training in these areas.

Aggregate data provided to hospital administrators may also provide them with some information as to the overall management climate in their institution. Data may indicate the need for providing specific management development sessions in leadership development and methods of conflict resolution.

All levels of administrators in hospitals must be prepared to deal with rapid changes in the industry. Effective leadership is necessary for meeting the challenges of an increasingly competitive marketplace. An institution's decisions when responding to changing external incentives are far reaching and will determine the success and ultimately the survival of that institution. Diversification in the form of new programs and modes of health care delivery will require broadened relationships as new alliances are formed among a variety of health care providers who previously worked largely independent of each other. As services are eliminated, consolidated, or integrated, a strain will be placed on the stability and interpersonal relationships within the institution. If conflict is not acknowledged and dealt with effectively, it could lead to group dysfunction, decreased performance, and personnel turnover. Supervisory personnel who are provided with

information related to the causes of conflict and the best strategies for dealing with it may be valuable assets to their organization.

### Organization of the Study

Chapter 2 includes a review of pertinent literature and research studies on leadership styles and conflict management techniques. Chapter 3 outlines the selection of the hospitals and the participants, the survey tools, and the procedures used for data collection. Analyses of the data are presented in chapter 4. Chapter 5 provides observations/conclusions, limitations, and recommendations based upon the analysis of the data.



## CHAPTER II

### REVIEW OF THE LITERATURE

The review of literature contains perspectives on leadership styles and conflict management techniques to provide a context of this study. The first section is devoted to a historical perspective of both components. The second section includes related information and recent research related to both.

#### Historical Perspectives

Leadership is a concept whose behavioral components have been difficult to define and operationalize for valid measurement. Leadership, regardless of its definition, is variously related to interactions which occur relative to accomplishment of an objective. Management is a term often considered to be synonymous with leadership. Hersey and Blanchard (1982), however, make a distinction between the two. They define management as "working with and through individuals and groups to accomplish organizational goals." Leadership, they stated, implies a broader concept than management and occurs any time one attempts to influence the behavior of an individual or group, regardless of the reason (p. 3).

#### Leadership

The concept of leadership and the development of its definitions first appeared at the turn of this century. Organizing themes

centered around group structure and group processes, personality traits, goal achievement, role, and maintenance of role structure (Stogdill 1974). Newer testing methods and the use of statistical tools during the World War I era led to an increase in research aimed at determining what traits were common to leaders. It was believed that identification of certain consistent qualitative components would allow for increased efficiency in the selection of leaders. However, research in this area has produced conflicting and inconclusive findings (Napier and Gershenfeld 1973). Several authors expressed frustration in attempting to derive a universally accepted definition of leadership or identify integrative models and unifying theories (Stogdill 1974, Lombardo and McCall 1978, Napier and Gershenfeld 1973).

One of the more comprehensive analyses of leadership studies was done by Stogdill (1974). His belief was that a definition of leadership should not only identify leaders and the means of acquiring their positions but also the maintenance and continuance of leadership. By introducing the concepts of goal attainment, problem solution, role, position, reinforcement of behavior, and structuring expectations to a definition there would be recognition given to the fact that leadership serves a continuing function in a group. For purposes of theory development, he maintained that definitions of leadership should contain those variables that account for the differentiation and maintenance of group roles (p. 16). Summarization of the works of a number of theorists--e.g., great man theories, environmental theories, personal-situational theories, interaction-expectation theories, humanistic theories, and exchange theories--can be found in his classic work, Handbook of Leadership.



Pfeffer (1978) considered the ambiguity of leadership. He argued that fundamental assumptions such as the belief that theories of leadership could be developed and that with improved selection and training of leaders there would be a consequent increase in organizational effectiveness are incorrect (p. 13). He contended that leadership, as a form of social influence, is attributed by observers.

Leadership is the outcome of an attribution process in which observers--in order to achieve a feeling of control over their environment--tend to attribute outcomes to persons rather than to context, and the identification of individuals with leadership positions facilitates this attribution process. The belief of meritocratic advancement helps to legitimate the position of the leader with respect to others in the group, as well as to provide the appearance of potential mobility.

Leadership is associated with a set of myths serving to reinforce a social construction of meaning that legitimates leadership role occupants, provides the belief in potential mobility for those not in leadership roles, and attributes social causality to leadership roles, thereby providing a belief in the effectiveness of individual control. (p. 31)

Health care is a humanistic service. According to Stogdill (1974), the humanistic theories of Argyris, McGregor, Likert, and Blake and Mouton are concerned with the development of effective and cohesive organizations. The function of humanistic leadership is to modify the organization in such a way as to provide a work environment in which the individual's motivational potential for need fulfillment coincides with the accomplishment of organizational goals.

Argyris (1962) noted that the individual's strategy for existence is at crucial points antagonistic to the strategy that guides the formal organization; this may lead to continual conflict between the individual and the organization (p. 1). An organization's ability to achieve its objectives, maintain itself internally, and adapt to its external environment is related to the competence of its

administration. Leadership, the effectiveness of the groups and group interrelationships, the formal organizational structures, the managerial controls, the policies and practices, the technology, and the people at all levels have an influence on an organization's effectiveness (p. 15). He further maintained that formal organizations form a social system that operates under certain assumptions regarding the nature of effective human relationships within the organization. Traditional organizational values include achieving the organization's objectives through rational, logical means with human relationships most effectively influenced through direction, coercion, and control. When executives emphasize and adhere to these values, there is a resulting decrease in seeking input and feelings from subordinates. This in turn leads to increased mistrust, external commitment, organizational defensiveness, and interdepartmental rivalries as well as decreased interpersonal competence on the part of the executive and decreased effectiveness in many human and personal decisions. Bennis (1969) maintained that without interpersonal competence or a "psychologically safe" environment, an organization becomes a breeding ground for mistrust, intergroup conflict, and rigidity which in turn leads to a decrease in organizational success in problem-solving (p. 13).

According to Argyris (1962), executives need to develop a new set of values about human relationships which will increase their interpersonal competence. An organization's objectives can best be achieved if there is a commitment to developing authentic relationships, increasing interpersonal competencies, fostering internal commitment, and emphasizing the process of confirmation (p. 137). Argyris further suggested that formal organizational structure, managerial controls,



and directive leadership tend to have some unintended consequences that decrease the human effectiveness of the organization if the participants aspire to work that permits them self-responsibility, self-control, and the use of their intellectual and interpersonal abilities (p. 15).

Likert (1967) described styles of organizational management and depicted them on a continuum from System 1 through System 4. System 1 (exploitive-authoritative) managers have little interaction with subordinates. Information flows downward only since the bulk of decisions are made at levels higher than where the most adequate and accurate information exists, and goals are overtly accepted while covertly being resisted. Motivational forces include fear, threats, punishment, and occasional rewards with need satisfaction being at the physiological and safety level. System 2 (benevolent-authoritative) managers interact in a condescending manner with information flowing almost entirely downward and decisions again made at levels appreciably higher than those at which the most adequate and accurate information exists. Overtly accepted goals are covertly resisted to a moderate degree. Economic and occasional ego motives are associated with the use of rewards or some actual or potential punishment. System 3 (consultative) managers have moderate interaction with their subordinates along with a fair amount of trust. Communications tend to be largely downward with broad policy and general decisions being made at the top; however, subordinates are permitted some input into decisions. Goals tend to be overtly accepted but are at times covertly resisted. Rewards, occasional punishment, and some involvement are the basis of economic and ego-based motivational forces. System 4 (participative

group) managers interact extensively with subordinates and display a high degree of confidence and trust in them. Communications flow in all directions from all levels which in turn tends to push decisions to the point where information is most adequate or to pass relevant information to the decision-making points and enhances both overt and covert acceptance of goals. Workers are motivated by participation and involvement in developing and assessing progress towards goals attainment. There is full use of economic, ego, and other major motivational forces.

Companies generally organize on a functional basis or on a product basis. A singular organizational emphasis may lead to difficulty since functionalization is required to more effectively use new knowledge and methodologies, while at the same time increased coordination of all aspects of production is necessary. According to Likert (1967, pp. 158-159) at least four conditions must be met by an organization if it is to achieve a satisfactory solution to this dilemma. First, the company must provide high levels of cooperative behavior between superiors and subordinates--and especially among peers--aimed at the development of favorable attitudes, confidence, and trust among its members. Second, it must have the organizational structure and interaction skills required to solve differences and conflicts and to attain creative solutions. Third, it must also possess the capacity to exert influence and to create motivation and coordination without traditional forms of line authority. Fourth, its decision-making processes and superior-subordinate relationships must enable a person to perform his job well and without interference when he/she has two or more superiors. Likert maintained that these four conditions could



not be met by Systems 1, 2, or 3 since his theory specifies that:

(1) a person can have only one boss; (2) managerial procedures and behavior, on the average, tend to produce competition and conflict between peers and apathy or resentment among subordinates; and (3) full use of motivational forces must be employed if cooperative attitudes and effective coordination are to be achieved.

Hersey and Blanchard (1982) reported on the efforts of the University of Michigan's Survey Research Center to study leadership by locating related clusters of characteristics which were indicators of effectiveness. The studies defined two concepts, employee orientation and production orientation. Leaders described as employee-oriented stressed the interpersonal aspects of their jobs, recognizing every employee as important and taking an interest in his/her individuality and personal needs. Production oriented leaders emphasized the production and technical aspects of the job, with employees being viewed as the tools to accomplish the goals of the institution (p. 87).

Cartwright and Zander (1968) maintained that trait research on leadership has provided less than satisfactory results since personality traits are poorly conceived and unreliably measured.

The characteristics that get a person into a position of leadership may be rather different from those that make a person an effective leader once he has attained an office of leadership. It may be that the study of leadership effectiveness will reveal a greater consistency of results than has been found from comparing leaders and nonleaders. (p. 303)

According to them, since minimal abilities required of all leaders are widely distributed among nonleaders, the selection of leaders should take into consideration a person's suitability for the type of functions he/she is to perform in a given situation. Improvement in

leadership behavior cannot be expected by merely providing the individual with set "rules of leadership."

In summary, we may conclude that the conception of leaders as people who possess certain distinctive traits has not proven to be satisfactory. A "new view" of leadership is emerging which stresses the performance of needed functions and adaptability to changing situations. According to this conception, groups are or should be flexible in assigning leadership functions to various members as conditions change. Effective leaders are sensitive to the changing conditions of their groups and flexible in adapting their behavior to new requirements. The improvement of leadership may be expected, not from improving leaders apart from the group, but by modifying the relations between leaders and the rest of the group. (p. 304)

Cartwright and Zander (1968) identified the achievement of some specific group goal and the maintenance or strengthening of the group itself as two major functions of groups. Behaviors characteristic of goal achievement functions include: "initiates action," "keeps members' attention on the goals," "clarifies the issue," "develops a procedural plan," "evaluates the quality of work done," and "makes expert information available." Those behaviors characteristic of group maintenance include: "keeps interpersonal relations pleasant," "arbitrates disputes," "provides encouragement," "gives the minority a chance to be heard," "stimulates self-direction," and "increases the interdependence among members" (p. 306).

Hemphill and Coons (1973) studied leadership behavior within the framework of what the individual does while operating as a leader and how he/she goes about doing it. Nine dimensions of behaviors were identified and the "forced choice" questionnaire, the Leader Description Behavior Questionnaire (LDBQ), was developed. Initiating Structure and Consideration--i.e., goal attainment and maintenance of group



structure--are included in the LBDQ as two dimensions of behavior observed by others.

The work of Blake and Mouton has applicability to leadership and management styles and methods of handling conflict. Hersey and Blanchard (1982) credited Blake and Mouton with popularizing the concepts developed through the Ohio State, Michigan, and Group Dynamics leadership studies. Blake and Mouton's (1964) work led to the development of a 9 X 9, 81 square managerial grid depicting the two independent dimensions--concern for people on the vertical axis and concern for production on the horizontal axis. A nine-point scale on each axis represents a continuum from minimal to maximal concern in the respective dimensions. The 9,1 (Task Manager) has highest regard for production and lowest concern for people; the 1,1 (Impoverished Manager) lacks concern for either. The 5,5 (Organization Man) shows moderate concern for production and people. The 1,9 (Country Club Manager) is highly concerned with relationships but has little concern for production. The 9,9 (Team Manager) integrates concern for production with concern for people in order to achieve organizational goals.

Several researchers have identified the idea that situational determinants influence leadership behaviors (Korman 1968, Stogdill 1974).

Theorists no longer explain leadership solely in terms of the individual or the group. Rather, it is believed that characteristics of the individual and demands of the situation interact in such a manner as to permit one, or perhaps a few persons to rise to leadership status. Groups become structured in terms of positions and roles. Leadership represents one or more of the differentiated positions and roles. The occupant of a leadership position is expected to play a role that differs from the roles of other group members. (Stogdill 1974, p. 23)

Based on the work of several humanistic theorists, Hersey and Blanchard formulated their Tri-Dimensional Leader Effectiveness Model. They used the terms "task behavior" and "relationship behavior" to describe concepts similar to Consideration and Initiating Structure of the Ohio State Studies. Identified in their model are four basic quadrants: high task and low relationship, high task and high relationship, high relationship and low task, and low relationship and low task (Hersey and Blanchard 1982). These four styles depict leadership styles or patterns of behavior, as perceived by others, that an individual exhibits when attempting to influence the activities of others. They noted that the individual's style is also viewed from the perspective of self-perception and thus may be very different from that perceived by subordinates. A combination of task behavior and relationship behavior is central to the concept of leadership style according to Hersey and Blanchard. Their definitions have been adapted from the definitions of "Initiating Structure" (task) and "Consideration" (relationship) of the Ohio State Leadership Studies.

Task Behavior--The extent to which a leader is likely to organize and define the roles of the members of his group (followers); to explain what activities each is to do and when, where, and how tasks are to be accomplished; characterized by endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting jobs accomplished.

Relationship Behavior--The extent to which a leader is likely to maintain personal relationships between himself and the members of his group (followers) by opening up channels of communication, delegating responsibility and giving subordinates an opportunity to use their potential; characterized by socio-emotional support, friendship and mutual trust. (Hersey and Blanchard 1972, pp. 82-83)

Reddin (1970) was the first to add an effectiveness dimension to earlier attitudinal models of leadership. It was his work that greatly influenced Hersey and Blanchard in the development of their



Tri-Dimensional Leader Effectiveness Model. Their intent was to integrate the concepts of leader style with situational demands of a specific environment. When the style of leadership was appropriate to the given situation, it was determined to be effective; when it was inappropriate, it was determined to be ineffective. Thus, the difference between effective and ineffective styles was not the actual behavior of the leader but rather the appropriateness of the leader's behavior to the situation/environment in which it was used (Hersey and Blanchard 1982, pp. 96-97). They concluded that empirical studies have tended to show that there is no normative (best) style of leadership and that effective leaders adapt their behavior to meet the needs of their followers and the particular environment (p. 103).

Conflict, like leadership, has many definitions. Since conflict may be classified as intrapersonal, interpersonal, intergroup, interorganizational, or international, knowledge of the context within which the interaction occurs aids in its understanding. Regardless of the context there is general consensus that conflict is costly to all involved in terms of time, energy, and resources. An individual's orientation to conflict resolution/management is important in determining the outcome. When the conflict is intraorganizational in nature, the outcome may affect both the efficiency and the effectiveness of the organization.

#### Conceptualizations of Conflict

Mack and Snyder (1973) noted that there has been inadequate conflict conceptualization and theory development which has led to the lack of generalization across disciplinary lines. They stated that in



the absence of a conflict framework it becomes difficult to choose between alternative approaches or to transfer relevant knowledge from one arena of social conflict to another (p. 27). Thomas (1976) has also noted that "in the behavioral sciences the word 'conflict' has no single, clear referent." Coser (1964) suggested that consolidation of a theory could possibly result if some of the central conceptions from the "classical" sociological literature were clarified and linked with research findings and relevant theoretical material (p. 29). Lacking a unified theory, the works of Deutsch (1973), Blake and Mouton (1964), Likert (1967), Likert and Likert (1976), and Thomas (1976) which are related to intergroup conflict, organizational climate, and industrial psychology will provide the major conceptual bases for this study.

Deutsch (1973) analyzed conflict in relation to the effects of cooperative and competitive processes.

In a cooperative situation when a participant behaves in such a way as to increase his chances of goal attainment, he increases the chances that the others, with whom he is promotively linked, will also attain their goals. In contrast, in a competitive situation when a participant behaves in such a way as to increase his chances of goal attainment, he decreases the chances of the others. (p. 22)

A cooperative situation allows for more economical use of personnel and resources since repetition is not required in task behaviors. Favorable attitudes toward one another create open communication and trust allowing for the use of persuasion rather than coercion if conflicts arise. On the other hand, competitive situations are characterized by decreased or misleading communications and the development of suspicious, hostile attitudes. Task orientation breaks down as imposition of the solution becomes the mode of conflict resolution resulting in duplication of effort rather than division of effort (Deutsch 1973, p. 25).

Blake and Mouton (1964) analyzed conflict behavior in relation to managerial styles. The 9,1 manager deals with conflict in a competitive way through illogical disagreements and open arguments. The competition is impersonal and economic in nature with the idea that production comes first. The 1,9 manager attempts reconciliation through appeasement and "smoothing over" conflict. The 1,1 manager avoids conflict by withdrawing or maintaining strict neutrality. The 5,5 manager seldom confronts conflict head-on but attempts to arrive at a solution which, although not the perfect one, represents the thinking of the contending factions. The 9,9 manager emphasizes unity in group efforts, seeking an interconnection between people and work. Conflict is managed through direct confrontation.

Likert's (1967) characterization of interaction-influence processes and decision-making processes for Systems 1 through 4 reveals a gradual increase in communications and cooperativeness which in turn leads to more effective management of conflict. Likert and Likert (1976) maintained that the conflict handling process is viewed as virtually always win-lose in System 1, largely win-lose and very little win-win in System 2, some win-lose and some win-win in System 3, and virtually always win-win in System 4 (Likert and Likert 1976, p. 283).

Thomas (1976) presented a dyadic model of conflict which focuses on both internal and external processes and structures of the phenomenon. The process model focused on the sequence of events leading up to the conflict episode while the structural model focused on those conditions which shape the conflict behavior in a relationship. Drawing from the work of Blake and Mouton, he introduced five orientations to conflict-handling based on the two dimensions of assertiveness



and cooperativeness. It was his contention that "the cooperative-uncooperative dichotomy appears to greatly oversimplify the more complex range of options available to the conflict party" (p. 901).

Ruble and Thomas (1976) also addressed the limitations of the unidimensional "cooperative-competitive" classification of interpersonal conflict-handling behavior. They examined the relationship between the Thomas two-dimensional model and the connotative meaning of the two primary dimensions of ratings of persons and their behaviors--i.e., evaluative (good vs. bad) and dynamism (strong and active vs. weak and passive) in actual or hypothetical conflict situations. Analyses from two studies revealed that two "negative" modes (avoiding and competing) and three "positive" modes (collaborating, compromising, and accommodating) supported the premises of the two-dimensional model of conflict-handling behavior (p. 152).

#### Conflict Management

Coser (1964) stated that conflict served a social function of group maintenance since it regulated relationships. Both Coser (1964) and Deutsch (1973) maintained that the intensity of conflict tended to be related to the closeness of group relationships.

Certain internal properties of groups as well as external conditions impacting on them favor the development of conflict situations. Internal characteristics of groups that may influence the level of conflict include group cohesiveness, "ingroup cohesiveness" which causes "outgroup hostility," group structure, and power. External factors include increased contact and interaction; "ingroup" and "outgroup"

distinctions; competition for scarce resources such as wealth, power, prestige, and territory; and social changes (Deutsch 1973).

Anxiety, tension, resistance, and conflict tend to be associated with change. The immediate applications of research findings and modern technology are causing rapid changes within many organizations. When these factors are added to the more traditional causes of conflict--e.g., struggles for power and status or the desire for economic gain--the level of conflict occurring within an organization will increase (Likert and Likert 1976, Bennis 1969).

An organization's structure and functioning may impede the management or resolution of conflict. Bureaucratic organizations tend to have more conflict because of institutional attempts to control behavior and the reactions of employees to such control and their inability to have input into the decision-making process (Calderwell and Daywalt 1983, Griffin 1984, Kowalski 1982). Coser (1964) noted that "decision-makers are engaged in maintaining and, if possible, strengthening the organizational structures through and in which they exercise power and influence. Whatever conflicts occur within these structures will appear to them to be dysfunctional" (pp. 27-28).

The traditional power-oriented win-lose methods of settling disputes are ineffective and destructive. Bennis (1969, p. 22) suggested a change in the basic philosophy underlying managerial behavior--i.e., man has complex and shifting needs, power must be based on collaboration and reason, and organizational values must be based on humanistic-democratic ideals.

Blake and Mouton (1973) noted that in accepting the status quo requirements and by conforming to the expectations of others and the



patterns of institutions, man reduces the tendency toward conflict but may at the same time diminish his creative problem-solving capacities. They maintained that differences are intrinsically valuable and that appropriate resolution of these differences will allow for implementation of effective solutions leading to success in meeting society's future challenges. In the 9,9 approach to conflict, disagreement is valued as inevitable in that strong minded people have convictions of what is right. It is assumed that all involved will examine causes and facts through candid discussion.

Likert and Likert (1976) have noted also that the win-lose pattern of conflict management only serves to perpetuate the problem and aggravate the struggle, and that this win-lose approach to problem-solving is inherent in Systems 1 and 2 and to some extent in System 3 (p. 69). They asserted that large organizations such as firms, hospitals, governmental agencies, or universities could handle differences more constructively through the application of System 4 concepts and principles. They referred to their model as a "linking pins structure." Such a multiple-overlapping group structure would allow for more cross-functional coordination of activities designed to meet an organization's goals since more alternate channels for communication are developed (pp. 211-215).

Many others who have written about conflict management also contended that conflict is inescapable and that trying to avert it is detrimental to both individuals and the organization since it causes group dysfunction and decreased performance (Araki 1983, Baxter 1982, Dorman 1984, Kormanski 1982, Lippitt 1982, Wilson 1984).

In relation to the most viable methods of dealing with conflict, Griffin (1984), Kormanski (1982), Kraten (1982), and Wilson (1984) noted that the use of power/authority/force usually tends to be a poor choice. Avoidance, withdrawal, or distancing also are generally considered to be ineffective methods of dealing with conflict, especially when working with professional staff (Araki 1983, Griffin 1984, Kormanski 1982, Kreidler 1984, Lippitt 1982, Wilson 1984). Adopting a "win-lose" philosophy when dealing with conflict causes heightened tensions and intensifies the conflict (Lippitt 1983, McDonald 1984, McGuire 1984).

The "win-win" approach is considered to be the most widely accepted strategy for conflict management (Araki 1983, Kowalski 1982, Kraten 1982, Lippitt 1982, Mallory 1985). Working toward integrating points of agreement by decision-making through consensus allows for the generation of a variety of alternative solutions (Chermin 1982, Isherwood 1982, Kormanski 1982, Kraten 1982).

Conflict should be dealt with in a timely manner to avoid deterioration of relations (Calderwell and Daywalt 1983, McDonald 1984, Fahs 1982, Mallory 1985). Trust, mutual respect, honesty, and integrity are essential if conflict management through group problem-solving is to be effective (Araki 1983, Calderwell and Daywalt 1983, Chermin 1982, Griffin 1984, Lippitt 1982, Silber 1984). When dealing with conflict, the manager must guide interactions to assure that the substantive issue(s) and not the persons (or personalities) are dealt with (Fahs 1982, Gamon 1982, Griffin 1984, Lippitt 1982, Roseman 1984).



### Recent Research and Related Findings

Leadership styles in relation to organizational climate, teacher satisfaction, and other aspects of overall school effectiveness continue to be studied with various research methods and different tools. Generally when the LEAD-Self instrument is used, it is used in conjunction with LEAD-Other. Also, when the LEAD-Self is used, the researcher compares all three attributes--i.e., style, style range, and adaptability--of the instrument to selected variables.

A number of doctoral students including Beck (1978), Paul (1980), Clark (1981), Grimes (1982), Winkler (1983), and Romero (1983) have used the LEAD-Self, LEAD-Other, and LEAD-Subordinate to study the leadership styles of principals. Welch (1982) used these instruments to study leadership styles of school superintendents. Several others have studied the styles of academicians (Adamitis 1981, Bryant 1983). Gooding (1978) studied the leadership styles of administrative heads of colleges/departments of nursing. Doctoral students have also used the Thomas-Kilman Conflict Mode Instrument to study the conflict management techniques of educators and other management personnel (Thomas 1971, Robertson 1977, Ashmore 1979, Garnier 1981, Camp 1984, Ryan 1984, Revilla 1984, Goodwyn 1985). Doering (1979) studied the levels of conflict among health care personnel. These researchers did not use the same tools nor the same samples as were used in this study.

A thorough search of dissertation abstracts and ERIC documents by this researcher revealed only one other study which utilized both the LEAD-Self and Thomas-Kilman Conflict Mode Instrument. The search did not reveal any studies related to leadership styles and conflict

management techniques of middle management supervisory personnel in health care using these two instruments.

Porter (1982) compared the self-perceptions of North Dakota elementary principals' leadership styles, their range of leadership styles, and their leadership adaptability with a number of variables including sex, age, amount of education, number of years of experience as a classroom teacher, number of years of experience as a principal, number of women teachers supervised, and training in leadership. She found no statistically significant differences between the leadership style, range of leadership styles, and adaptability of these principals in relation to age, amount of education, number of years of experience as a principal, or amount of leadership training. There also was no statistical difference between the number of years experience as a teacher and the leadership range and adaptability; however, there was a statistical difference in relation to style. Those principals who had the most experience as teachers had a Low Relationship and Low Task dominant style, suggesting that the more experience a principal had as a teacher, the less he/she was concerned with relationship-oriented behavior. In relation to gender differences, there was no statistical difference between the principals' leadership styles and range; however, there was a statistical difference in relation to the adaptability score with female principals being more adaptable in their leadership behaviors. There was no statistically significant difference between the number of female teachers supervised and the principal's leadership style and range; however, principals who supervised more female teachers were able to adapt their leadership behaviors more effectively than principals who supervised fewer female teachers.



Romero (1983) studied the relationship of conflict management style to the leadership style of secondary school principals. The principals involved in the study reported High Task and High Relationship as their dominant style of leadership with High Relationship and Low Task as the supporting style. Their self-reported leadership styles were found to have no relationship to their years of experience, number of hours of management development training, and number of hours of conflict management training.

Thomas (1971) conducted an exploratory study of five conflict-handling modes and other variables in the context of interdepartmental relationships in a telephone company. The modes identified in his study were: forcing (win-lose arguing), avoiding the issue, accommodation of the other's view, compromising (proposing a middle-ground solution), and candor (sharing and soliciting information for problem-solving). He found a statistically significant, although weak, relationship between conflict-handling behaviors and the age, sex, and values which the manager's subordinates perceived him/her as stressing. Women used forcing less than men and compromising more than men. The tendency for using forcing decreased and the tendency for accommodation increased after the age of 40. It was also found that managers between the ages of 20 and 30 were least accommodating and those between the ages of 51 and 65 engaged the least in forcing. In relation to supervisory styles, it was found that supervisors who emphasized coordination with other departments were themselves somewhat less likely to avoid interdepartmental issues. Supervisors who stressed achievement of the department's performance indices had some tendency to engage in more forcing and less candor. Thomas concluded that this latter

pattern fit the stereotype of Blake and Mouton's production-oriented or "(9,1)" manager.

Huie (1983) utilized the Thomas-Kilmann Mode Instrument to test the differences in the conflict approaches used by nurses and those used by physicians. She found no significant differences, although mean scores of responses indicated that nurses tended to compromise while physicians tended to collaborate. A statistically significant difference was found between ages of the physicians and nurses and the preferred conflict management techniques. Younger physicians and nurses tended to use the compromising mode while the older age group tended to score higher on the use of avoiding. No statistically significant differences in the preferred use of a conflict-handling mode were found in relation to sex, area of practice, or level of education.

Hightower (1984) sought to gain a better understanding of the variables impacting a subordinate's choice of conflict-handling strategies in dyadic relationships with a superior. He studied the relationship between a subordinate's choice of conflict-handling strategies in high-stakes, hierarchial conflict situations and his/her desire to remain in the organization. Avoidance was the most frequently utilized mode followed by compromise, collaboration, competition, and accommodation. Only the mode of compromise had significant variance. This mode was used more frequently by those aged 30 or less and those between 50 and 59 years of age and less frequently by those 60 years and over. Comparison of the type of conflict-handling mode with years of employment showed no significant variance.

Revilla (1984) investigated the conflict management styles of male and female administrators in three private liberal arts colleges



in the state of Pennsylvania, comparing them to a norm group from business and government. She found no significant gender differences between the conflict management styles of the administrators. Significance at the .05 and .01 levels was found in relation to some of the conflict management styles and age, level of education, and management level; there was a small relationship between age and the use of competing and accommodating, between the level of education and the use of avoiding, and between the management level and the use of collaborating and avoiding. There was a "subtle difference" between the norm group and the research population. The research population used the modes of competing and collaborating significantly less than the norm group. The research population also used the modes of compromising and avoiding significantly more than the norm group. The author noted that this difference may have been accounted for by the large and unequal sample size.

Aina (1983) studied the ethnic influence on leadership and conflict management in selected Nigerian universities using the LEAD-Self and the Thomas-Kilmann Conflict Mode Instrument. He found that the two modes of high assertiveness (competition and collaboration) matched the two modes of high task behavior (telling and selling). Results also indicated that the two modes of low assertiveness (accommodation and avoidance) matched with the mode of high relationship behavior. He concluded that an assertive dean seems to be at the same time high in task behavior and a cooperative dean seems to be high in relationship behavior. He noted a similarity between each of the two dimensions of leader behavior (task and relationship) and conflict management orientation (assertiveness and cooperativeness). Since the task behavior



dimension was similar to the assertiveness orientation dimension, he further concluded that a leader who is high in task behavior is also high in assertiveness orientation. He goes on to state that a leader who is high in relationship behavior tends to be high in cooperativeness orientation because of the relationship between the use of the accommodating style of conflict management and the use of the participating style of leadership.

In summary, there has been insufficient research conducted with consistent use of the same instruments to determine if there is a relationship between specific leadership styles and conflict management techniques. The lack of widely accepted theories on leadership and conflict management techniques adds also to the problem in the assessment of relationship between these two concepts.

## CHAPTER III

### METHODOLOGY

The purpose of this study was to determine possible relationships between self-reported leadership styles and conflict management techniques of a selected group of hospital middle management supervisory personnel. These leadership styles and conflict management techniques were analyzed on the basis of each supervisor's sex, age, level of educational preparation, years in a supervisory position, number of subordinates supervised, type of department, and amount of management training. This chapter describes the hospitals and participants, the survey instruments, the data collection procedures, and the methods of analysis.

#### Selection of Hospitals and Participants

Eight of the largest acute care hospitals in the state of North Dakota were selected for inclusion in this study. Selection of the specific hospitals was made based on their bed capacity and consequently the probability of their having distinct patient care and ancillary departments with identifiable department heads or cost center managers.

In order to be included in the sample, individual supervisors:

- 1) must have been in a supervisory position a minimum of one year,
- 2) must be the director/manager of a recognized department within the hospital, and 3) must supervise three or more subordinates. This was

a voluntary sample in that both the hospitals and the supervisors could decline to participate.

### Survey Instruments

The participants were asked to complete three survey instruments. The questionnaire used to obtain background information is included in appendix A. A letter requesting copyright permission related to the Thomas-Kilmann Conflict Mode Instrument and the purchase of copies of the Hersey and Blanchard LEAD-Self Instrument is found in appendix B.

### Personal Background Data

A one-page background information sheet was developed by the researcher to collect data on variables which might be related to the self-reported leadership styles and conflict management techniques. Participants were asked to provide data related to sex, age, level of educational preparation, number of years in their current supervisory position, number of overall years in supervisory positions, number of subordinates currently supervised, type of department supervised, and approximate number of hours of management training they had received.

### LEAD-Self Instrument

The LEAD-Self Instrument consists of twelve management situations for which respondents have a choice of four alternatives, one which best describes their management style. The instrument, developed by Hersey and Blanchard (1974), measures three aspects of leader behavior: 1) style, 2) style range, and 3) style adaptability. Leadership style is defined as the consistent pattern of behavior which an



individual exhibits, as perceived by others, when attempting to influence the activities of people. This pattern involves either task behavior or relationship behavior or some combination of both. The Hersey and Blanchard model is an outgrowth of the Ohio State Leadership Studies. Hersey and Blanchard provided definitions of "Initiating Structure" (task) and "Consideration" (relationship).

Task behavior--The extent to which a leader is likely to organize and define the roles of the members of his group (followers); to explain what activities each is to do and when, where, and how tasks are to be accomplished; characterized by endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting jobs accomplished.

Relationship behavior--The extent to which a leader is likely to maintain personal relationships between himself and the members of his group (followers) by opening up channels of communication, delegating responsibility and giving subordinates an opportunity to use their potential; characterized by socioemotional support, friendship and mutual trust. (1972, pp. 82-83)

The leader behavior styles of task and relationship behavior are placed on horizontal and vertical axes, respectively, and defined according to four quadrants. Quadrant 1 represents High Task and Low Relationship, Quadrant 2 represents High Task and High Relationship, Quadrant 3 represents High Relationship and Low Task, and Quadrant 4 represents Low Task and Low Relationship. This model is illustrated in figure 1.

A dominant leadership style is defined as the quadrant where the most responses fall. The supporting style(s) is a leadership style which the individual will tend to use on occasion. Style range includes the dominant style plus supporting style(s) (Hersey and Blanchard 1974, p. 26).

Style adaptability, according to Hersey and Blanchard (1974, p. 28), is the degree to which leader behavior is appropriate to the

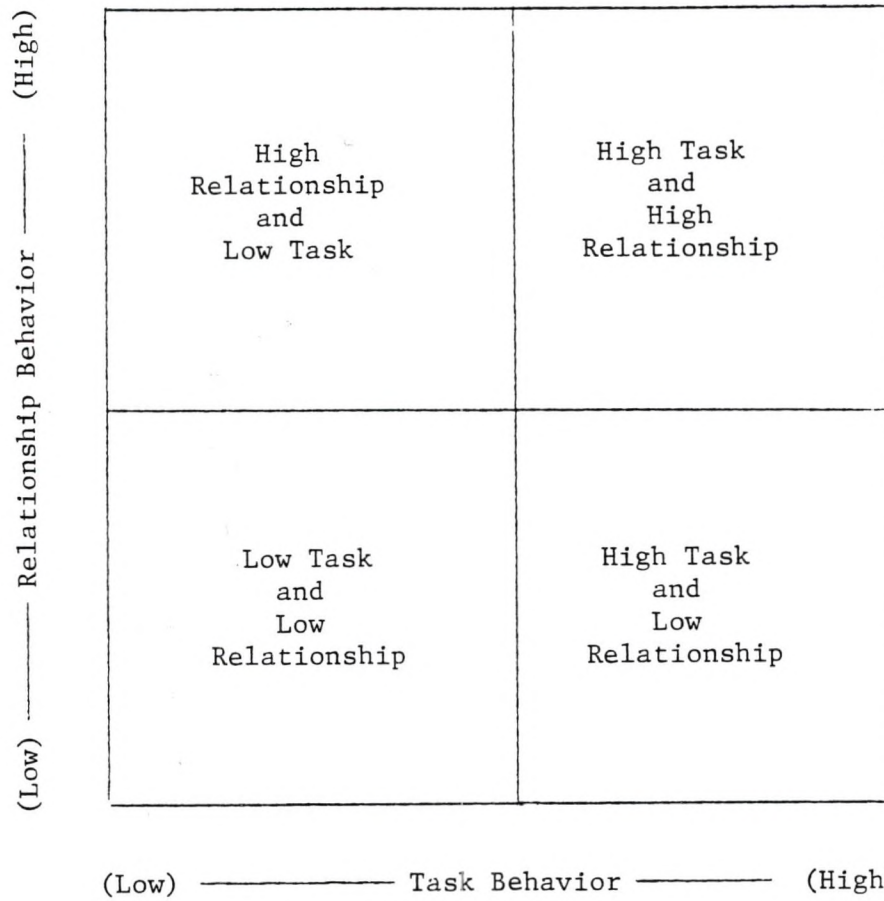


Fig. 1. Basic leader behavior styles.  
(Adapted from Hersey and Blanchard, 1982, p. 96.)



demands of a given situation. A person with a narrow style range can be effective over a long period of time if the leader remains in situations in which his or her style has a high probability of success. Conversely, a person with a wide range of styles may be ineffective if these behaviors are not consistent with the demands of the situation.

The LEAD-Self instrument was designed to measure specified aspects of leader behavior based on the Situational Leadership theoretical model. An accompanying manual was written by John F. Green.

The LEAD-Self Manual contains a discussion of the Situational Leadership Model, format of the scale, characteristics of ipsative measures, standardization procedures, item derivation and selection, estimates of reliability, logical validity, empirical validity, types of scores, and normative information. Administration and scoring procedures are also included. The LEAD-Self was standardized on the responses of 264 managers constituting a North American sample. The managers ranged in age from twenty-one to sixty-four; 30 percent were at the entry level of management; 55 percent were middle managers; 14 percent were at the high level of management. The twelve-item validities for the adaptability score ranged from .11 to .52, and ten of the twelve coefficients (83 percent) were .25 or higher. Eleven coefficients were significant beyond the .01 level and one was significant at the .05 level. Each response option met the operationally defined criterion of less than 80 percent with respect to selection frequency. The stability of the LEAD-Self was moderately strong. In two administrations across a six-week interval, 75 percent of the managers maintained their dominant style and 71 percent maintained their alternate style. The contingency coefficients were both .71 and each was significant ( $p < .01$ ). The correlation for the adaptability scores was .69 ( $p < .01$ ). The LEAD-Self scores remained relatively stable across time and the user may rely on the results as consistent measures.

The logical validity of the scale was clearly established. Face validity was based on a review of the items, and content validity emanated from the procedures used to create the original set of items.

Several empirical validity studies were conducted. As hypothesized, correlations with the demographic/organismic variables of sex, age, years of experience, degree and management level were generally low, indicating the relative independence of the scales with respect to these variables. Satisfactory results were reported supporting the four style dimensions of the scale using a modified approach to factor structure. In forty-six of the forty-eight item options (96 percent), the expected relationship was found. In another study, a significant correlation of .67 was



found between the adaptability scores of the managers and the independent ratings of their supervisors. Based on these findings, the LEAD-Self instrument is deemed to be an empirically sound instrument. (Hersey and Blanchard 1982, p. 105)

#### Thomas-Kilmann Conflict Mode Instrument

The Thomas-Kilmann Conflict Mode Instrument, owned and originated by XICOM, Inc., contains thirty paired statements describing modes of handling conflict. It is a self-report instrument designed to assess an individual's behavior in conflict situations. Conflict situations are defined as those in which the concerns of two people appear to be incompatible. In such situations, a person's behavior may be described along two basic dimensions--assertiveness and cooperativeness (Thomas and Kilmann 1974).

Cooperativeness is defined as attempting to satisfy the other party's concerns. Assertiveness is defined as attempting to satisfy one's own concerns. These two dimensions are used to identify the five conflict-handling modes in figure 2.

These five conflict-handling modes are defined by Thomas and Kilmann.

Competing is assertive and uncooperative--an individual pursues his own concerns at the other person's expense. This is a power-oriented mode, in which the individual uses whatever power seems appropriate to win one's position--one's ability to argue, one's rank, economic sanctions. Competing might mean "standing up for your rights," defending a position which you believe is correct, or simply trying to win.

Accommodating is unassertive and cooperative--the opposite of competing. When accommodating, an individual neglects his own concerns to satisfy the concerns of the other person; there is an element of self-sacrifice in this mode. Accommodating might take the form of selfless generosity or charity, obeying another person's order when one would prefer not to, or yielding to another's point of view.

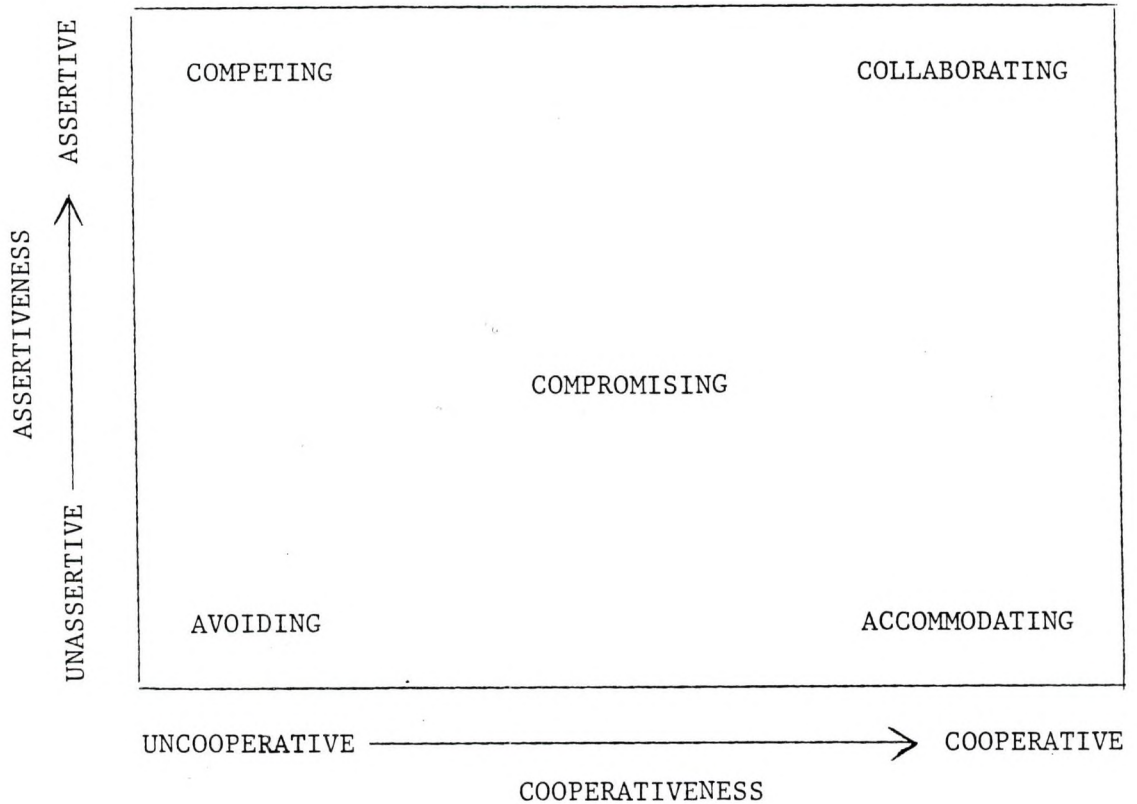


Fig. 2. A two-dimensional model of conflict handling. (Adapted from "Conflict and Conflict Management" by Kenneth Thomas in The Handbook of Industrial Psychology edited by Marvin Dunnette, 1976, p. 900.)



Avoiding is unassertive and uncooperative--the individual does not pursue his own concerns or those of the other person. He does not address the conflict. Avoiding might take the form of diplomatically sidestepping an issue, postponing an issue until a better time, or simply withdrawing from a threatening situation.

Collaborating is both assertive and cooperative--the opposite of avoiding. Collaborating involves an attempt to work with the other person to find some solution which fully satisfies the concerns of both persons. It means digging into an issue to identify the underlying concerns of the two individuals and to find an alternative which meets both sets of concerns. Collaborating between two persons might take the form of exploring a disagreement to learn from each other's insights, concluding to resolve some condition which would otherwise have them competing for resources, or confronting and trying to find a creative solution to an interpersonal problem.

Compromising is intermediate in both assertiveness and cooperativeness. The objective is to find some expedient, mutually acceptable solution which partially satisfies both parties. It falls on a middle ground between competing and accommodating. Compromising gives up more than competing but less than accommodating. Likewise, it addresses an issue more directly than avoiding, but doesn't explore it in as much depth as collaborating. Compromising might mean splitting the difference, exchanging concessions, or seeking a quick middle-ground position. (1974, p. 12)

. Validity and reliability of the Thomas and Kilmann Conflict Mode Instrument were established by Kilmann and Thomas (1977) and Thomas and Kilmann (1978) in comparison with similar instruments developed by Blake and Mouton, Lawrence-Lorsch, and Hall. The average alpha coefficient for internal consistency of items for the Mode instrument was .60 compared to .55 for the Hall instrument and .45 for the Lawrence-Lorsch instrument (1977, p. 316).

The test-retest reliabilities also compared favorably with the other instruments. The average test-retest coefficient for the Mode instrument was .64. This coefficient for the Hall instrument was .55, for the Lawrence-Lorsch instrument .50, and for the Blake and Mouton instrument .39 (Kilmann and Thomas 1977, p. 317). Thomas and Kilmann (1978, p. 1142) later reported that test-retest reliability and



internal consistencies showed a tendency to improve with the chronological order of improvement of the Mode instrument.

Correlation studies for convergent test validity among the four instruments on each of the five modes of conflict handling were conducted. It was reported that moderate correlation occurred between the competition, collaborating, and avoiding scores of the four instruments with intercorrelation of accommodation scores low and those for compromising almost negligible (Thomas and Kilmann 1978, p. 1142). Studies have also shown that the Thomas-Kilmann and Hall instruments show somewhat higher reliabilities and some degree of convergent test validity across all five modes of conflict (Thomas and Kilmann 1978, p. 1144).

Kilmann and Thomas (1977) reported some support for the external validity of the Mode instrument. Findings indicated that the instrument could discriminate expected differences in male versus female respondents and differences between student behavior towards teachers versus generalized others (Kilmann and Thomas 1977, p. 320). They recommended that further tests on the Mode's external validity be conducted.

Kilmann and Thomas (1977) concluded that social desirability in responding to all four instruments can distort results due to self-reporting of more desirable modes--i.e., a tendency to prefer behavior higher in cooperativeness than behavior lower in cooperativeness. In developing their Mode instrument they attempted to control for the social desirability response bias.

### Data Collection Procedures

The presidents of each of the eight hospitals selected to participate in the study were contacted initially through a letter which gave a brief explanation of the study and requested permission to conduct the survey in that facility (appendix C). Approximately one week later the researcher contacted the presidents via telephone to determine their responses and to answer questions regarding the study.

After initial approval to conduct the study in each institution was given, the president delegated coordination of the data collecting activity to another individual, such as the personnel director or a vice president.

Data were collected either before or following an institution's regularly scheduled management meeting. In all cases the middle management supervisory personnel were informed that the researcher would be collecting data prior to or following the meeting.

The researcher was on site to collect the data. Participants were informed of the purpose of the study and were told that their participation was voluntary. The three instruments, assembled in manila envelopes, were distributed by the researcher with the assistance of the institution's contact person.

Clarification of items on the background information sheet was given. Then participants were given instructions on how to complete the LEAD-Self instrument. When it had been ascertained that all participants had completed that tool, instructions were given for completion of the Thomas-Kilmann Conflict Mode Instrument. When these instruments were completed, the researcher gave instructions for the



scoring of both instruments. This process allowed participants to receive immediate feedback on their leadership styles and conflict management techniques.

A brief description of task behavior and relationship behavior with identification of the four quadrants of basic leader behavior styles and an interpretation of the five conflict management techniques with the two dimensional chart depicting the assertiveness and cooperativeness axes were provided for those participants who wished to have that information. Transparencies containing this information facilitated the presentation. Participants were then instructed to replace all forms in the envelope for collection by the researcher.

All scoring sheets were checked for accuracy. Responses from each individual in the eight hospitals were transferred to a master sheet and then entered into the computer.

#### Protection of Human Subjects

At the beginning of the data collecting session at each of the eight hospitals, participants were informed that their participation was voluntary. They were requested not to identify themselves by name on the data collecting instruments and were informed that for the purposes of this study hospitals would be identified by a letter code.

#### Methods of Analysis

Analysis of data focused on any relationships between the self-reported leadership styles and conflict management techniques as measured by the two instruments. Quantitative information was reported through the use of descriptive statistics in summarizing numerical data. The chi-square test for contingency tables, a non-parametric



statistical procedure, was used to determine any relationships. The SPSSX Batch System was used for analysis. Data summaries are included in appendix D. The results of the data analyses are presented in the following chapter.

## CHAPTER IV

### RESULTS AND DISCUSSION

This study examined the self-reported primary and secondary leadership styles and conflict management techniques of middle management supervisory personnel in the eight largest hospitals in North Dakota. The major question studied was whether there was a relationship between the variables of sex, age, level of education, years in the current supervisory position, total years in supervisory positions, hours of management training, and number of subordinates supervised and leadership styles and conflict management techniques. The relationship between leadership styles and conflict management techniques also was studied. Leadership styles were measured by the Hersey and Blanchard LEAD-Self Instrument and conflict management techniques were measured by the Thomas-Kilmann Conflict Mode Instrument.

#### Description of Sample

The sample was comprised of 171 middle management supervisory personnel from the eight largest hospitals in North Dakota. Fifteen data collection instruments were determined to be invalid for purposes of the study due to the level of management involved--i.e., top management or supervisory status below that of department or cost center manager, too few subordinates in the department, or incomplete data forms.

The 156 usable forms represented a sample of middle management supervisory personnel who had a minimum of one year in a management position and had three or more subordinates in their department. Table 1 summarizes the data from the respondents.

Of the total, 46.8 percent were males and 53.2 percent were females. The age range for males was 28 to 65 with a mean age of 42; the age range for females was 25 to 62 with a mean age of 42. Of those responding, 21.8 percent were under 35 years of age, 41.7 percent were between the ages of 36 and 45, and 32.1 percent were 46 or more years of age. Age was not listed by 4.4 percent of the respondents.

Reporting of the educational level for all respondents indicated that 36.5 percent had less than Bachelor's level preparation, 41.7 percent held Bachelor's degrees, and 18.6 percent held Master's degrees. Level of educational preparation was not listed by 3.2 percent of the respondents.

Of these middle managers, 28.8 percent had been in their current supervisory positions for less than 2 years, 38.5 percent had been in their positions from 3 to 8 years, and 32.7 percent had been in their positions for 9 years or more. In terms of total years in a supervisory position, 31.4 percent had been in this type of position for at least 7 years, 32.1 percent for 8 to 15 years, and 35.9 percent for 16 years or more. The total number of years in supervisory positions was not listed by 0.6 percent of the respondents.

These supervisors were asked to indicate the number of subordinates who reported directly to them, not necessarily the total number of subordinates in their department. This number ranged from 1 to 90. Although the various hospitals and their respective



TABLE 1

## SUMMARY OF BACKGROUND INFORMATION FOR RESPONDENTS

| Background Information           | Hospitals and Number/Percentages of Responses |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
|----------------------------------|---|------|----|------|---|------|---|------|----|------|----|------|----|------|---|------|-------|------|
|                                  | A   |      | B  |      | C |      | D |      | E  |      | F  |      | G  |      | H |      | TOTAL |      |
|                                  | N   | %    | N  | %    | N | %    | N | %    | N  | %    | N  | %    | N  | %    | N | %    | N     | %    |
| SEX:                             |   |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
| Male                             | 10  | 8.3  | 11 | 55.0 | 6 | 54.5 | 7 | 46.7 | 10 | 37.0 | 12 | 37.5 | 12 | 40.0 | 5 | 55.5 | 73    | 46.8 |
| Female                           | 2   | 16.7 | 9  | 45.5 | 5 | 45.5 | 8 | 53.3 | 17 | 63.0 | 20 | 62.5 | 18 | 60.0 | 4 | 45.5 | 83    | 53.2 |
| AGE:                             |   |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
| 35 or under                      | 1   | 8.3  | 1  | 5.0  | 3 | 27.3 | 1 | 6.7  | 4  | 14.8 | 9  | 28.1 | 10 | 33.3 | 5 | 55.5 | 34    | 21.8 |
| 36-45                            | 5   | 41.7 | 12 | 60.0 | 5 | 45.5 | 8 | 53.3 | 11 | 40.7 | 12 | 37.5 | 9  | 30.0 | 3 | 33.3 | 65    | 41.7 |
| 45 or above                      | 6   | 50.0 | 6  | 30.0 | 2 | 18.1 | 6 | 40.0 | 12 | 44.4 | 10 | 31.2 | 7  | 23.3 | 1 | 11.1 | 50    | 32.1 |
| Not listed                       | 0   | 0.0  | 1  | 5.0  | 1 | 9.0  | 0 | 0.0  | 0  | 0.0  | 1  | 3.1  | 4  | 13.3 | 0 | 0.0  | 7     | 4.4  |
| LEVEL OF EDUCATION:              |   |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
| Less than a<br>Bachelor's Degree | 1   | 8.3  | 5  | 25.0 | 3 | 27.3 | 9 | 60.0 | 11 | 40.7 | 11 | 34.4 | 14 | 46.7 | 3 | 33.3 | 57    | 36.5 |
| Bachelor's Degree                | 3   | 25.0 | 10 | 50.0 | 5 | 45.5 | 4 | 26.7 | 11 | 40.7 | 16 | 50.0 | 11 | 36.7 | 5 | 55.5 | 65    | 41.7 |
| Master's Degree<br>(or higher)   | 8   | 66.7 | 5  | 25.0 | 1 | 9.0  | 1 | 6.7  | 4  | 14.8 | 5  | 15.6 | 4  | 13.3 | 1 | 11.1 | 29    | 18.6 |
| Not listed                       | 0   | 0.0  | 0  | 0.0  | 2 | 18.1 | 1 | 6.7  | 1  | 3.7  | 0  | 0.0  | 1  | 3.3  | 0 | 0.0  | 5     | 3.2  |

TABLE 1--Continued

| Background Information                       | Hospitals and Number/Percentages of Responses |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
|--|---|------|----|------|---|------|---|------|----|------|----|------|----|------|---|------|-------|------|
|  | A   |      | B  |      | C |      | D |      | E  |      | F  |      | G  |      | H |      | TOTAL |      |
|  | N   | %    | N  | %    | N | %    | N | %    | N  | %    | N  | %    | N  | %    | N | %    | N     | %    |
| YEARS IN CURRENT SUPERVISORY POSITION:       |   |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
| 0-2  | 7   | 58.3 | 3  | 15.0 | 4 | 36.3 | 4 | 26.7 | 6  | 22.2 | 12 | 37.5 | 7  | 23.3 | 2 | 22.2 | 45    | 28.8 |
| 3-8  | 5   | 41.7 | 7  | 35.0 | 4 | 36.3 | 4 | 26.7 | 9  | 33.3 | 12 | 37.5 | 16 | 53.3 | 3 | 33.3 | 60    | 38.5 |
| 9 or more                                    | 0   | 0.0  | 10 | 50.0 | 3 | 27.3 | 7 | 46.7 | 12 | 44.4 | 8  | 25.0 | 7  | 23.3 | 4 | 45.5 | 51    | 32.7 |
| TOTAL YEARS IN A SUPERVISORY POSITION:       |   |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
| 1-7  | 6   | 50.0 | 3  | 15.0 | 3 | 27.3 | 5 | 33.3 | 6  | 22.2 | 13 | 40.6 | 12 | 40.0 | 1 | 11.1 | 49    | 31.4 |
| 8-15   | 1   | 8.3  | 5  | 25.0 | 5 | 45.5 | 4 | 26.7 | 11 | 40.7 | 7  | 21.8 | 11 | 36.7 | 6 | 66.6 | 50    | 32.1 |
| 16 or more                                   | 4   | 33.3 | 12 | 60.0 | 3 | 27.3 | 6 | 40.0 | 10 | 37.0 | 12 | 37.5 | 7  | 23.3 | 2 | 22.2 | 56    | 35.9 |
| Not listed                                   | 1   | 8.3  | 0  | 0.0  | 0 | 0.0  | 0 | 0.0  | 0  | 0.0  | 0  | 0.0  | 0  | 0.0  | 0 | 0.0  | 1     | 0.6  |
| NUMBER OF SUBORDINATES CURRENTLY SUPERVISED: |   |      |    |      |   |      |   |      |    |      |    |      |    |      |   |      |       |      |
| 3-5  | 4   | 33.3 | 10 | 50.0 | 4 | 36.3 | 5 | 33.3 | 6  | 22.2 | 9  | 28.1 | 6  | 20.0 | 2 | 22.2 | 46    | 29.5 |
| 6-15   | 4   | 33.3 | 7  | 35.0 | 6 | 54.5 | 8 | 53.3 | 7  | 25.9 | 11 | 34.3 | 6  | 20.0 | 2 | 22.2 | 51    | 32.7 |
| 16 or more                                   | 4   | 33.3 | 3  | 15.0 | 1 | 9.0  | 2 | 13.3 | 13 | 48.1 | 12 | 37.5 | 17 | 56.6 | 5 | 55.5 | 57    | 36.5 |
| Not listed                                   | 0   | 0.0  | 0  | 0.0  | 0 | 0.0  | 0 | 0.0  | 1  | 3.7  | 0  | 0.0  | 1  | 3.3  | 0 | 0.0  | 2     | 1.3  |

TABLE 1--Continued

| Background<br>Information        | Hospitals and Number/Percentages of Responses |             |             |             |             |             |             |             |                 |  |
|----------------------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|--|
|                                  | A<br>N    %                                   | B<br>N    % | C<br>N    % | D<br>N    % | E<br>N    % | F<br>N    % | G<br>N    % | H<br>N    % | TOTAL<br>N    % |  |
| HOURS OF MANAGEMENT<br>TRAINING: |   |             |             |             |             |             |             |             |                 |  |
| 0-99                             | 5   41.7                                      | 3   15.0    | 4   36.3    | 5   33.3    | 4   14.8    | 12   37.5   | 8   26.7    | 5   55.5    | 46   29.5       |  |
| 100-199                          | 6   50.0                                      | 7   35.0    | 3   27.3    | 5   33.3    | 4   14.8    | 5   15.6    | 15   50.0   | 4   45.5    | 49   31.4       |  |
| 200 or more                      | 1   8.3                                       | 10   50.0   | 4   36.3    | 5   33.3    | 19   70.3   | 13   40.6   | 5   16.6    | 0   0.0     | 57   36.5       |  |
| Not listed                       | 0   0.0                                       | 0   0.0     | 0   0.0     | 0   0.0     | 0   0.0     | 2   6.3     | 2   6.6     | 0   0.0     | 2   2.5         |  |



departments were organized differently, the wide range in the number of subordinates reported apparently represents, in a number of cases, the total number of employees within the department rather than the actual number reporting directly to the supervisor. In instances where the number reported was less than three (the criterion for inclusion in the study), the contact person at the participating institution was asked to verify if at least three subordinates worked in those departments. Of those responding, 29.5 percent reported that they supervised 3 to 5 subordinates, 32.7 percent reported supervising 6 to 15, and 36.5 percent reported supervising 16 or more subordinates. The number of subordinates reporting directly was not listed by 1.3 percent of the respondents.

Management training hours were described as those programs which were not a part of a formal degree but rather consisted of in-service programs, conferences, workshops, or seminars related to any aspect of management or supervision. Respondents listed hours of management training ranging from 0 to 2,000+. Between 0 and 99 hours of management training were reported by 29.5 percent of the respondents; 31.4 percent reported having received between 100 and 199 hours and 36.5 percent reported having received 200 or more hours of training. Of those responding, 2.5 percent did not indicate hours of management training.

#### Dominant and Supporting Leadership Styles

Of the 156 respondents, 8.9 percent did not have a dominant or primary style of leadership--i.e., their responses provided tied scores

for two or three styles. In addition, 12.8 percent reported more than a single supporting or secondary leadership style.

Table 2 summarizes the dominant leadership styles for these respondents. None of the respondents reported Low Task and Low Relationship (Quadrant 4) as their dominant style. High Task and High Relationship (Quadrant 2) was reported by 67.3 percent of those responding as their dominant or primary style of leadership; 23.1 percent reported High Relationship and Low Task (Quadrant 3) and 0.6 percent reported High Task and Low Relationship (Quadrant 1).

In relation to the supporting or secondary style of leadership summarized in table 3, 12.8 percent did not have a single reported style. High Relationship and Low Task (Quadrant 3) was reported by 53.8 percent of those responding; 19.9 percent reported High Task and High Relationship (Quadrant 2), 10.9 percent reported High Task and Low Relationship (Quadrant 1), and 2.5 percent reported Low Task and Low Relationship (Quadrant 4).

#### Primary and Secondary Conflict Management Techniques

Two- or three-way ties for their primary conflict management techniques were reported by 18.5 percent of those responding; 28.2 percent also had two- or three-way ties for their secondary technique.

Table 4 contains information on the primary conflict management technique of the hospital middle managers. Of those responding, 23.7 percent reported behaviors indicative of a Compromising technique as their primary mode of conflict management. Collaborating was reported by 21.8 percent, Avoiding by 19.8 percent, Competing by 9.0 percent, and Accommodating by 7.1 percent.

TABLE 2

## DOMINANT LEADERSHIP STYLES AMONG HOSPITAL MIDDLE MANAGERS

| Dominant Style                                     | Frequency | Percent<br>of Total |
|--|-----------|---------------------|
| High Task and<br>Low Relationship<br>(Quadrant 1)  | 1         | 0.6                 |
| High Task and<br>High Relationship<br>(Quadrant 2) | 105       | 67.3                |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 36        | 23.1                |
| Low Task and<br>Low Relationship<br>(Quadrant 4)   | 0         | 0.0                 |
| No Single Dominant<br>Style                        | 14        | 8.9                 |
| TOTAL  | 156       | 99.9                |



TABLE 3

## SUPPORTING LEADERSHIP STYLES AMONG HOSPITAL MIDDLE MANAGERS

| Supporting Style                                   | Frequency | Percent<br>of Total |
|--|-----------|---------------------|
| High Task and<br>Low Relationship<br>(Quadrant 1)  | 17        | 10.9                |
| High Task and<br>High Relationship<br>(Quadrant 2) | 31        | 19.9                |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 84        | 53.8                |
| Low Task and<br>Low Relationship<br>(Quadrant 4)   | 4         | 2.5                 |
| No Single Supporting<br>Style                      | 20        | 12.8                |
| TOTAL  | 156       | 99.9                |

TABLE 4  
PRIMARY CONFLICT MANAGEMENT TECHNIQUES  
AMONG HOSPITAL MIDDLE MANAGERS

| Primary Technique              | Frequency | Percent<br>of Total |
|--------------------------------|-----------|---------------------|
| Competing                      | 14        | 9.0                 |
| Collaborating                  | 34        | 21.8                |
| Compromising                   | 37        | 23.7                |
| Avoiding                       | 31        | 19.8                |
| Accommodating                  | 11        | 7.1                 |
| No Single Primary<br>Technique | 29        | 18.5                |
| TOTAL                          | 156       | 99.9                |

Table 5 contains information on the secondary or backup mode for conflict handling. No single consistent secondary or backup style was reported by 28.2 percent of those responding; 20.0 percent reported utilizing the Compromising mode, 17.3 percent the Collaborating mode, 17.3 percent the Avoiding mode, 8.9 percent the Accommodating mode, and 8.3 percent the Competing mode.

#### Leadership Styles and Conflict Management Techniques Related to Variables

For purposes of analysis, the chi-square test was applied only to the responses of those middle management supervisory personnel who exhibited a single dominant leadership style and a primary conflict management technique. Since only one respondent reported the use of High Task and Low Relationship (Quadrant 1) and none reported the use of Low Task and Low Relationship (Quadrant 4), this information will not appear on the tables.

#### Sex of Respondents

The comparison of the dominant leadership styles as reported by sex of respondents is shown in table 6. Of the 141 managers, 46.8 percent were males and 53.2 percent were females. There were no statistically significant differences between males and females in their use of leadership styles. Both sexes reported High Task and High Relationship (Quadrant 2) as their most utilized style of leadership.

Table 7 contains information on the use of the various conflict management techniques as reported by sex of respondents. Statistically significant differences ( $p < .05$ ) were found in the use of preferred conflict management techniques as reported by sex. Males tended to use



TABLE 5  
SECONDARY CONFLICT MANAGEMENT TECHNIQUES  
AMONG HOSPITAL MIDDLE MANAGERS

| Secondary Technique              | Frequency | Percent<br>of Total |
|----------------------------------|-----------|---------------------|
| Competing                        | 13        | 8.3                 |
| Collaborating                    | 27        | 17.3                |
| Compromising                     | 31        | 20.0                |
| Avoiding                         | 27        | 17.3                |
| Accommodating                    | 14        | 8.9                 |
| No Single Secondary<br>Technique | 44        | 28.2                |
| TOTAL                            | 156       | 100.0               |

TABLE 6  
DOMINANT LEADERSHIP STYLES REPORTED BY SEX OF RESPONDENTS

| Leadership Style                                   | Males |      | Females |      |
|--|-------|------|---------|------|
|  | N     | %    | N       | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 48    | 45.7 | 57      | 54.3 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 18    | 50.0 | 18      | 50.0 |

chi-square = .063, df = 1, p = .802

TABLE 7  
PRIMARY CONFLICT MANAGEMENT TECHNIQUES  
REPORTED BY SEX OF RESPONDENTS

| Conflict<br>Management<br>Techniques | Males |      | Females |      |
|--------------------------------------|-------|------|---------|------|
|                                      | N     | %    | N       | %    |
| Competing                            | 3     | 5.2  | 11      | 15.9 |
| Collaborating                        | 17    | 29.3 | 17      | 24.6 |
| Compromising                         | 14    | 24.1 | 23      | 33.3 |
| Avoiding                             | 15    | 25.9 | 16      | 23.2 |
| Accommodating                        | 9     | 15.5 | 2       | 2.9  |

chi-square = 10.372, df = 4, p = .035



the Compromising mode less often than did females; 24.1 percent of the males and 33.3 percent of the females reported using this conflict management technique. The Collaborating mode was used by 29.3 percent of the males and 24.6 percent of the females. The Competing mode was used by 5.2 percent of the males and 15.9 percent of the females. The Accommodating mode was used by 15.5 percent of the males and 2.9 percent of the females.

#### Age of Respondents

Table 8 contains comparisons based on age of respondents. The dominant leadership style for all three age categories was High Task and High Relationship (Quadrant 2). No statistically significant differences were found among the three categories in relation to the reported dominant leadership styles.

Table 9 contains information on the use of the various conflict management techniques as reported by age of respondents. Statistically significant differences ( $p < .05$ ) were found in the use of preferred conflict management techniques as reported by age of respondents. Respondents 36 to 45 years of age tended to use the Compromising mode more frequently than did those respondents in the other two age categories; 23.1 percent of those 35 years of age or under, 43.9 percent of those between 36 and 45 years of age, and 13.5 percent of those 46 years of age or more indicated its use. The second most frequently used mode was that of Collaborating. Respondents 46 years of age or more used the Collaborating mode more frequently than did those respondents in the other two age categories; 23.1 percent of those 35 years of age or under, 17.5 percent of those between 36 and 45 years of age,

TABLE 8  
DOMINANT LEADERSHIP STYLES REPORTED BY AGE OF RESPONDENTS

| Leadership Styles                                  | 35 or Under |      | 36 to 45 Years |      | 46 or Above |      |
|--|-------------|------|----------------|------|-------------|------|
|  | N           | %    | N              | %    | N           | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 23          | 23.5 | 41             | 41.8 | 34          | 34.7 |
| High Relationship<br>and Low Task<br>(Quadrant 3)  | 10          | 27.8 | 15             | 41.7 | 11          | 30.6 |

chi-square = 0.333, df = 2, p = .847

TABLE 9  
PRIMARY CONFLICT MANAGEMENT TECHNIQUES REPORTED BY AGE OF RESPONDENTS

| Conflict<br>Management<br>Techniques | 35 or Under |      | 36 to 45 Years |      | 46 or Above |      |
|--------------------------------------|-------------|------|----------------|------|-------------|------|
|                                      | N           | %    | N              | %    | N           | %    |
| Competing                            | 4           | 15.4 | 7              | 12.3 | 2           | 5.4  |
| Collaborating                        | 6           | 23.1 | 10             | 17.5 | 17          | 45.9 |
| Compromising                         | 6           | 23.1 | 23             | 43.9 | 5           | 13.5 |
| Avoiding                             | 8           | 30.8 | 9              | 15.8 | 11          | 29.7 |
| Accommodating                        | 2           | 7.7  | 6              | 10.5 | 2           | 5.4  |

chi-square = 19.226, df = 8, p = .014



and 45.9 percent of those 46 years of age or more indicated its use. Avoiding was the third most frequently reported technique. Respondents between the ages of 36 and 45 used Avoiding less frequently than did those respondents in the other two age categories; 30.8 percent of those 35 years of age or under, 15.8 percent of those between 36 and 45 years of age, and 29.7 percent of those 46 years of age or more indicated its use. Competing was used by 15.4 percent of the respondents 35 years of age or under, 12.3 percent of those between 36 and 45, and 5.4 percent of those 46 years of age or more. The Accommodating mode was used by 7.7 percent of the respondents 35 years of age or under, 10.5 percent of those between 36 and 45 years of age, and 3.1 percent of those 46 years of age or more. Of the 7 respondents who did not list their ages, one each reported the use of the Competing, Compromising, and Avoiding modes, and two each used the modes of Collaborating and Accommodating.

#### Level of Education

Table 10 contains information on dominant leadership styles reported by level of education. The dominant leadership style for all three educational categories was High Task and High Relationship (Quadrant 2). No statistically significant differences were found in relation to level of education and self-reported leadership styles.

Table 11 contains information on the various conflict management techniques as reported by level of education. Compromising was reported as the most frequently used technique for all three educational categories. Collaborating and Avoiding were the second and third most frequently used techniques, respectively. No statistically

TABLE 10  
DOMINANT LEADERSHIP STYLES REPORTED BY LEVEL OF EDUCATION

| Leadership Styles                                  | Less than<br>Bachelor's |      | Bachelor's |      | Master's<br>or Higher |      |
|--|-------------------------|------|------------|------|-----------------------|------|
|  | N                       | %    | N          | %    | N                     | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 40                      | 39.6 | 43         | 42.6 | 18                    | 17.8 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 13                      | 36.1 | 14         | 38.9 | 9                     | 25.0 |

chi-square = 0.864, df = 2, p = .649

TABLE 11

PRIMARY CONFLICT MANAGEMENT TECHNIQUES REPORTED BY LEVEL OF EDUCATION

| Conflict Management Techniques | Less than Bachelor's |      | Bachelor's |      | Master's or Higher |      |
|--------------------------------|----------------------|------|------------|------|--------------------|------|
|                                | N                    | %    | N          | %    | N                  | %    |
| Competing                      | 3                    | 6.4  | 9          | 18.0 | 0                  | 0.0  |
| Collaborating                  | 17                   | 36.2 | 9          | 18.0 | 6                  | 24.0 |
| Compromising                   | 14                   | 29.8 | 12         | 24.0 | 11                 | 44.0 |
| Avoiding                       | 9                    | 19.1 | 16         | 32.0 | 5                  | 20.0 |
| Accommodating                  | 4                    | 8.5  | 4          | 8.0  | 3                  | 12.0 |

chi-square = 13.945, df = 8, p = .083



significant differences were found in relation to the level of education and preferred mode of conflict handling.

#### Years in Current Supervisory Position

Table 12 contains comparisons based on years in the current supervisory position. The dominant leadership style for all three categories was High Task and High Relationship (Quadrant 2). There were no statistically significant differences in relation to the number of years in the current supervisory positions and the dominant leadership styles.

Table 13 contains information on the use of the various conflict management techniques as reported by years in the current supervisory position. Compromising was the most frequently used technique. Collaborating and Avoiding were the second and third most frequently used techniques, respectively. No statistically significant differences were found in relation to years in the current supervisory position and conflict management techniques.

#### Total Years in Supervisory Positions

Table 14 contains the comparisons based on the total years in supervisory positions. The dominant leadership style for all three categories was High Task and High Relationship (Quadrant 2). No statistically significant differences were found in relation to total years as a supervisor and the dominant leadership styles.

Table 15 contains information on the use of various conflict management techniques as reported by total years in supervisory positions. Compromising was reported as the most frequently used conflict management technique; Collaborating and Avoiding were the second and

TABLE 12  
 DOMINANT LEADERSHIP STYLES REPORTED BY YEARS  
 IN CURRENT SUPERVISORY POSITION

| Leadership Styles                                  | 2 Years<br>or Less |      | 3 to 8<br>Years |      | 9 Years<br>or More |      |
|--|--------------------|------|-----------------|------|--------------------|------|
|  | N                  | %    | N               | %    | N                  | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 26                 | 24.8 | 46              | 43.8 | 33                 | 31.4 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 14                 | 38.9 | 10              | 27.8 | 12                 | 33.3 |

chi-square = 3.651, df = 2, p = .161

TABLE 13  
 PRIMARY CONFLICT MANAGEMENT TECHNIQUES REPORTED BY  
 YEARS IN CURRENT SUPERVISORY POSITION

| Conflict<br>Management<br>Techniques | 2 Years<br>or Less |      | 3 to 8<br>Years |      | 9 Years<br>or More |      |
|--------------------------------------|--------------------|------|-----------------|------|--------------------|------|
|                                      | N                  | %    | N               | %    | N                  | %    |
| Competing                            | 5                  | 12.5 | 4               | 8.3  | 5                  | 12.8 |
| Collaborating                        | 8                  | 20.0 | 14              | 29.2 | 12                 | 30.8 |
| Compromising                         | 17                 | 42.5 | 10              | 20.8 | 10                 | 25.6 |
| Avoiding                             | 7                  | 17.5 | 14              | 29.2 | 10                 | 25.6 |
| Accommodating                        | 3                  | 7.5  | 6               | 12.5 | 2                  | 5.1  |

chi-square = 7.973, df = 8, p = .436



TABLE 14  
 DOMINANT LEADERSHIP STYLES REPORTED BY  
 TOTAL YEARS IN SUPERVISORY POSITIONS

| Leadership Styles                                  | 7 Years<br>or Less |      | 8 to 15<br>Years |      | 16 Years<br>or More |      |
|--|--------------------|------|------------------|------|---------------------|------|
|  | N                  | %    | N                | %    | N                   | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 29                 | 27.9 | 37               | 35.6 | 38                  | 36.5 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 16                 | 44.4 | 10               | 27.8 | 10                  | 27.8 |

chi-square = 3.365, df = 2, p = .186

TABLE 15  
PRIMARY CONFLICT MANAGEMENT TECHNIQUES REPORTED BY  
TOTAL YEARS IN SUPERVISORY POSITIONS

| Conflict<br>Management<br>Techniques | 7 Years<br>or Less |      | 8 to 15<br>Years |      | 16 Years<br>or More |      |
|--------------------------------------|--------------------|------|------------------|------|---------------------|------|
|                                      | N                  | %    | N                | %    | N                   | %    |
| Competing                            | 4                  | 9.1  | 6                | 15.0 | 4                   | 9.5  |
| Collaborating                        | 8                  | 18.2 | 13               | 32.5 | 13                  | 31.0 |
| Compromising                         | 17                 | 38.6 | 11               | 27.5 | 8                   | 19.0 |
| Avoiding                             | 10                 | 22.7 | 8                | 20.0 | 13                  | 31.0 |
| Accommodating                        | 5                  | 11.4 | 2                | 5.0  | 4                   | 9.5  |

chi-square = 7.783, df = 8, p = .455

third most frequently used techniques, respectively. No statistically significant differences were found in relation to total years as a supervisor and conflict management techniques.

Table 16 contains information related to the number of subordinates supervised. The dominant leadership style for all three categories was High Task and High Relationship (Quadrant 2). No statistically significant differences were found between number of subordinates supervised and dominant leadership styles.

Table 17 contains information on the use of various conflict management techniques as reported by the number of subordinates supervised. Compromising was the most frequently reported technique used. Collaboration and Avoiding were the second and third most frequently used techniques, respectively. No statistically significant differences were found between number of subordinates supervised and conflict management techniques.

#### Hours of Management Training

Table 18 contains information on dominant leadership styles reported by the number of hours of management training. The dominant leadership style for all three categories was High Task and High Relationship (Quadrant 2). No statistically significant differences were found between hours of management training and dominant leadership styles.

Table 19 contains information on the use of various conflict management techniques as reported by hours of management training. Compromising was the most frequently used technique. Collaboration and Avoiding were the second and third most frequently used techniques,



TABLE 16  
 DOMINANT LEADERSHIP STYLES REPORTED BY  
 NUMBER OF SUBORDINATES SUPERVISED

| Leadership Styles                                  | 5 Subordinates<br>or Less |      | 6 to 15<br>Subordinates |      | 16 Subordinates<br>or More |      |
|--|---------------------------|------|-------------------------|------|----------------------------|------|
|  | N                         | %    | N                       | %    | N                          | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 25                        | 24.0 | 33                      | 31.7 | 46                         | 44.2 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 14                        | 40.0 | 12                      | 34.3 | 9                          | 25.7 |

chi-square = 4.700, df = 2, p = .095

TABLE 17  
 PRIMARY CONFLICT MANAGEMENT TECHNIQUES REPORTED BY  
 NUMBER OF SUBORDINATES SUPERVISED

| Conflict<br>Management<br>Techniques | 5 Subordinates<br>or Less |      | 6 to 15<br>Subordinates |      | 16 Subordinates<br>or More |      |
|--------------------------------------|---------------------------|------|-------------------------|------|----------------------------|------|
|                                      | N                         | %    | N                       | %    | N                          | %    |
| Competing                            | 5                         | 13.5 | 2                       | 4.9  | 7                          | 14.9 |
| Collaborating                        | 8                         | 21.6 | 10                      | 24.4 | 14                         | 29.8 |
| Compromising                         | 6                         | 16.2 | 17                      | 41.5 | 14                         | 29.8 |
| Avoiding                             | 14                        | 37.8 | 8                       | 19.5 | 9                          | 19.1 |
| Accommodating                        | 4                         | 10.8 | 4                       | 9.8  | 3                          | 6.4  |

chi-square = 11.104, df = 8, p = .196

TABLE 18  
 DOMINANT LEADERSHIP STYLES REPORTED BY  
 HOURS OF MANAGEMENT TRAINING

| Leadership Styles                                  | 99 Hours<br>or Less |      | 100 to 199<br>Hours |      | 200 Hours<br>or More |      |
|--|---------------------|------|---------------------|------|----------------------|------|
|  | N                   | %    | N                   | %    | N                    | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 30                  | 29.1 | 34                  | 33.0 | 39                   | 37.9 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 14                  | 38.9 | 10                  | 27.8 | 12                   | 33.3 |

chi-square = 1.183, df = 2, p = .554



TABLE 19  
PRIMARY CONFLICT MANAGEMENT TECHNIQUES REPORTED BY  
HOURS OF MANAGEMENT TRAINING

| Conflict<br>Management<br>Techniques | 99 Hours<br>or Less |      | 100 to 199<br>Hours |      | 200 Hours<br>or More |      |
|--------------------------------------|---------------------|------|---------------------|------|----------------------|------|
|                                      | N                   | %    | N                   | %    | N                    | %    |
| Competing                            | 3                   | 7.1  | 3                   | 8.3  | 7                    | 14.9 |
| Collaborating                        | 10                  | 23.8 | 11                  | 30.6 | 13                   | 27.7 |
| Compromising                         | 12                  | 28.6 | 10                  | 27.8 | 15                   | 31.9 |
| Avoiding                             | 13                  | 31.0 | 9                   | 25.0 | 8                    | 17.0 |
| Accommodating                        | 4                   | 9.5  | 3                   | 8.3  | 4                    | 8.5  |

chi-square = 3.813, df = 8, p = .874

respectively. No statistically significant differences were found between hours of management training and conflict management techniques.

Table 20 contains information on the comparison of relationships between the dominant leadership styles and the primary conflict management techniques of the middle management supervisory personnel participating in this study. The most frequently reported dominant leadership style was that of High Task and High Relationship (73.9 percent) and the most frequently reported primary conflict-handling mode was that of Compromising (29.6 percent). There were no statistically significant relationships between leadership styles and conflict management techniques in the sample studied.

#### Summary and Interpretations

Of the 171 respondents participating in the study, the data collected from 156 were usable for statistical analyses. There were 73 males and 83 females in the sample. The majority of the sample were in the 36 to 45 age group; the mean age for the group was 42. Fifty-nine percent of the respondents had educational preparation at the Bachelor's degree level or higher. Seventy-one percent of the respondents had been in their current supervisory positions for 3 years or more. The group was distributed nearly evenly in terms of the three categories for total years in a supervisory position--i.e., 1 to 7, 8 to 15, and 16 or more years. Sixty-nine percent of the supervisors indicated having 16 or more subordinates reporting to them. Sixty-eight percent of the respondents reported having 100 or more hours of management training.

TABLE 20

COMPARISON OF RELATIONSHIP BETWEEN DOMINANT LEADERSHIP STYLES  
AND PRIMARY CONFLICT MANAGEMENT TECHNIQUES

| Leadership Styles                                  | Conflict Management Techniques |      |               |      |              |      |          |      |               |      |
|--|--------------------------------|------|---------------|------|--------------|------|----------|------|---------------|------|
|  | Competing                      |      | Collaborating |      | Compromising |      | Avoiding |      | Accommodating |      |
|  | N                              | %    | N             | %    | N            | %    | N        | %    | N             | %    |
| High Task and<br>High Relationship<br>(Quadrant 2) | 11                             | 84.6 | 19            | 63.3 | 28           | 82.4 | 20       | 69.0 | 7             | 77.8 |
| High Relationship and<br>Low Task<br>(Quadrant 3)  | 2                              | 15.4 | 11            | 36.7 | 6            | 17.6 | 9        | 31.0 | 2             | 22.2 |

chi-square = 4.208, df = 4, p = .379



High Task and High Relationship (Quadrant 2) was reported as their dominant leadership style by 67.3 percent of the respondents. High Relationship and Low Task (Quadrant 3) was reported as their dominant style by 23.1 percent of the respondents. No single dominant leadership style was reported by 8.9 percent of those responding; 0.6 percent reported a dominant leadership style of High Task and Low Relationship (Quadrant 1). None of the respondents indicated use of the Low Task and Low Relationship style (Quadrant 4). No single primary conflict management technique was reported by 18.5 percent of those responding. Of those respondents reporting a single or primary technique, Compromising (23.7%) was the most frequently used technique followed by Collaborating (21.8%), Avoiding (19.8%), Competing (9.0%), and Accommodating (7.1%).

Only the data from those respondents reporting a single dominant leadership style and a single primary conflict management technique were included in the data analyzed for this study. The following interpretations have been made from that data.

#### Dominant Leadership Styles

The large number of self-reported High Task and High Relationship behaviors (Quadrant 2) may, in part, be accounted for by the fact that this supervisory behavior is often viewed as being more socially acceptable. Across all variables it accounted for approximately 67 percent of the total leadership style responses. Women tended to use this style more frequently than men. Supervisors between the ages of 35 and 46 tended to use it more frequently than their other colleagues. Respondents with Master's degrees tended to use the High Relationship

and Low Task style (Quadrant 3) more than the High Task and High Relationship style (Quadrant 2). Supervisors who had held their current positions between 3 and 8 years reported more frequent use of the High Task and High Relationship style (Quadrant 2). Supervisors in their positions 7 years or less reported more frequent use of the High Relationship and Low Task style (Quadrant 3). Supervisors with 16 or more subordinates used the High Task and High Relationship style (Quadrant 2) more frequently and supervisors with 5 or fewer subordinates used the High Relationship and Low Task style (Quadrant 3) more frequently. Hours of management training did not produce any distinctive pattern of frequency for the use of either of the dominant styles.

#### Primary Conflict Management Techniques

When comparing the modes of conflict management reported in this study, the researcher found that the most frequently reported mode was Compromising. Females tended to use this technique slightly more than males (33.3 percent and 24.1 percent, respectively). Supervisors between the ages of 36 and 45 also tended to use Compromising more frequently than did their counterparts in other age groups. Respondents with educational preparation at the Master's level or higher tended to use the Compromising mode more frequently. Supervisors who had been in their positions 2 years or less used Compromising more frequently than those who had been in their positions for 3 years or more. This mode tended to be used less frequently as the total number of years in supervisory positions increased. Compromising was reported more frequently by those who supervised between 6 and 15 subordinates than by



those who supervised less than 5 or 16 or more subordinates; this mode did not seem to be influenced by the hours of management training.

Collaborating was the second most frequently reported conflict management technique. It appeared to be used with similar frequency by both men and women. It was used more frequently by supervisors 46 years and older. It was used less frequently by those respondents with less than a Bachelor's degree as compared to those with a Bachelor's degree and more frequently by those with a Master's degree. The use of Collaborating increased as the number of years in a supervisory position increased. This mode showed less variance in relation to the number of subordinates supervised or the hours of management training completed.

Competing was the third most frequently reported technique used for conflict management. Competing was reported more frequently by females than by males. The frequency of use of Competing decreased with age of the respondents. More respondents with a Bachelor's degree used Competing than did those without the degree; however, none of the respondents with a Master's degree reported its use. The use of this mode fluctuated with years of supervisory experience; however, in this sample it did show a decrease after 15 years of experience. Competing was reported to be used less by those supervisors with 6 to 15 subordinates. The use of this mode increased in relation to hours of management training.

Avoiding was the fourth most frequently reported conflict management technique. There was little variation in terms of gender. It tended to be used more frequently by those 35 years or under and those 46 years and over. As noted earlier, those between 36 and 45 years of age reported higher use of Compromising; that may account for the less



frequent use of Avoiding by persons in that age group. The use of Avoiding was higher for those respondents with a Bachelor's degree than for those having less than a Bachelor's degree or the Master's degree or higher. Avoiding also tended to be used more frequently by supervisors having more than 3 years of experience and less frequently by those with 6 or more subordinates. The use of Avoiding decreased steadily in relation to the increase in hours of management training completed.

Accommodating was the conflict-handling mode least often reported in relation to all variables studied. This mode was reported more frequently by men than by women. It also was reported more frequently by supervisors between the ages of 36 and 45; this may bear some relationship to the increased use of Compromising--also considered to be an unassertive mode of conflict management--in this age group. This mode showed little variance among those with a Bachelor's degree or less but frequency of use increased slightly among those with a Master's degree. The use of this mode was highest among those in their current supervisory position between 3 and 8 years. The use of Accommodating showed a decrease in frequency of use as the number of subordinates increased. The number of hours of management training completed did not seem to affect its use.

## CHAPTER V

### OBSERVATIONS/CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

This study sought to determine if a relationship existed between the self-reported leadership styles and conflict management techniques of middle management supervisory personnel in the eight largest hospitals in North Dakota. The Hersey and Blanchard LEAD-Self Instrument, the Thomas-Kilmann Conflict Mode Instrument (XICOM, 1974), and a form designed by the researcher to collect background information were used for this study. This chapter provides a section on observations/conclusions, some limitations of the study, and several recommendations.

#### Observations/Conclusions

The following conclusions are based upon analysis of the data collected and information gained through review of the literature.

1. The large number of department heads/cost center managers who participated in the study indicated they were interested in assessing their leadership styles and conflict management techniques.
2. Self-reporting of leadership styles may allow for the increased possibility that supervisors are reporting behaviors that they view as "socially acceptable." Unless these behaviors are validated by subordinates and superordinates, there is no assurance that they have been accurately reported.

3. The High Task and High Relationship leadership style (Quadrant 2) seems to be the most frequently reported dominant style of management among middle managers both in hospital settings and schools. The High Relationship and Low Task leadership style (Quadrant 3) seems to be the most frequently reported supporting style. The majority of hospital middle management supervisory personnel reported their dominant style of leadership as High Task and High Relationship (Quadrant 2). Their supporting style was reported as High Relationship and Low Task (Quadrant 3). In this study no statistically significant differences were found between the self-reported leadership styles of supervisors on the basis of the variables of sex, age, level of education, years in the current supervisory position, total years in supervisory positions, number of subordinates, and hours of management training completed. These findings are similar to those of Romero (1983) who also found High Task and High Relationship (Quadrant 2) as the dominant style of leadership among secondary school principals. High Relationship and Low Task (Quadrant 3) was reported as the most frequently used supporting style. She did not find any significant differences on the basis of those variables studied here. Porter (1982) also found High Task and High Relationship (Quadrant 2) to be the dominant leadership style of elementary school principals. High Relationship and Low Task (Quadrant 3) was reported as their supporting style. She found a significant difference in relation to years of experience as a teacher and use of the Low Task and Low Relationship style (Quadrant 4). Aina (1983) found the use of High Task and High Relationship (Quadrant 2) as the most frequently reported dominant style for respondents in his study; however, High Task and Low Relationship (Quadrant 1)



was the most frequently reported supporting style. High Relationship and Low Task (Quadrant 3) was the most frequently reported supporting style in the present study.

4. Conflict management techniques may not be accurately perceived by supervisors themselves; these perceptions should be validated by subordinates and superordinates. Organizational climate and the degree of bureaucracy may have an effect on the level of conflict within an institution.

5. The two most frequently reported conflict management techniques seem to be Compromising and Collaborating. The most frequently used primary conflict management technique reported by the hospital middle management supervisory personnel was Compromising. The second most frequently reported primary technique was that of Collaborating. Avoiding was the third most frequently reported conflict-handling technique in this study. There currently is a great deal of competition occurring among hospitals in this region; the external competition may cause increased internal cooperation within those hospitals included in the study. Compromise and Collaboration are considered to be cooperative forms of behavior and may be compatible with this increased need for cooperation internally. Avoiding may reflect a supervisor's unwillingness to confront conflict or it may reflect a delaying process aimed at a more in-depth study of the issues surrounding the conflict situation.

There were no significant differences between conflict management techniques reported by the supervisors in this study on the basis of the variables of level of education, years in the current supervisory position, total years in supervisory positions, number of subordinates,

or hours of management training completed. There were statistically significant differences between conflict management techniques on the basis of the variables of sex and age of the respondents. Females tended to use the Compromising and Competing modes more frequently than males and the Accommodating mode less frequently than males. Respondents 35 years of age or under used Competing more frequently than the other two age groupings. Those between 36 and 45 years of age used Compromising more frequently and Avoiding less frequently, and those age 46 or more tended to use Collaborating more frequently.

In his study, Thomas (1971) reported Candor, Compromise, and Accommodation as the three most frequently used conflict-handling techniques. The Compromising, Collaborating, and Avoiding modes were those identified by Huie (1983), Hightower (1984), and Revilla (1984) as being the three most frequently occurring conflict management techniques reported by participants in their studies. Aina (1983) found Competing and Avoiding to be the first and second reported choices, with equal use of Collaborating and Compromising as the third choice.

Findings of this study support those of Thomas (1971) in relation to the increased use of Compromising by women but do not support his findings of less use of Forcing (Competing). His findings that managers under 40 years of age used Accommodating less frequently were not supported by this study, but those indicating that younger managers used Forcing (Competing) more frequently were supported. He maintained that older managers at lower levels in the organization used Forcing less since their limited chances for promotion did not provide an incentive for competing.



This study did not support the findings of Revilla (1983) that the use of the Accommodating mode increased with age but did support the finding of decreased use of the Competing mode with age. Her finding that level of education was negatively correlated to Avoiding was not supported by this study.

Although age categories in Huie's (1983) study differed from the categories in this study, her findings that younger respondents tended to use the Compromising mode were supported by this study. Huie also found that older respondents in her study used Avoiding more frequently. Respondents in this study 46 years of age or more reported more frequent use of Avoiding than those between the ages of 36 and 45 and similar frequency of use of this mode by respondents 35 years of age and under. This supports Huie's findings.

The frequency of reporting of the use of Compromising in this study does not support Hightower's (1984) findings. The order of preference in the use of conflict management techniques by respondents in this study does not reflect those used by respondents in Aina's (1983) study.

The predominant use of Compromising as a mode of handling conflict may reflect the lack of training related to the causes of conflict and the most appropriate strategies for managing it. Compromising may be effective when a temporary solution needs to be reached; however, it places both parties in a partial win-win situation rather than finding a third solution which will meet the needs and requirements of both parties. Compromising represents a neutral stance in relation to cooperativeness and assertiveness.



Collaboration often is a more effective method of dealing with conflict since it provides for dialogue on the problem as well as its related issues. It calls for confrontation of the problem and openness in dealing with the context of the situation leading to the conflict. Thomas (1971) noted that decreases in Candor (Collaboration) are accompanied by decreases in the speed and efficiency of decision-making.

The frequent use of Avoiding could pose a problem for organizations because it may indicate that managers are withdrawing from actual or potential conflict situations rather than confronting them. Organizations cannot fulfill their missions or attain their goals if there is constant suppression of actual or perceived problems. Avoidance and Competing modes may be related to the organizational climate of the institution and the degree of bureaucracy. Thomas (1971) noted that Forcing tended to be reciprocal in nature, thus not allowing for the sharing of mutual concerns which could lead to resolution of the conflict.

Accommodation, an unassertive mode of dealing with conflict, can also be detrimental to an organization's success. Passivity or the lack of interest in dealing with concerns may result in inefficient decision-making.

#### Limitations

Several limitations of this study should be recognized by the reader.

1. The findings are based on data collected from only eight hospitals located in one geographical area and may not be generalizable to other regions.

2. The leadership styles and conflict management styles of the hospital middle managers who constituted the sample were self-reported; no effort was made to validate these findings through information gained from subordinates or superordinates.

3. Individuals may have a tendency to respond to hypothetical situations, such as those found on the data collecting instruments, in a "socially acceptable" manner rather than as an accurate assessment of their own behavior. For that reason, responses related to leadership style and modes of conflict handling may be a reflection of social desirability.

#### Recommendations

This study examined the potential relationships between the self-reported leadership styles and conflict management techniques of hospital middle managers in a predominantly rural, midwestern state. The following recommendations are made for action by the hospitals as well as for future research.

#### Recommendations for Hospitals

1. Hospital administrators should conduct more in-depth assessments of the conflict management techniques of their managers through validation of self-reported techniques by subordinates and superordinates.

2. Management training programs should be developed to address causes of conflict and strategies for dealing with them.

3. Managers need to be made aware that continued use of Avoidance, Accommodation, and Competing could be detrimental to the organization's ability to meet its goals.

Recommendations for Future Research

1. For purposes of studying the relationship between leadership styles and conflict management techniques more studies need to be conducted utilizing the same two instruments. Replications should also be done in a predominantly urban setting to identify possible differences related to geography and environment.

2. A larger number of managers should be included in future studies.

3. The mission as well as the organizational climate of those institutions participating in future studies should be assessed as factors bearing on a possible relationship to the leadership styles and conflict management techniques used by their managers.

4. Interdependence of departments as well as the overall organizational plan should be studied in relation to the primary conflict-handling techniques used by the managers to more clearly delineate relationships.

5. The hours of management training should be categorized as to the focus of the training, and the hours of actual conflict management training should be included as a separate variable to be studied.

Behavior is multidimensional; therefore, it would seem appropriate to study leadership styles and conflict management techniques from the perspective of several disciplines. A cross-disciplinary approach may be most productive in future studies related to leadership styles and conflict management techniques.



## APPENDICES

APPENDIX A  
SURVEY INSTRUMENT

## BACKGROUND INFORMATION

1. SEX:

       Male  
       Female

2. AGE:       

3. EDUCATION:

       Less than a Bachelor's Degree in                                  (major area)  
       Bachelor's Degree in    (major area)  
       Master's Degree or higher in    (major area)

4. NUMBER OF YEARS IN YOUR CURRENT SUPERVISORY POSITION:       5. NUMBER OF YEARS OVERALL IN SUPERVISORY POSITIONS:       6. NUMBER OF SUBORDINATES WHO CURRENTLY REPORT DIRECTLY TO YOU:       7. NAME OF DEPARTMENT SUPERVISED:   8. APPROXIMATE CLOCK HOURS OF MANAGEMENT TRAINING:       

(Management training refers to formal, planned training not included in your formal degree such as inservice, individual college courses, or workshops/seminars.)



APPENDIX B

LETTERS GRANTING PERMISSION FOR USE OF THE  
THOMAS-KILMANN CONFLICT MODE INSTRUMENT  
AND PURCHASE OF THE HERSEY AND  
BLANCHARD LEAD-SELF INSTRUMENT



Sterling Forest, Tuxedo, New York 10987    Telex: 646-590  
 914-351-4735    800-431-2395    212-989-2676



December 13, 1985

Ms. Todette L. Holt, R.N., M.S.  
 1316 N. 5th Street  
 Fargo, North Dakota 58102

Dear Ms. Todette:

Pursuant to your request, XICOM, INC. consents to your use of the Thomas-Kilmann Conflict Mode Instrument under the following terms and conditions:

(1) That the maximum number of Thomas-Kilmann Conflict Mode Instruments you reproduce will not exceed 150 copies and that the Thomas-Kilmann Conflict Mode Instrument be identified and XICOM be identified as the creators and owners thereof.

(2) You will use the Thomas-Kilmann Conflict Mode Instrument only for your thesis entitled, "The Relationship between Leadership Styles and Conflict Management Techniques as Reported by Hospital Middle Management Personnel in Eight of the Largest Hospitals in North Dakota."

It is further understood that if the above titled thesis is reproduced, a copy of the Thomas-Kilmann Conflict Mode Instrument may not be enclosed.

(3) You will provide XICOM with a copy of the results of this study and a copy of any articles produced as a result of this study.

(4) For the limited rights conveyed herein, you will pay XICOM, INC., Sixty Dollars (\$60.00).


(5) It is understood that the Thomas-Kilmann Conflict Mode Instrument and all reprints of articles written will credit Xicom as the owner/originators of the Thomas-Kilmann Conflict Mode Instrument.

(6) That you further agree that the use of any reference to promotional materials, any publications written as the result of this study will refer to the "Thomas-Kilmann Conflict Mode Instrument", copyright XICOM, INC. 1974.

If the above terms and conditions are agreeable, please sign on the line designated and return with a check for \$60.00.

ACCEPTED AND AGREED:

XICOM, INC.

  
Ms. Todette L. Holt, R.N., M.S.

  
Arthur J. Blazek  
Vice President-Sales

HOME ADDRESS  
1316 N. 5th Street  
Fargo, ND 58102

COMPLETION DATE OF THESIS

August, 1986

HOME PHONE NUMBER  
(701) 237-9707



THE  
UNIVERSITY  
OF  
NORTH  
DAKOTA

CENTER FOR TEACHING AND LEARNING  
Box 8158, University Station  
Grand Forks, North Dakota 58202

December 20, 1985

University Associates  
8517 Production Avenue  
San Diego, CA 92121

Dear Sirs:

I recently spoke with Mr. Ron Campbell regarding use of the LEAD-Self instrument as a data collecting instrument for my doctoral dissertation. He informed me that I could purchase the instrument for that use and that an educational discount would reduce the cost of the instrument to \$.95 each.

I would like to purchase 50 copies of the LEAD-Self instrument. I have enclosed a check to cover this cost since I wish to have the instruments by January 20th. Your promptness in dealing with this request will be appreciated.

Sincerely,

*Todette L. Holt*  
Todette L. Holt

*Donald L. Piper*  
Donald L. Piper, Advisor  
Chairperson, Educational Administration

APPENDIX C

WRITTEN COMMUNICATION TO HOSPITAL PRESIDENTS

January 22, 1986

(Name), President  
X Hospital  
X Address  
X City and State                      Zip

Dear \_\_\_\_\_:

In this rapidly changing health care delivery system managers are faced with a variety of decisions which may produce conflict. Effective conflict management enhances an organization's adaptability as well as its ability to develop relevant goals.

As a doctoral student at the University of North Dakota, I am interested in studying the relationship between the leadership styles and conflict management techniques of middle management supervisors in the eight largest hospitals in North Dakota. In planning for my dissertation I discussed these concepts with several individuals currently involved in the health care industry. I am writing to you at this time to seek your assistance for completion of my study.

The doctoral committee has now approved my research project and I am ready to begin implementing it. My proposal is to administer to unit cost managers (department heads) two instruments related to leadership styles and conflict management techniques. It should take approximately 20-30 minutes to complete these instruments. This survey does not constitute a workshop experience; it is a data-collecting activity using the LEAD-Self Instrument and the Thomas-Kilmann Conflict Mode Instrument.

As a Department Head myself I recognize that the availability of time to commit to such a study may be limited. However, I feel that such a study could be valuable to individual managers as well as their employing institutions. One study has shown that hospital administrators spend as much as 49 percent of their time dealing with conflict.

Managers can expect to work with others who have differing viewpoints. Therefore varying degrees of conflict will be inevitable as organizational needs and personal needs, beliefs, and values come together. Unresolved conflicts may contribute to reduced productivity and low morale among employees. Assessing one's leadership and conflict management style could be an important first step in helping managers understand and deal more effectively with conflict both intradepartmentally and interdepartmentally.

I would appreciate your consideration in permitting me to conduct my study in your institution. I will call you next week to discuss my request and would be happy to provide more information about my proposal at that time.

Sincerely,

Todette L. Holt, R.N., M.S.



APPENDIX D

INFORMATION PROVIDED BY INDIVIDUAL RESPONDENTS

TABLE 21

## INFORMATION PROVIDED BY INDIVIDUAL RESPONDENTS

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles      |                        | Conflict Management<br>Techniques |                           |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|------------------------|------------------------|-----------------------------------|---------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant               | Supporting             | Primary                           | Secondary                 |
| Males                       |     |                         |                   |                   |                   |                  |                        |                        |                                   |                           |
| 1                           | 36  | Bachelor's              | 4                 | 5                 | 58                | 100+             | HiTa-HiRe              | HiRe-LoTa              | Competing                         | Collaborating             |
| 2                           | 40  | Bachelor's              | 7                 | 11                | 8                 | 80               | HiTa-HiRe              | HiRe-LoTa              | Collaborating<br>Compromising     | Avoiding<br>Accommodating |
| 3                           | 55  | Master's                | 1                 | 20                | 4                 | 170+             | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Avoiding                  |
| 4                           | 64  | Bachelor's              | 8                 | 30                | 3                 | 100+             | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Accommodating             |
| 5                           | 37  | Master's                | 2                 | 4                 | 7                 | 30               | HiRe-LoTa              | HiTa-HiRe              | Compromising                      | Collaborating             |
| 6                           | 59  | Master's                | 6                 | 34                | 41                | 0                | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Competing                 |
| 7                           | 60  | Master's                | 3                 | –                 | 16                | 0                | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa | Compromising                      | Accommodating             |
| 8                           | 42  | Master's                | 1                 | 6                 | 26                | 100              | HiTa-HiRe<br>HiRe-LoTa |                        | Compromising                      | Accommodating             |
| 9                           | 51  | Master's                | 1                 | 5                 | 1 <sup>e</sup>    | 0                | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Compromising              |
| 10                          | 60  | Less than<br>Bachelor's | 2                 | 16                | 1 <sup>e</sup>    | 100+             | HiTa-HiRe              | HiRe-LoTa              | Collaborating<br>Avoiding         | Competing                 |
| 11                          | 54  | Master's                | 20                | 28                | 6                 | 100              | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Compromising              |
| 12                          | 38  | Less than<br>Bachelor's | 17                | 17                | 56                | 1,000+           | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Collaborating             |
| 13                          | 38  | Master's                | 3                 | 11                | 4                 | 150              | HiTa-HiRe              | HiRe-LoTa              | Accommodating                     | Avoiding                  |
| 14                          | 44  | Bachelor's              | 17                | 17                | 5                 | 100+             | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe<br>LoTa-LoRe | Collaborating<br>Compromising     | Avoiding                  |
| 15                          | 40  | Bachelor's              | 3                 | 12                | 3                 | 400+             | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Avoiding                  |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles |            | Conflict Management<br>Techniques              |                               |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------|--|-------------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant          | Supporting | Primary  | Secondary                     |
| 16                          | 41  | Bachelor's              | 4                 | 17                | 4                 | 200+             | HiRe-LoTa         | HiTa-LoRe  | Collaborating<br>Compromising<br>Accommodating | Avoiding                      |
| 17                          | 39  | Bachelor's              | 2                 | 8                 | 4                 | 50               | HiTa-HiRe         | HiRe-LoTa  | Compromising                                   | Competing                     |
| 18                          | 48  | Less than<br>Bachelor's | 19                | 21                | 4                 | 500              | HiRe-LoTa         | HiTa-HiRe  | Collaborating                                  | Compromising                  |
| 19                          | -   | Bachelor's              | 10                | 11                | 34                | 200+             | HiTa-HiRe         | HiRe-LoTa  | Compromising                                   | Competing                     |
| 20                          | 37  | Master's                | 1                 | 3                 | 12                | 50               | HiRe-LoTa         | HiTa-HiRe  | Accommodating                                  | Compromising<br>Avoiding      |
| 21                          | 34  | Bachelor's              | 3                 | 6                 | 2 <sup>e</sup>    | 480              | HiRe-LoTa         | HiTa-HiRe  | Collaborating<br>Compromising                  | Competing<br>Accommodating    |
| 22                          | 28  | Less than<br>Bachelor's | 2                 | 8                 | 25                | 24               | HiTa-HiRe         | HiTa-LoRe  | Competing<br>Avoiding                          | Collaborating                 |
| 23                          | 38  | Master's                | 4                 | 7                 | 11                | 50               | HiRe-LoTa         | LoTa-LoRe  | Compromising                                   | Collaborating                 |
| 24                          | 39  | Less than<br>Bachelor's | 10                | 12                | 11                | 100+             | HiTa-HiRe         | HiRe-LoTa  | Compromising                                   | Collaborating<br>Avoiding     |
| 25                          | 39  | Bachelor's              | 7                 | 7                 | 9                 | 300              | HiRe-LoTa         | HiTa-HiRe  | Collaborating                                  | Competing                     |
| 26                          | 40  | -                       | 10                | 10                | 7                 | 148              | HiTa-LoRe         | HiTa-HiRe  | Collaborating                                  | Compromising                  |
| 27                          | -   | -                       | 5                 | 16                | 3                 | 80               | HiTa-HiRe         | HiRe-LoTa  | Avoiding                                       | Accommodating                 |
| 28                          | 51  | Bachelor's              | 16                | 16                | 1 <sup>e</sup>    | 100              | HiTa-HiRe         | HiRe-LoTa  | Compromising                                   | Collaborating                 |
| 29                          | 35  | Bachelor's              | 2                 | 16                | 7                 | 100              | HiRe-LoTa         | HiTa-HiRe  | Compromising                                   | Collaborating                 |
| 30                          | 59  | Less than<br>Bachelor's | 11                | 20                | 2 <sup>e</sup>    | 50               | HiRe-LoTa         | HiTa-HiRe  | Collaborating                                  | Compromising<br>Avoiding      |
| 31                          | 37  | Less than<br>Bachelor's | 5                 | 5                 | 8                 | 120              | HiTa-HiRe         | HiRe-LoTa  | Avoiding                                       | Compromising<br>Accommodating |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSPa | TYSPb | NECSc          | HMTd | Leadership Styles      |            | Conflict Management<br>Techniques |  |
|-----------------------------|-----|-------------------------|-------|-------|----------------|------|------------------------|------------|-----------------------------------|--|
|                             |     |                         |       |       |                |      | Dominant               | Supporting | Primary                           | Secondary                              |
| 32                          | 58  | Less than<br>Bachelor's | 10    | 10    | 1 <sup>e</sup> | 46   | HiRe-LoTa              | HiTa-LoRe  | Avoiding                          | Accommodating                          |
| 33                          | 41  | Less than<br>Bachelor's | 5     | 18    | 14             | 48   | HiTa-HiRe              | HiRe-LoTa  | Collaborating                     | Competing<br>Accommodating             |
| 34                          | 38  | -                       | 11    | 14    | 3              | 200  | HiTa-HiRe              | HiRe-LoTa  | Competing                         | Collaborating                          |
| 35                          | 43  | Master's                | 3     | 15    | 12             | 200  | HiRe-LoTa              | HiTa-HiRe  | Collaborating                     | Compromising                           |
| 36                          | 39  | Bachelor's              | 13    | 16    | 18             | 300+ | HiTa-HiRe              | HiRe-LoTa  | Avoiding                          | Collaborating<br>Accommodating         |
| 37                          | 48  | Less than<br>Bachelor's | 6     | 10    | 3              | 70   | HiTa-HiRe              | HiRe-LoTa  | Compromising                      | Competing<br>Collaborating<br>Avoiding |
| 38                          | 39  | Bachelor's              | 3     | 10    | 18             | 300+ | HiTa-HiRe              | HiRe-LoTa  | Collaborating                     | Compromising                           |
| 39                          | 56  | Bachelor's              | 18    | 34    | 11             | 500  | HiTa-HiRe              | HiRe-LoTa  | Competing<br>Collaborating        | Compromising<br>Avoiding               |
| 40                          | 56  | Less than<br>Bachelor's | 3     | 29    | 3              | 200+ | HiTa-HiRe              | HiRe-LoTa  | Avoiding<br>Accommodating         | Compromising                           |
| 41                          | 41  | Less than<br>Bachelor's | 2     | 9     | 7              | 100+ | HiTa-HiRe              | HiRe-LoTa  | Accommodating                     | Collaborating                          |
| 42                          | 39  | Master's                | 3     | 10    | 15             | 250+ | HiTa-HiRe              | HiRe-LoTa  | Compromising                      | Collaborating                          |
| 43                          | 40  | Master's                | 3     | 6     | 8              | 400+ | HiTa-HiRe              | HiRe-LoTa  | Compromising                      | Accommodating                          |
| 44                          | 28  | Bachelor's              | 1     | 1     | 2 <sup>e</sup> | 20   | HiTa-LoRe<br>HiTa-HiRe | HiRe-LoTa  | Accommodating                     | Collaborating<br>Avoiding              |
| 45                          | 48  | Bachelor's              | 2     | 20    | 18             | 500  | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe  | Collaborating                     | Compromising                           |

TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles      |                        | Conflict Management<br>Techniques |                            |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|------------------------|------------------------|-----------------------------------|----------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant               | Supporting             | Primary                           | Secondary                  |
| 46                          | 30  | Bachelor's              | 3                 | 4                 | 10                | 250              | HiTa-HiRe              | HiTa-LoRe<br>LoTa-LoRe | Avoiding                          | Compromising               |
| 47                          | 37  | Bachelor's              | 7                 | 9                 | 11                | 120              | HiRe-LoTa              | HiTa-LoRe              | Compromising<br>Avoiding          | Competing<br>Collaborating |
| 48                          | 33  | Bachelor's              | 2                 | 5                 | 4                 | 70               | HiRe-LoTa              | HiTa-HiRe              | Competing                         | Collaborating              |
| 49                          | 48  | Bachelor's              | 3                 | 16                | 15                | 600              | HiTa-HiRe              | HiRe-LoTa              | Accommodating                     | Avoiding                   |
| 50                          | 53  | Bachelor's              | 24                | 24                | 21                | 200              | HiTa-HiRe              | HiRe-LoTa              | Accommodating                     | Compromising               |
| 51                          | 29  | Less than<br>Bachelor's | 6                 | 6                 | 3                 | 20               | HiRe-LoTa              | HiTa-HiRe              | Accommodating                     | Avoiding                   |
| 52                          | 48  | Bachelor's              | 12                | 20                | 41                | 150+             | HiTa-HiRe              | HiRe-LoTa              | Collaborating<br>Compromising     | Competing<br>Accommodating |
| 53                          | -   | Less than<br>Bachelor's | 7                 | 20                | 4                 | 300+             | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Compromising               |
| 54                          | 52  | Master's                | 5                 | 13                | 13                | 430              | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Compromising               |
| 55                          | 45  | Bachelor's              | 11                | 17                | 3                 | -                | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Compromising               |
| 56                          | 37  | Master's                | 4                 | 4                 | 6                 | 45               | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe              | Accommodating                     | Avoiding                   |
| 57                          | 43  | Bachelor's              | 3                 | 14                | 4                 | 200+             | HiRe-LoTa              | HiTa-HiRe              | Avoiding                          | Competing                  |
| 58                          | 50  | Less than<br>Bachelor's | 6                 | 25                | 3                 | 75               | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Collaborating              |
| 59                          | 65  | Master's                | 11                | 11                | 2 <sup>e</sup>    | 100              | HiRe-LoTa              | HiTa-HiRe              | Avoiding                          | Collaborating              |
| 60                          | 43  | Bachelor's              | 13                | 13                | 6                 | 200+             | HiTa-HiRe              | HiTa-LoRe              | Avoiding                          | Competing                  |
| 61                          | 49  | Less than<br>Bachelor's | 6                 | 18                | 8                 | 175              | HiTa-HiRe              | HiRe-LoTa              | Competing<br>Collaborating        | Compromising               |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles                   |                        | Conflict Management<br>Techniques         |  |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------------------------|------------------------|---|--|
|                             |     |                         |                   |                   |                   |                  | Dominant                            | Supporting             | Primary                                   | Secondary                                  |
| 62                          | 38  | Master's                | 7                 | 8                 | 8                 | 150              | HiTa-HiRe                           | HiRe-LoTa              | Compromising<br>Accommodating             | Collaborating<br>Avoiding                  |
| 63                          | 49  | Bachelor's              | 27                | 27                | 13                | 200+             | HiTa-LoRe<br>HiTa-HiRe<br>HiRe-LoTa |                        | Avoiding                                  | Collaborating                              |
| 64                          | 28  | Less than<br>Bachelor's | 3                 | 3                 | 22                | 100              | HiTa-HiRe                           | HiRe-LoTa              | Collaborating<br>Accommodating            | Avoiding                                   |
| 65                          | 41  | Master's                | 15                | 15                | 26                | 60+              | HiTa-HiRe                           | HiRe-LoTa              | Collaborating<br>Avoiding                 | Competing<br>Compromising<br>Accommodating |
| 66                          | 59  | Less than<br>Bachelor's | 22                | 22                | 16                | 120              | HiTa-HiRe                           | HiRe-LoTa              | Collaborating<br>Compromising<br>Avoiding | Competing                                  |
| 67                          | 34  | -                       | 2                 | 9                 | 29                | 100+             | HiTa-HiRe                           | HiTa-LoRe              | Collaborating                             | Avoiding                                   |
| 68                          | -   | Less than<br>Bachelor's | 6                 | 16                | 42                | 200              | HiTa-HiRe                           | HiRe-LoTa              | Accommodating                             | Competing<br>Compromising<br>Avoiding      |
| 69                          | 41  | Bachelor's              | 6                 | 11                | 5                 | 70               | HiTa-HiRe                           | HiRe-LoTa              | Avoiding                                  | Competing                                  |
| 70                          | 33  | Less than<br>Bachelor's | 12                | 12                | 4                 | 100+             | HiRe-LoTa                           | HiTa-HiRe              | Collaborating                             | Compromising<br>Accommodating              |
| 71                          | 37  | Master's                | 2                 | 5                 | 11                | 24               | HiTa-HiRe                           | HiTa-LoRe              | Collaborating                             | Compromising<br>Avoiding                   |
| 72                          | 34  | Bachelor's              | 5                 | 10                | 8                 | 75               | HiRe-LoTa                           | HiTa-HiRe              | Collaborating                             | Compromising                               |
| 73                          | 33  | Bachelor's              | 3                 | 9                 | 18                | 60               | HiTa-HiRe                           | HiTa-LoRe<br>HiRe-LoTa | Avoiding                                  | Competing<br>Collaborating                 |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles |            | Conflict Management<br>Techniques |                               |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------|-----------------------------------|-------------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant          | Supporting | Primary                           | Secondary                     |
| <u>Fe-<br/>males</u>        |     |                         |                   |                   |                   |                  |                   |            |                                   |                               |
| 1                           | 31  | Master's                | 2                 | 5                 | 9                 | 100+             | HiTa-HiRe         | HiRe-LoTa  | Compromising                      | Collaborating<br>Avoiding     |
| 2                           | 37  | Master's                | 1                 | 3                 | 14                | 200+             | HiTa-HiRe         | HiRe-LoTa  | Compromising                      | Avoiding                      |
| 3                           | 57  | Bachelor's              | 11                | 23                | 10                | 400+             | HiTa-HiRe         | HiRe-LoTa  | Competing                         | Collaborating                 |
| 4                           | 41  | Bachelor's              | 10                | 17                | 23                | 300+             | HiRe-LoTa         | HiTa-HiRe  | Compromising                      | Collaborating                 |
| 5                           | 44  | Master's                | 3                 | 8                 | 6                 | 200+             | HiRe-LoTa         | HiTa-HiRe  | Collaborating                     | Competing                     |
|                             |     |                         |                   |                   |                   |                  |                   |            | Compromising                      | Avoiding                      |
| 6                           | 44  | Bachelor's              | 5                 | 20                | 5                 | 60               | HiTa-HiRe         | HiTa-LoRe  | Compromising                      | Accommodating                 |
|                             |     |                         |                   |                   |                   |                  | HiRe-LoTa         | LoTa-LoRe  | Avoiding                          |                               |
| 7                           | 45  | Less than<br>Bachelor's | 10                | 19                | 6                 | 100+             | HiTa-HiRe         | HiRe-LoTa  | Compromising                      | Collaborating                 |
| 8                           | 53  | Less than<br>Bachelor's | 10                | 30                | 6                 | 2,000+           | HiTa-HiRe         | LoTa-LoRe  | Collaborating                     | Avoiding                      |
|                             |     |                         |                   |                   |                   |                  | HiRe-LoTa         |            |                                   |                               |
| 9                           | 45  | Master's                | 1                 | 6                 | 14                | 100+             | HiRe-LoTa         | HiTa-HiRe  | Avoiding                          | Competing<br>Collaborating    |
| 10                          | 61  | Bachelor's              | 21                | 24                | 2 <sup>e</sup>    | 100+             | HiTa-HiRe         | HiRe-LoTa  | Collaborating                     | Avoiding                      |
|                             |     |                         |                   |                   |                   |                  |                   |            | Compromising                      | Accommodating                 |
| 11                          | 53  | Less than<br>Bachelor's | 3                 | 16                | 2 <sup>e</sup>    | 100+             | HiTa-HiRe         | HiTa-LoRe  | Compromising                      | Collaborating                 |
|                             |     |                         |                   |                   |                   |                  | HiRe-LoTa         |            |                                   |                               |
| 12                          | 34  | Bachelor's              | 7                 | 10                | 3                 | 200+             | HiTa-HiRe         | HiTa-LoRe  | Competing                         | Compromising<br>Accommodating |

TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles      |                                     | Conflict Management<br>Techniques |                               |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|------------------------|-------------------------------------|-----------------------------------|-------------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant               | Supporting                          | Primary                           | Secondary                     |
| 13                          | 35  | Bachelor's              | 1                 | 7                 | 6                 | 96+              | HiTa-HiRe              | HiRe-LoTa                           | Compromising                      | Avoiding                      |
| 14                          | 47  | Bachelor's              | 2                 | 25                | 5                 | 400+             | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa              | Compromising                      | Competing<br>Collaborating    |
| 15                          | 42  | Less than<br>Bachelor's | 1                 | 10                | 15                | 100+             | HiTa-HiRe              | HiTa-LoRe                           | Competing                         | Compromising                  |
| 16                          | 60  | Bachelor's              | 26                | 29                | 5                 | 225+             | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe<br>LoTa-LoRe              | Compromising<br>Avoiding          | Competing                     |
| 17                          | 41  | Less than<br>Bachelor's | 2                 | 5                 | 13                | 150+             | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe                           | Compromising                      | Avoiding<br>Accommodating     |
| 18                          | 49  | Less than<br>Bachelor's | 7                 | 7                 | 9                 | 1,025            | HiTa-HiRe              | HiRe-LoTa                           | Collaborating                     | Compromising<br>Accommodating |
| 19                          | 39  | Bachelor's              | 3                 | 15                | 1 <sup>e</sup>    | 72               | HiTa-LoRe<br>HiTa-HiRe | HiRe-LoTa<br>LoTa-LoRe              | Avoiding                          | Accommodating                 |
| 20                          | 50  | Less than<br>Bachelor's | 9                 | 12                | 9                 | 250+             | HiTa-HiRe              | HiRe-LoTa                           | Collaborating<br>Compromising     | Competing<br>Accommodating    |
| 21                          | 53  | Less than<br>Bachelor's | 20                | 20                | 6                 | 120              | HiRe-LoTa              | HiTa-HiRe                           | Avoiding                          | Accommodating                 |
| 22                          | 43  | Bachelor's              | 16                | 19                | 19                | 200+             | HiTa-HiRe              | HiRe-LoTa                           | Avoiding                          | Compromising                  |
| 23                          | 42  | Master's                | 1                 | 3                 | 11                | 20               | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa              | Compromising                      | Collaborating                 |
| 24                          | 39  | Less than<br>Bachelor's | 2                 | 5                 | 16                | 200              | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa<br>LoTa-LoRe | Compromising                      | Collaborating<br>Avoiding     |
| 25                          | 53  | Less than<br>Bachelor's | 17                | 20                | 54                | 2,000+           | HiTa-HiRe              | HiRe-LoTa                           | Competing                         | Avoiding                      |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles      |                        | Conflict Management<br>Techniques |  |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|------------------------|------------------------|-----------------------------------|--|
|                             |     |                         |                   |                   |                   |                  | Dominant               | Supporting             | Primary                           | Secondary                                      |
| 26                          | 50  | Bachelor's              | 5                 | 28                | 3                 | 200+             | HiTa-HiRe              | HiTa-LoRe              | Avoiding                          | Accommodating                                  |
| 27                          | 58  | Bachelor's              | 17                | 18                | 35                | 100+             | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Avoiding                                       |
| 28                          | 32  | Less than<br>Bachelor's | 1                 | 7                 | 16                | 200+             | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa | Competing<br>Collaborating        | Avoiding<br>Accommodating                      |
| 29                          | 45  | Bachelor's              | 16                | 20                | 90                | 2,000            | HiTa-HiRe              | HiRe-LoTa              | Competing                         | Collaborating<br>Compromising<br>Accommodating |
| 30                          | 39  | Bachelor's              | 2                 | 7                 | 50                | 200+             | HiRe-LoTa              | HiTa-HiRe              | Compromising                      | Collaborating                                  |
| 31                          | 38  | Less than<br>Bachelor's | 13                | 13                | 29                | 250+             | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Accommodating                                  |
| 32                          | 48  | Less than<br>Bachelor's | 2                 | 4                 | 47                | 50               | HiRe-LoTa              | HiTa-HiRe              | Collaborating                     | Avoiding                                       |
| 33                          | 35  | Bachelor's              | 1                 | 4                 | 33                | 60+              | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Compromising                                   |
| 34                          | 44  | Master's                | 12                | 12                | 15                | 1,500            | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Collaborating                                  |
| 35                          | 46  | Bachelor's              | 20                | 23                | 40                | 300+             | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Compromising                                   |
| 36                          | 51  | Less than<br>Bachelor's | 8                 | 8                 | 26                | 100+             | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa | Collaborating                     | Avoiding                                       |
| 37                          | 44  | Less than<br>Bachelor's | 15                | 18                | 3                 | 800+             | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe              | Competing                         | Collaborating<br>Accommodating                 |
| 38                          | 50  | Less than<br>Bachelor's | 8                 | 8                 | 4                 | 250+             | HiTa-HiRe              | HiTa-LoRe<br>HiRe-LoTa | Collaborating                     | Accommodating                                  |
| 39                          | 35  | Bachelor's              | 12                | 12                | 8                 | 200+             | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Competing<br>Avoiding                          |
| 40                          | 48  | -                       | 12                | 20                | 52                | 1,500+           | HiTa-HiRe              | HiRe-LoTa              | Competing                         | Collaborating                                  |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles      |                        | Conflict Management<br>Techniques |   |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|------------------------|------------------------|-----------------------------------|---|
|                             |     |                         |                   |                   |                   |                  | Dominant               | Supporting             | Primary                           | Secondary                                   |
| 41                          | 55  | Less than<br>Bachelor's | 11                | 15                | 0 <sup>e</sup>    | 100              | HiRe-LoTa              | HiTa-LoRe<br>HiTa-HiRe | Collaborating                     | Avoiding                                    |
| 42                          | 36  | Less than<br>Bachelor's | 8                 | 12                | 45                | 200              | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Collaborating                               |
| 43                          | 42  | Less than<br>Bachelor's | 11                | 16                | 4                 | 200+             | HiTa-HiRe              | HiRe-LoTa              | Accommodating                     | Avoiding                                    |
| 44                          | 34  | Master's                | 2                 | 4                 | 13                | 42               | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Competing<br>Collaborating<br>Accommodating |
| 45                          | 38  | Less than<br>Bachelor's | 1                 | 1                 | 22                | 50               | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Collaborating                               |
| 46                          | 37  | Bachelor's              | 1                 | 10                | 9                 | 400              | HiTa-HiRe<br>HiRe-LoTa | HiTa-LoRe<br>LoTa-LoRe | Collaborating                     | Compromising                                |
| 47                          | 39  | Bachelor's              | 1                 | 13                | 7                 | 400              | HiRe-LoTa              | HiTa-HiRe              | Competing                         | Compromising                                |
| 48                          | 34  | Bachelor's              | 4                 | 7                 | 65                | 160              | HiTa-HiRe              | HiRe-LoTa              | Competing                         | Compromising                                |
| 49                          | 33  | Less than<br>Bachelor's | 3                 | 5                 | 25                | 36               | HiTa-HiRe              | HiRe-LoTa              | Collaborating                     | Avoiding                                    |
| 50                          | 38  | Less than<br>Bachelor's | 2                 | 2                 | 30                | 200              | HiRe-LoTa              | HiTa-HiRe              | Compromising                      | Avoiding                                    |
| 51                          | 51  | Less than<br>Bachelor's | 8                 | 25                | 10                | 40               | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Collaborating                               |
| 52                          | 56  | Bachelor's              | 15                | 27                | 3                 | 80               | HiTa-HiRe              | HiRe-LoTa              | Avoiding                          | Collaborating                               |
| 53                          | 38  | Less than<br>Bachelor's | 2                 | 4                 | 13                | 70               | HiTa-HiRe              | HiRe-LoTa              | Compromising                      | Avoiding                                    |

TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles |                        | Conflict Management<br>Techniques |                                       |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------------------|-----------------------------------|---------------------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant          | Supporting             | Primary                           | Secondary                             |
| 54                          | 47  | Less than<br>Bachelor's | 10                | 20                | 50                | 160              | HiRe-LoTa         | HiTa-HiRe              | Collaborating                     | Competing<br>Compromising<br>Avoiding |
| 55                          | 40  | Bachelor's              | 2                 | 7                 | 18                | 40               | HiRe-LoTa         | LoRe-LoTa              | Avoiding                          | Compromising                          |
| 56                          | 32  | Bachelor's              | 1                 | 4                 | 50                | 80               | HiTa-HiRe         | HiRe-LoTa              | Compromising                      | Collaborating                         |
| 57                          | 38  | Bachelor's              | 5                 | 8                 | 20                | -                | HiTa-HiRe         | HiRe-LoTa              | Competing                         | Compromising                          |
| 58                          | 32  | Master's                | 2                 | 3                 | 4                 | 12               | HiRe-LoTa         | HiTa-HiRe              | Avoiding                          | Compromising                          |
| 59                          | 35  | Bachelor's              | 1                 | 12                | 13                | 750              | HiTa-HiRe         | HiRe-LoTa              | Collaborating<br>Avoiding         | Compromising                          |
| 60                          | 51  | Master's                | 16                | 25                | 2 <sup>e</sup>    | 120              | HiRe-LoTa         | HiTa-HiRe              | Avoiding                          | Compromising                          |
| 61                          | 60  | Less than<br>Bachelor's | 24                | 32                | 1 <sup>e</sup>    | 200+             | HiRe-LoTa         | HiTa-LoRe<br>HiTa-HiRe | Collaborating                     | Competing<br>Avoiding                 |
| 62                          | 41  | Less than<br>Bachelor's | 7                 | 7                 | 32                | 100              | HiTa-HiRe         | HiTa-LoRe              | Compromising                      | Competing                             |
| 63                          | 33  | Less than<br>Bachelor's | 5                 | 5                 | 3                 | 175              | HiTa-HiRe         | HiRe-LoTa              | Avoiding                          | Compromising                          |
| 64                          | 39  | Bachelor's              | 8                 | 10                | 42                | 125              | HiTa-HiRe         | HiRe-LoTa              | Compromising                      | Collaborating                         |
| 65                          | 54  | Master's                | 6                 | 10                | 7                 | 100+             | HiTa-HiRe         | HiRe-LoTa              | Collaborating<br>Compromising     | Competing                             |
| 66                          | 62  | Bachelor's              | 24                | 26                | 21                | 54               | HiTa-HiRe         | HiTa-LoRe<br>HiRe-LoTa | Competing<br>Avoiding             | Collaborating<br>Compromising         |
| 67                          | 30  | Bachelor's              | 1                 | 3                 | 3                 | 50               | HiTa-HiRe         | HiRe-LoTa              | Competing                         | Avoiding                              |
| 68                          | 45  | Less than<br>Bachelor's | 4                 | 13                | 53                | 200              | HiTa-HiRe         | HiRe-LoTa              | Collaborating                     | Avoiding                              |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles |                        | Conflict Management<br>Techniques |                                |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------------------|-----------------------------------|--------------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant          | Supporting             | Primary                           | Secondary                      |
| 69                          | 28  | Bachelor's              | 3                 | 4                 | 18                | 100+             | HiTa-HiRe         | HiTa-LoRe<br>HiRe-LoTa | Avoiding                          | Compromising                   |
| 70                          | 43  | Less than<br>Bachelor's | 11                | 18                | 8                 | 70               | HiTa-HiRe         | HiRe-LoTa              | Compromising                      | Competing<br>Avoiding          |
| 71                          | 42  | Bachelor's              | 4                 | 4                 | 45                | 100              | HiTa-HiRe         | HiTa-LoRe              | Accommodating                     | Avoiding                       |
| 72                          | 31  | Less than<br>Bachelor's | 3                 | 3                 | 38                | 100+             | HiTa-HiRe         | HiRe-LoTa              | Compromising<br>Avoiding          | Accommodating                  |
| 73                          | 25  | Less than<br>Bachelor's | 1                 | 4                 | 23                | 60               | HiRe-LoTa         | HiTa-HiRe              | Collaborating                     | Compromising<br>Avoiding       |
| 74                          | 34  | Bachelor's              | 1                 | 2                 | 30                | 50               | HiRe-LoTa         | HiTa-HiRe              | Avoiding                          | Compromising                   |
| 75                          | 30  | Bachelor's              | 2                 | 6                 | 2 <sup>e</sup>    | 45               | HiRe-LoTa         | HiTa-HiRe              | Collaborating<br>Accommodating    | Avoiding                       |
| 76                          | -   | Less than<br>Bachelor's | 2                 | 2                 | 16                | -                | HiTa-HiRe         | HiRe-LoTa              | Avoiding                          | Collaborating<br>Accommodating |
| 77                          | -   | Less than<br>Bachelor's | 3                 | 3                 | 25                | 100+             | HiTa-HiRe         | HiRe-LoTa              | Collaborating                     | Compromising<br>Avoiding       |
| 78                          | -   | Bachelor's              | 1                 | 10                | 85                | -                | HiTa-HiRe         | HiRe-LoTa              | Competing                         | Avoiding                       |
| 79                          | 35  | Less than<br>Bachelor's | 6                 | 8                 | -                 | 100+             | HiTa-HiRe         | LoTa-LoRe              | Collaborating                     | Compromising                   |
| 80                          | 57  | Less than<br>Bachelor's | 14                | 25                | 20                | 100+             | HiRe-LoTa         | HiTa-HiRe              | Collaborating<br>Avoiding         | Accommodating                  |
| 81                          | 41  | Bachelor's              | 16                | 16                | 23                | 100+             | HiTa-HiRe         | HiRe-LoTa              | Collaborating                     | Competing                      |



TABLE 21--Continued

| Re-<br>spon-<br>dent<br>No. | Age | Level of<br>Education   | YCSP <sup>a</sup> | TYSP <sup>b</sup> | NECS <sup>c</sup> | HMT <sup>d</sup> | Leadership Styles |            | Conflict Management<br>Techniques |                                |
|-----------------------------|-----|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------|-----------------------------------|--------------------------------|
|                             |     |                         |                   |                   |                   |                  | Dominant          | Supporting | Primary                           | Secondary                      |
| 82                          | 35  | Bachelor's              | 9                 | 9                 | 28                | 100              | HiTa-HiRe         | HiTa-LoRe  | Compromising<br>Avoiding          | Collaborating<br>Accommodating |
| 83                          | 32  | Less than<br>Bachelor's | 1                 | 8                 | 43                | 10               | HiTa-HiRe         | HiRe-LoTa  | Avoiding                          | Compromising<br>Accommodating  |

<sup>a</sup>YCSP = Years in Current Supervisory Position.

<sup>b</sup>TYSP = Total Years in Supervisory Positions.

<sup>c</sup>NECS = Number of Employees Currently Supervised.

<sup>d</sup>HMT = Hours of Management Training.

<sup>e</sup>Three or more subordinates even though only one was reported.

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