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SUPERVISORY CONFLICT MANAGEMENT BEHAVIORS,
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by

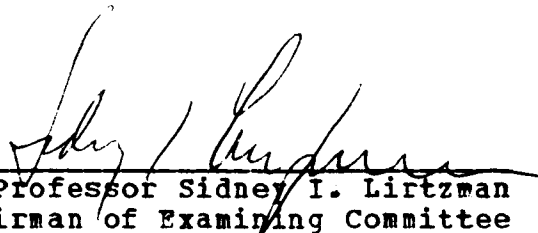
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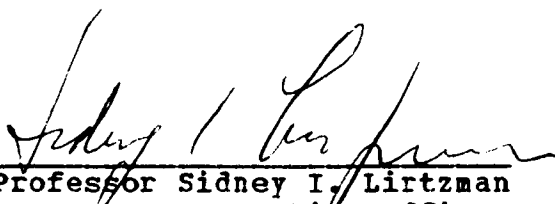
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Abstract

SOME RELATIONSHIPS BETWEEN
SUPERVISORY CONFLICT MANAGEMENT BEHAVIOR,
SITUATIONAL FACTORS AND SUBORDINATE PERCEPTIONS
OF CONFLICT IN ORGANIZATIONAL SETTINGS

by

Samuel G. Ryan, Jr.

Advisor: Professor Sidney I. Lirtzman

Relationships between seven rated supervisory conflict management behaviors (Problem Solving, Bargaining, Forcing, Smoothing, Avoiding, Adherence to Rules and Adherence to Chain of Command), three situational variables as perceived by both supervisors and subordinates (Non-Routinization, Personal Influence and Dogmatism) and subordinates' perceptions of conflict (Role and Overt) are hypothesized and investigated across work groups in three organizations. A series of multiple linear regression analyses suggest support for hypothesized positive relationships between conflict indices and supervisory Non-Routinization, supervisory Personal Influence and subordinate Dogmatism and for hypothesized negative relationships with supervisory Adherence to Chain of Command and subordinate Personal Influence. Results contradicted expected negative relationships for supervisory Smoothing and anticipated positive relationships for supervisory Bargaining, Forcing and Dogmatism. The previously cited roles of the Blake and

Mouton (1964)/Lawrence and Lorsch (1967) conflict resolution modes in reducing subordinate conflict are questioned. The significance of relationships between contextual and structural factors and general levels of conflict in organizations are examined. Alternative causal flows are proposed and the reciprocal nature of relationships between variables in conflict systems are discussed.

ACKNOWLEDGEMENTS

This dissertation has been one of the most important experiences in my life. It is meaningful to me, more for the broad educational process which accompanied its completion than for whatever contribution it makes to knowledge of organizational behavior.

In the final analysis, the dissertation and its strengths and weaknesses are products of my own efforts. This is as it should be for any doctoral candidate. Yet, any researcher, particularly a student, is totally naive not to recognize the crucial need for the thoughts, criticisms and support of others.

I experienced some of the very best educational input during this process and, some which was poor. The positive input had direct and powerful effect on my attitudes, motivation and productivity. Without it, I probably would not have completed the paper. The negative input sometimes environmental, sometimes interpersonal, was just as disruptive. I have, as a result, truly come to appreciate the differences and similarities between scholarly talents of a researcher or theorist and those required of an educator. To be sure, this latter function is too often undervalued by scholars.

It is a genuine pleasure to recognize those people who, over too many years, have helped me in important ways to learn and grow toward a PhD.

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I consider Bob House and Sid Lirtzman to be my "mentors". I am proud to have been their student and to be their friend.

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Chapter I

INTRODUCTION

Objective of the Study

The conceptual focus of this study is the process of conflict as it is affected by factors which are significant in the management of conflict. Butler (1973) notes, pragmatically, that in order to study conflict management, a great deal needs to be learned about the nature of conflict itself. A number of prominent authors (Boulding, 1962; Deutsch, 1973; March & Simon, 1958; Sherif, 1966) discuss the management of conflict primarily as it relates to components of conflict theory. An important measure of the effectiveness of conflict management efforts is, according to these authors, the degree to which conflict is reduced. In addition, these authors discuss conflict management from a managerial perspective. Managerial actions, in their views, are important determinants of the level of conflict in organizational subordinates.

The objective of this study is, therefore, to investigate several supervisory conflict management techniques and situational factors as they relate to subordinate conflict in organizational settings. Accordingly, the dependent variable in this design is conflict as perceived by subordinates. The included independent variables were selected because of their prominence in the conflict management literature.

Need for Conflict Research in Organizations.

Conflict appears to be increasing in popularity as a topic of interest in management (Thomas & Schmidt, 1976). Laboratory experimentation in the area has been extremely active and, in fact, forms much of the bases for the hypotheses of the present study. But Yukl (1974), in an extensive review of laboratory studies of negotiation, criticized the constraints of artificiality inherent in the laboratory and emphasized the need for more research in "real" settings.

In a similar vein, other writers have urged the investigation of patterns of relationships between variables which have been defined as significant in conflict theory (Corwin, 1969; Deutsch, 1973; Patchen, 1970; Pondy, 1967, 1969; Schmidt & Kochan, 1972). The results of such studies would then serve as empirical inputs for deriving a stronger theory of conflict.

Conflict and its Management in Organization Theory

Conflict processes have pervaded the structure and dynamics of organization theory throughout its evolution. They have also been the subject of considerable theoretical controversy. This controversy is exemplified by two basic schools of thought concerning the nature and consequences of conflict (Horowitz, 1973).

The "consensus" or "harmony" theorists are epitomized in organizational thought by authors of Classical theory (Davis, 1951; Fayol, 1925; Gulick & Urwick, 1937; Taylor,

1947; Weber, 1947); the so-called "Human Relations" school (Argyris, 1964; Bennis, 1966; Likert, 1961; McGreagor, 1960); and early modern theories (Barnard, 1938; March & Simon, 1958; Simon, 1947) These authors tend to describe organizations as relatively static, closed systems; human beings as capable of totally rational behavior; and harmony as the necessary condition for organizational survival. They view conflict as an inherently destructive process and prescribe a state of component consensus or equilibrium as the optimum functional condition.

The "conflict" organizational theorists, (Cyert & March, 1963; Katz & Kahn, 1966; J. D. Thompson, 1967; V. Thompson, 1961), conceptualize organizations as dynamic, open systems; humans as satisficing beings of limited rationality; and conflict as an ever present phenomenon which pervades organizational life and is never fully resolved. Humans, in effect, are assumed to operate in an unstable world of constant conflict, and are able to cope in only an imperfect manner. The consequences of conflict, according to these authors, may variously be positive, innovative or constructive as well as negative, inflammatory or destructive. Whether conflict outcomes are constructive or destructive is seen as importantly dependent upon methods used to manage conflict.

Factors Influencing the Management of Conflict

Deutsch (1973) in an extensive review of the social psychology literature relating to conflict management,

listed a set of factors as substantial determinants of the nature of conflict processes. These factors represent an integration of those proposed in the writings of other prominent authors in the conflict area (Axelrod, 1970; Baumgarten, Buckley & Burns, 1975; Boulding, 1962; Coser, 1956; Mack & Snyder, 1957; March & Simon, 1958; Patchen, 1970; Pondy, 1967; Sherif, 1958, 1966). The factors presented by Deutsch are:

- (a). Characteristics of the Parties: values, abilities, resources, personality factors, etc.
- (b). Social Environment: within which the conflict occurs - constraints, contingencies, etc.
- (c). Relationship Between the Parties: present and prior.
- (d). Process of Interaction: between the parties, strategy, tactics, estimations of success.
- (e). Interested Third Parties: leaders, peers, mediators, etc.
- (f). Nature of the Conflict Episode: size, centrality, issues, etc.

To provide a representative set of conflict predictors, the above categories were used as guides in selecting variables for this study.

Process of Interaction - Third Parties.

A supervisor may be viewed as having several roles in a dynamic work group. The supervisor may be variously a primary party or an interested and influential third party

to conflicts in the group. In any case, the supervisor in a hierarchical organization becomes, at some point, almost inevitably involved in job related conflict.

The first subset of variables selected are six widely discussed and researched managerial techniques which might be employed to manage conflict. Five of these are managerial behaviors, specifically, Problem Solving, Bargaining, Forcing, Smoothing and Avoiding, drawn from a line of research which includes the work of Blake, Shepard and Mouton (1964) and Lawrence and Lorsch (1967). Although these variables have been widely studied, the influence of situational variables from other of Deutsch's categories have been, with the exception of Lawrence and Lorsch, generally omitted.

The final technique is the pre-planned regulation of conflict through the adherence to formalized rules, procedures and Chain of Command. Formalization has been prescribed in many of the principles of classical management theory and has been subject to in depth empirical investigation in several major studies. (Duncan, 1974; Hage & Aiken, 1969; Harvey, 1968; Lawrence & Lorsch, 1967;) Formalized practices, as they relate specifically to the regulation of conflict, have been viewed theoretically by Deutsch, among others, as an important option in conflict management. This technique, however, has infrequently (Hilgert, 1967; O'Brien & Owens, 1969; Ryan & Clemence, 1973) been subject to specific empirical investigation as a

conflict management option.

Social Environment.

A central construct in the theoretical scheme of J.D. Thompson (1967), is the task environment confronting the individual within an organizational system. Thompson defines the task environment as "those parts of the environment which are relevant or potentially relevant to goal setting and goal attainment". Deutsch speaks of the constraints, contingencies, people and forces operative in the social environment which surrounds organizational members and affects their goal seeking behavior. Accordingly, these two concepts of task and social environment seem closely compatible.

Thompson differentiates between the routiness of environmental and organizational demands impinging upon positions located in the technical core of organizations and the more uncertain, nonroutine pressures characteristic of those situated at organizational boundaries. Studies have found that felt role conflict of incumbents increased as job positions moved closer to such system boundaries (Kahn, et. al., 1964; Kellar, 1975).

The inclusion of the Boundary/Core classifications and their associated Non-Routinization dimension in this study logically extends the above line of investigation to the description of organizational conflict management processes.

Relationship Between the Parties.

A variable that has been, widely mentioned in theoretical

discussions and empirical studies of conflict management is the power or ability to influence possessed by parties to a disagreement (Cyert & March, 1963; Deutsch, 1973; Deutsch & Krauss, 1960; Higbee, 1969; Kahn & Boulding, 1964; Kelley, 1965; Kipnis, 1972; March & Simon, 1958; J. D. Thompson, 1967)

The findings of several organizational studies suggest that personal influence is an important variable which partially defines the patterns of variable relationship in conflict systems (Corwin, 1969; Kahn et. al., 1964; Lawrence & Lorsch, 1967; Ryan & Clemence, 1973). A logical extension of this research is the investigation of effects of personal influence upon conflict management processes, while controlling for the effects of other variables from Deutsch's categories.

Characteristics of the Parties.

One construct that has received much attention in the study of broad similarities in cognitive processes is the Open/Closed-Mindedness of individual thought patterns (Rokeach, 1960; Vacchiano, Strauss & Hochman, 1969). Kahn and associates (1964) presented evidence to suggest that people with flexible behavior patterns, a reported characteristic of open-minded individuals, were able to cope more successfully with high levels of felt role conflict than were rigid individuals who tended toward closed-minded thought. A few studies have investigated the open/closed-mindedness as it relates to conflict management

processes. (Cheney, Harford & Solomon, 1972; Conway, 1967; Druckman, 1967; Slack & Cook, 1973). This study offers an opportunity to extend this line of research by considering the effects of other organizational conflict antecedents.

The Approach of the Study

To summarize, this study investigates the relationships between certain supervisory conflict management techniques, situational factors and subordinate conflict. The dependent variable is conflict as perceived by subordinates. The particular independent variables to be investigated are:

- (a). the supervisory behavioral techniques of Problem Solving, Bargaining, Forcing, Smoothing, Avoiding and Adherence to Formalized Rules and Chain of Command;
- (b). the degree of Non-Routinization associated with roles located in Boundary and Core positions within organizations;
- (c). the Personal Influence that parties to conflict perceive of themselves and of their supervisors; and
- (d). the degree of Dogmatism characteristic of individual cognitive patterns.

This study is interested in the relationship of each of the included predictor variables with conflict indices while controlling for the effects of all other predictors. The distinct predictor - criterion associations are the operational focus. Secondly, however, the present design

includes a broad range of behavioral, contextual and individual difference variables. The results should allow an assessment of the relative strength of the associations of these various factors with conflict. This design may also provide indications of the effects of the situation upon the conflict reducing properties of the included supervisory techniques.

The study is a cross-sectional survey of perceptions of people employed in three organizations. The measures employed are self report questionnaires, ratings of supervisory behaviors and observational classifications. Independent and dependent variables are measured from different perceptual perspectives to minimize "halo" biases.

Finally, the study concentrates conceptually on the points of correspondence between conflict management efforts, factors of the surrounding situations and the components of conflict theory. A brief review of the conflict literature was, therefore, conducted to identify, for the purposes of this study, what conflict is, the factors which may increase or decrease the potential for its occurrence and the implications of such relationships to organizational conflict management efforts.

Chapter II

THEORETICAL PERSPECTIVES OF CONFLICT

This review of conflict literature was limited to the major theories of organization and to social-psychological approaches which closely relate to organizational behavior. As the review progressed, it became clear that the various authors, although apparently adopting diverse viewpoints and using different language, describe conflict from one of two essentially common perspectives. These are intra-individual and inter-party conflict.

The March and Simon Models

To illustrate the structure of these conflict forms, two models proposed by March and Simon (1958) were chosen for analysis. These models were selected despite the existence of more chronologically recent works because:

- (a). they were conceived in the context of a larger theory of organizations;
- (b). they are stated concisely, yet elegantly, including illustrative system diagrams;
- (c). they contained no serious omissions, deficiencies or contradictions with respect to models of other authors;
- (d). they form a basis for many later frameworks; and
- (e). the authors presented models covering both forms of conflict in the same volume.

These two models were subsequently compared to several proposed by other authors to assess the degree of agreement among the various versions of the theory.

The March and Simon theory of organizations focuses on the individual decision-making process. Accordingly, the authors define conflict as a "breakdown in the standard mechanisms of decision making". Their models classify this decisional breakdown at the intra-individual and inter-party levels.

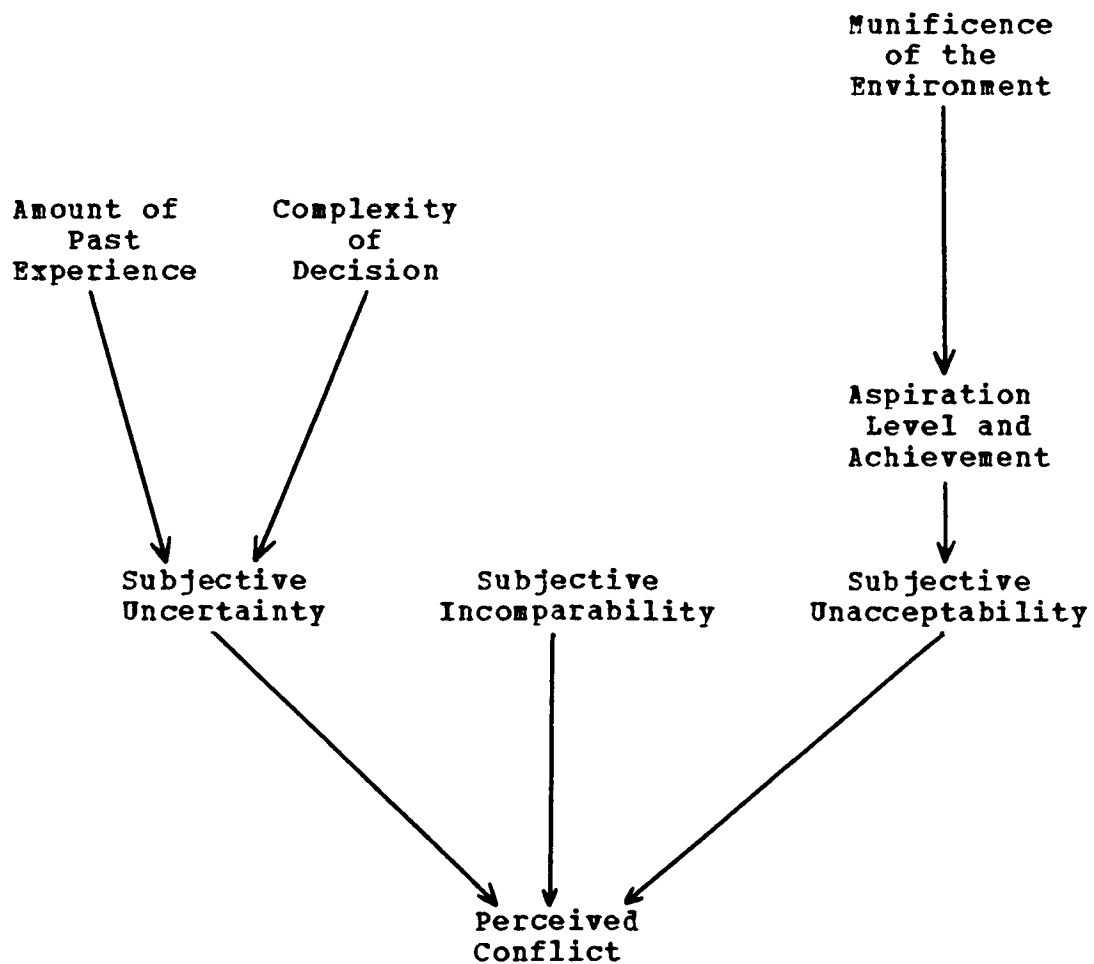
Intra-Individual Conflict.

The intra-individual model, shown in Figure 1, treats conflict as a function of the subjective uncertainty, unacceptability and incomparability associated with decision alternatives. In addition, March and Simon specify certain contextual and individual difference variables which partially determine these three primary antecedent conditions. The logical relationships among the component variables are linear, with an increase in the level of uncertainty leading to greater perceived conflict, and so forth. The resultant conflict experience is an internal state of confusion, lack of information or opposed values which blocks an individual's ability to select a personally satisfactory decision alternative. Implicit in this model, although not specified and thus absent from Figure 1, is the presence of a force upon or a need within the individual to actually make a decision.

This formulation has historical roots in Lewin's (1948) Gestalt framework, where an individual's mental states and processes are shaped by the relevant environmental field. It has also been explicated by Coser (1956) in his discussion of latent conflict; by Deutsch (1973) in his

Figure 1

March & Simon Intra-Individual Conflict Model
(Compiled from March & Simon, 1958, Pp. 117, 120)



intra-personal category; and by Pondy (1966) in his classes of latent, felt and perceived conflict. Miller (1944) defined the classic "approach-approach", "avoidance-avoidance" and "approach-avoidance" conflict typologies which fall into the intra-individual class. Brown (1957) reviewed Miller's typologies and presented a model which views intra-individual conflict as resulting from stimuli which evoke incompatible responses from the subject.

The existence of Intra-individual conflict was implicitly recognized in classical organization theory by such uncertainty-reducing mechanisms as unity of command, chain of command, and formalization of rules and structure. Argyris (1964), also recognized this conflict form in his assertions concerning the effect of classical management principles on the individual. Argyris argues that individuals can be diverted from the achievement of psychological success on the job by various adaptive activities necessary to avoid, circumvent or resist the destructive internal pressures (conflict). He feels such pressures inevitably result from the application of classical management practices.

Modern theorists from Barnard (1938) through J. D. Thompson (1967), have founded their theories on the assumption of the limited rationality of humans. Under this assumption, human beings are limited in their ability to make perfectly consistent, rational decisions by a variety of realistic constraints such as, mental capacity, physical

capabilities, perceptual biases, social pressures and the like. Limited rationality, therefore, axiomatically creates potential for internal conflict in humans due to differing abilities to establish consistent value rankings, perceive stimuli and function cognitively.

Organizational research relating to intra-individual conflict is best exemplified by the numerous studies of role conflict and ambiguity (Kahn et. al., 1964; Hall, 1972; House, 1970; House & Rizzo, 1972; Keller & Holland, 1975; Pugh, 1966; Rizzo, House & Lirtzman, 1970). Role conflict has generally been defined as an internal state aroused by incongruities or incompatibilities between role demands and the values, time, resources or capabilities of the individual; between different roles for the same person; or among different sub-sets of role demands. Role ambiguity has been defined as the predictability or clarity of behavioral requirements (Rizzo, House & Lirtzman, 1970). Role conflict appears to be definitionally equivalent to conflict in the intra-individual model, while role ambiguity seems more congruent with the antecedent conditions of subjective uncertainty and incomperability.

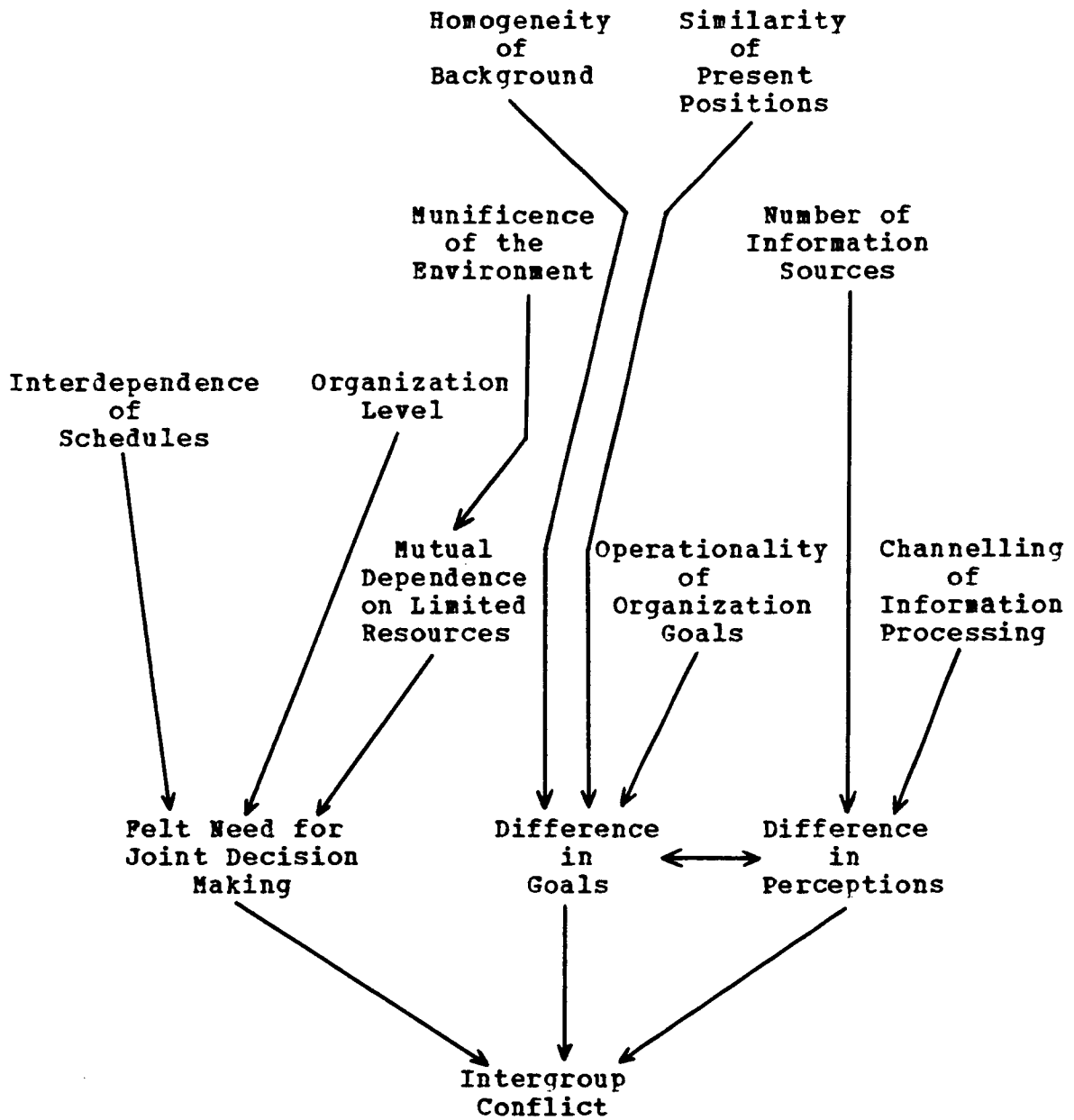
Inter-Party Conflict.

March and Simon's inter-individual (inter-group) model, shown in Figure 2, views conflict as disruptive inter-party behavior. In this form of conflict, parties attempt to facilitate their own goal achievement by interfering with the efforts of others seeking the same or related goals. Such behavior occurs as a function of perceived goal

Figure 2

March & Simon Inter-Individual/Group Conflict Model

(Compiled from March & Simon, 1958, pp. 71, 128)



differences and felt need for joint decision making. The latter antecedent is seen as resulting directly from interdependence of activities and mutual dependence on limited resources. The logical mechanisms which connect the components in this model are linear. A variety of situational variables are included as partial determinants of the above primary antecedent conditions.

Several other conceptualizations of conflict are essentially the same as the March and Simon inter-party model (Bernard, 1965; Boulding, 1962; Deutsch, 1973; Kahn & Boulding, 1964; Litterer, 1966; Pondy, 1966, 1967; Schmidt & Kochan, 1972). Many propositions in the major theories of organizations also have direct relevance to this model. Classical theory is replete with principles which are intended to structure internal interdependence and align activities toward common organizational goals. Some authors have spoken specifically of the conflict arising out of inherent goal incompatibility between technical specialists and those who administer the organization hierarchy (Katz & Kahn, 1966; Litvak, 1961; V. Thompson, 1961). Cyert and March (1963) view the top management of firms as in constant conflict due to differing individual goals and resource control among coalitions of managers. J. D. Thompson (1960, 1967) delineates conflicts arising from several areas of incompatibility within organizations. Thompson sees incompatible norms of technological rationality existing among interacting sub-units and between these technological norms and those of the administrative hierarchy. He also identifies conflicts between such internal norms and

exogenous environmental forces. Finally, he joins Cyert and March in noting the struggles between coalitions of managers whose discretionary activities determine the norms of organizational rationality and define the overall strategy of the firm.

Integration of the Various Models

Commonality of Components.

As mentioned above, the components and logical structure of the various inter-party conflict models were, except for semantic presentation, judged to be essentially equivalent. This commonality is illustrated in Table 1, where the critical components of several prominent social-psychological models of conflict are listed. Included for each of the sources are the definitions of conflict itself and four common factors which seem to adequately summarize the necessary conditions for conflict to occur. These factors are:

- (a). Parties,
- (b). Incompatibility,
- (c). Interdependence, and
- (d). Awareness or Perception.

Parties. These may be individuals, groups, institutions, physical objects, abstract norms or values, environmental constraints or similar defineable entities. Whatever the form or nature of the parties, it is central to the meaning of the conflict construct that two or more "things" must somehow exist at crossed purposes. With only one of these "things", there can be no conflict.

Table 1

Correspondence of Components in Conflict Models

The factorial breakdown of this table assumes that there is force on the parties to function or make a decision. It is also assumed that the models apply on an issue by issue basis.

<u>Model Source</u>	<u>Definition of Parties</u>	<u>Incompatibility</u>	<u>Interdependence</u>	<u>Awareness</u>	<u>Definition of Conflict</u>
March & Simon (1958) Inter-Individual/Group Model	Individuals or Groups	Goal Differences, Differences in Perceptions, Mutual Dependence on Limited Resources, Similarity of Present Positions, Homogeneity of Background	Felt Need for Joint Decision Making, Interdependence of Schedules, Channeling of Information Processing	Perceptions Limited Rationality of Humans	Dysfunctional Inter-Party Acts
K. Boulding (1962)	"Behavior Units"	Incompatibility of Wishes or Potential Future Positions	Parties Present in "Image" of Each Other, "Behavior Space"	Awareness	Inter-Party Acts, Acts Toward Third Parties, Internal State of Functional Paralysis
Pondy (1967)	Individuals or Groups	Goal Differences	Felt Need for Joint Activity, Role Interdependence	Perceptions	Inter-Party Acts
Litterer (1966)	Individuals or Groups	Relative Deprivation	Interdependence with others, Shared Resources	Perceptions	Acts to Reduce Deprivation
Schmidt & Kochan (1973)	Individuals or Groups	Perceived Goal Incompatibility	Perceived Opportunity for Interference, Interdependence of Activities, Shared Resources	Perceptions	Overt Inter-Party Acts or Omissions to "Block" Other Parties
Deutsch (1973)	Parties (Individuals, Groups, Institutions)	Incompatibility of Goals, Positions	Opportunity to Reach One's Goal Without the Other reaching theirs'.	Awareness	Incompatible Inter-Party Actions
Cyert & March (1963)	Coalitions of People	Goal Differences, Value Differences	Coalitional Bargaining	Perceptions, Limited Rationality of Humans	Bargaining Transactions, Side Payments

Table 1 (Cont'd)

Correspondence of Components in Conflict Models

The factorial breakdown of this table assumes that there is force on the parties to function or make a decision. It is also assumed that the models apply on an issue by issue basis:

<u>Model Source</u>	<u>Definition of Parties</u>	<u>Incompatibility</u>	<u>Interdependence</u>	<u>Awareness</u>	<u>Definition of Conflict</u>
V. Thompson (1961)	Functional Sub-Units (Technical Specialists vs Members of Hierarchy)	Differences in Professional Orientations & Organizational Commitments	Formal & Informal Organizational Activities	Implicit Recognition of Differing Task and Organizational Demands	Implicitly Dysfunctional Activities Affecting Organizational Effectiveness
Litvak (1961)	(Essentially the Same as V. Thompson)				
J.D. Thompson (1967)	Organization, Sub-Units, Environmental Factors, Coalitions, Individuals	Differences in Norms of Rationality (Technical, Organizational)	Interdependencies Required by Organizational Activities	Limited Rationality of Humans	Dysfunctional Inter-Party Interactions
Brown (1957)	Individual, Stimulus Complex	Incompatible Responses Evoked by Stimuli	Interaction of Individual and Situational Stimuli	Perception of Stimuli and Response Tendencies	Internal State of Decisional Pressures Toward Incompatible Acts
March & Simon (1958) Intra-Individual Model	Values, Needs, Abilities, Environmental	Uncertainty, Incomparability, Unacceptability of Decision Alternatives	Interaction Between Individual, Environment and Need to Make a Decision	Subjective Perceptions Limited Rationality of Humans	Internal State of Decisional Paralysis, Breakdown of Standard Mechanisms of Decision Making

Incompatibility. This condition creates the reason for conflict. It generates the potentials and atmosphere for disagreement, struggle, interference or antagonism between parties. Incompatibilities may concern goals, resources, physical positions, beliefs, values, aspirations, and the like. Without incompatibility of some sort, there is simply no reason for conflict.

Interdependence. This factor defines the field of conflict. The actual nature of interdependence between parties may range from intense, close, working relationships to indirect or abstract connections separated by great physical distances or institutional boundaries.

Awareness. The parties must be aware of or perceive the existence of each other, the incompatibilities which are manifested and the points of interdependence between them in order to recognize a conflict situation and, thus, have the potential to conflict. People, under assumptions of limited rationality, may perceive incompatibilities when none actually exist or, conversely, real differences may not be recognized by any or all of the parties.

Definition of Conflict Itself.

Conflict, as defined by the consensus of the above theories, takes the form of acts, behaviors, omissions or internal states of suspended action induced by one or more parties, which are incompatible with or "block" the decision-making or functional efforts of the recipient parties. Such manifestations may be perpetrated against the original opposing parties or against initially non-involved

people or objects as a result of the primary incompatibility. In other words, if an act, omission or feeling is viewed as incompatible by either the perpetrator, the recipient, or a third party, such as organizational management, then it is an occasion of conflict. The identity of the original parties or the source of the incompatibility which caused the episode may become irrelevant as such "unanticipated side effects" accelerate the spread of conflict (Coser, 1956).

Conflict versus Competition.

To complete the specification of conflict theory, the limits of the construct must be questioned. That is, what is not conflict. The concept most closely associated with conflict in the literature is that of competition.

Schmidt and Kochan (1972) have proposed that competition is a phenomenon of "parallel striving" whereas conflict involves the "Perceived Opportunity for Interference" through interdependent activities or shared resources. Under this view, both processes involve perceived incompatibility, while only conflict requires perceived interdependence between the parties. Accordingly, in competition, the opportunity for blocking behavior is not perceived by parties and, thus, does not occur.

Schmidt and Kochan's view is in contrast to other literature which defines competition as behavior which is regulated by the rules or norms of the relevant system, whereas conflict violates such rules (Fink, 1968). In this view, competitive acts are compatible with system norms,

conflict acts are incompatible. Both views of competition break down, however, when one considers competition toward a hierarchical goal, such as promotion in an organization. While the parties may strive in a parallel manner, presumably one will eventually receive the promotion. This then becomes an ultimate and inevitable non-parallel block to "losing" parties. This is a logical, legitimate outcome from the organizations point of view yet it produces a conflict-like impasse to individual parties.

This issue is not yet fully resolved, as the above arguments indicate. Clearly, the level of analysis that the observer adopts (e. g. individual, group, organizational, etc.) is crucial to differentiating between conflict and competition as commonly defined in the literature.

Relationships Between the "Intra" and "Inter" Models.

March and Simon assume a contradictory position when discussing the interrelationships between the intra-individual and inter-party models. On one hand, they contend that widespread intra-individual conflict must be minimized (i.e. a decision must have been made by both parties) before inter-party conflict is possible (March & Simon, 1958, p. 121). On the other hand, they have stated that "various combinations of inter- and intra-individual conflict can and will occur" (March & Simon, 1958, p. 118). Several other authors treat the two forms as different areas on the same dimension (Boulding, 1962; Deutsch, 1973; Mack & Snyder, 1957). Kahn, et. al. similarly suggest that

"intergroup conflicts are often epitomized and recreated as conflicts within certain roles (Kahn, et. al., 1964, p. 100).

Pondy (1967), while discussing the evolution of conflict episodes over time, has provided a sequential perspective of this issue. Pondy's framework, shown in Figure 3, contains the components of Latent, Felt and Perceived conflict, whose characteristics are analagous to intra-individual conflict as defined above. Manifest (inter-party) conflict is treated as a resultant phenomenon, which arises once the levels of internal conflict reach some critical point. Intra-individual conflict is, thus, depicted as the immediate predecessor of inter-party conflict. The latter need not inevitably result, however, particularly when conflict management mechanisms are available.

Brown (1957) demonstrates another linkage between the two conflict forms in his paradigm of intra-personal conflict, shown in Figure 4. Conflict, in this paradigm, arises within an individual when "a stimulus complex or pattern of cues having a high probability, when presented to an organism, of evoking two different and incompatible responses." (Brown, 1957, p. 135). Thus, the constructs of parties (the individual and the stimulus complex), incompatibility (of evoked responses), interdependence (of the individual and the stimuli) and awareness (of the stimuli by the individual) are specifically introduced into the "intra" model. If variables such as values, needs,

Figure 3

Dynamics of a Conflict Episode
 (From Pondy, 1967, p. 306)

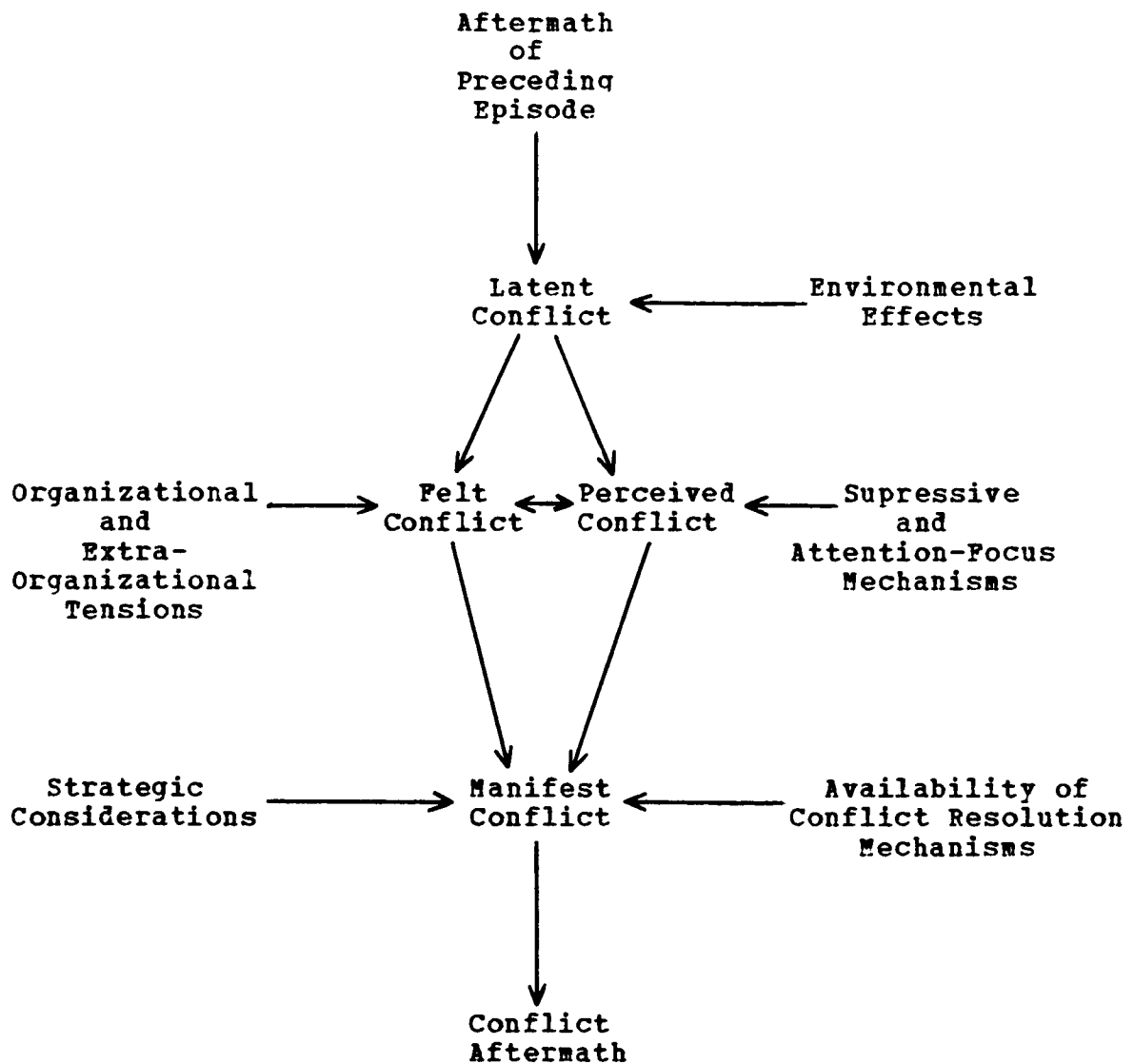
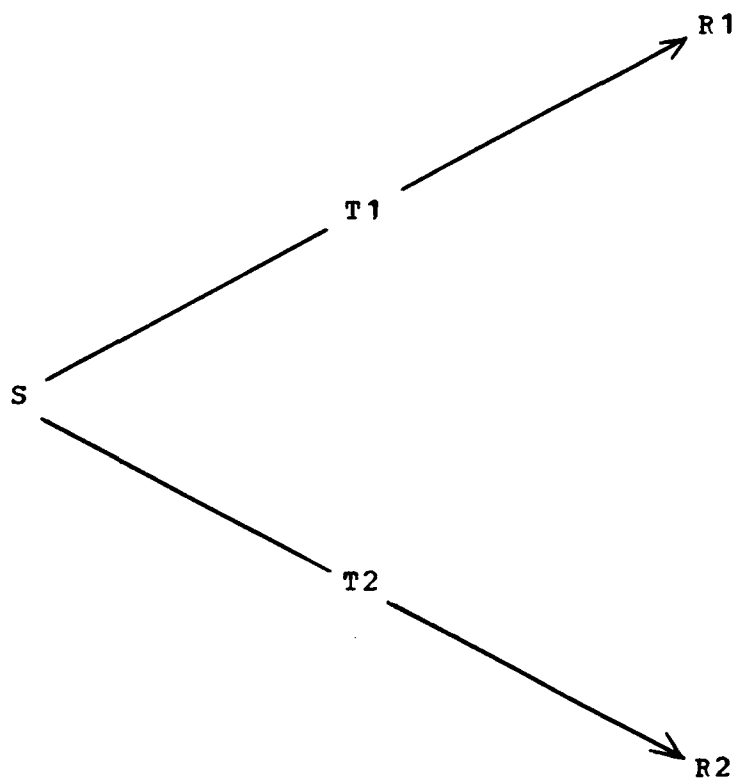


Figure 4

Paradigm of Intrapersonal Conflict
(From Brown, 1957, p. 135)



Basic conflict paradigm. S is a stimulus complex capable of arousing two tendencies (T1 and T2) to perform antagonistic responses (R1 and R2). For simplicity, it has been assumed that only two antagonistic reactions are involved.

aspirations, environmental constraints and contingencies, etc., are viewed conceptually as "parties" in interdependence with an individual, then intra-individual conflict becomes the experienced incompatibilities that may situationally arise among these factors (Brown, 1957; Sorenson & Sorenson, 1974).

Analysis of the antecedent components of the March and Simon models provides additional support for the positions of Brown and Pondy. Reinspection of Figures 1 and 2, for instance, reveals a number of antecedent conditions which seem conceptually common. Munificence of the environment is a component of both models. Complexity of decisions in the "intra" model seems closely related to the number of information sources and organization level in the "inter" model. Differences in perceptions on the inter-party level are definitionally intertwined with subjective biases or aspirations on the intra-individual level. Perceived uncertainty, incomperability and unacceptability may, accordingly, be viewed as forms of incompatibility between outside forces and the need on the part of the individual to function (i.e. make a decision). The relationships of these antecedent variables to conflict are implicitly linear and in identical direction for both models.

It appears to be logically consistant with the definitions of the component variables of both models that intra-individual conflict can be defined in terms of the same four antecedent factors as inter-party conflict. The

March and Simon Intra-individual model and Brown's paradigm have, therefore, been included in Table 1 and this research proceeded by treating both forms of conflict as dependent variables resulting from the same set of antecedent factors and the same basic logical framework.

Summary and Empirical Directions

In brief summary, this review has suggested five conclusions concerning the nature of conflict theory.

- (a). All versions reviewed seemed to reduce to a "goodness of fit" approach which defines the conditions under which the potential for conflict is high.
- (b). The four components of Parties, Incompatibility, interdependence and Awareness seem to define the necessary conditions for conflict in all versions of the theory.
- (c). The logical mechanisms of the models are linear and direct in relating antecedents and conflict.
- (d). Both the "intra" and "inter" forms of the theory seem to logically flow from this same set of four immediate antecedents.
- (e). Whether or not conflict actually manifests itself is held to be contingent, in large part, upon the availability of conflict management mechanisms.

Given these conclusions, at least three clear research paths are suggested. These are the investigation of:

- (a). Factors which generate or create the primary

antecedent conditions of perceived conflict;

(b). Factors which cause or inhibit the actual manifestation of observable conflict, given that the potential exists, and;

(c). Factors which affect the consequences of conflict acts or feelings, once they have occurred with respect to a given issue.

The study of conflict management deals directly with the latter two paths and may also yield findings of considerable relevance to the first. From a more pragmatic viewpoint, theorists and practitioners are in universal agreement that conflict can have serious destructive effects in organizations. This leads to a question which is of central interest to the present research: "What does management do?". In response, a review was conducted of the more prominent models of conflict management with particular attention given to points of correspondence with components of conflict theory.

Chapter III

MODELS OF CONFLICT MANAGEMENT

No clear distinction was apparent, to this reviewer, between the literature dealing with conflict itself and that concerning conflict management. Because of this overlap, the models discussed below as representative of conflict management theory were selected according to three criteria. First, the point of view of the author was considered. That is, the models specifically proposed responses designed to minimize or adapt to conflict, given that it exists or has the potential to occur. Secondly, the models reviewed were restricted to social-psychological approaches with close links to organization theory and behavior. Finally, the chosen models represent attempts to define integrated, systems perspectives of conflict management. They each possess a number of component variables and a basic logical mechanism which allows them to be viewed as theoretical models rather than as fragmented series of single behavior prescriptions.

Sherif - Superordinate Goals.

One of the most notable lines of research in the social sciences dealing with conflict management has been that of Sherif and his associates (Sherif, 1958, 1966). Drawing from several years of laboratory and field experimentation, including his classic "Robbers Cave" experiments, Sherif proposed that the key to inter-group conflict resolution lies in the creation of a sphere of superordinate goals. These goals must be compelling to all parties. Each must

feel that they are participating in goal attainment and will share equitably in potential rewards. Interactive episodes under such conditions must be repeated over time so that the parties internalize the superordinate goal and cooperative behavior is reenforced. In terms of the antecedent conditions of conflict, Sherif's approach seeks to resolve conflict by subordinating incompatibilities between parties to higher common goals.

Deutsch - Constructive vs Destructive Processes.

Deutsch (1973), based upon a substantial amount of experimental evidence, has developed a two-phase model which differentiates between "constructive" or cooperative and "destructive" or competitive orientations to inter-personal bargaining. In Deutsch's model, parties attempt to resolve incompatibilities through the character and strategies of their interdependence. He proceeds beyond Sherif by specifying several factors which may affect the generation or reduction of conflict. These are, as discussed earlier in Chapter I:

- (a). Characteristics of the Parties: values, abilities, resources, personality factors, etc.
- (b). Social Environment: within which the conflict occurs - constraints, contingencies, etc.
- (c). Relationship Between the Parties: present and prior.
- (d). Process of Interaction: between the parties, strategy, tactics, estimations of success.

- (e). Interested Third Parties: leaders, peers, mediators, etc.
- (f). Nature of the Conflict Episode: size, centrality, issues, etc.

The constructive half of the Deutsch model is identical to the ideal resolution state prescribed by the Sherif framework. The competitive half, however, describes a situation of continuing goal incompatibility. This state would not be viewed by Sherif, or by conflict theory, as a resolution alternative but, rather, as a situation of high conflict potential.

The Sherif/Deutsch framework forms the conceptual basis for two other models more specifically oriented toward conflict management in organizational settings.

Blake and Mouton - Modes of Conflict Resolution.

First, the development of the Managerial Grid approach to management style by Blake and Mouton led to the specification of five modes of managerial behavior which might be employed to resolve conflict in organizational settings (Blake & Mouton, 1964; Blake, Shepard & Mouton, 1964). These modes, briefly defined, are:

- (a) Problem Solving (Confrontation): recognition of a higher common goal; open exchange of information; trustful, friendly interpersonal atmosphere; facts and reason employed as decision criteria.
- (b) Bargaining (Compromise): a give and take process; goals of parties remain incompatible; limited information exchange; guarded, defensive

interaction; exchange of concessions.

- (c) Forcing: one party dictates solution to others; interactions based on relative power differentials; interpersonal considerations ignored; goals differences suppressed but may remain.
- (d) Smoothing: calming down interpersonal flareups; reason for problem ignored; appeals instead to friendship and common interpersonal interests.
- (e) Avoiding (Withdrawal): turning away from quarrels; ignoring problems; non-involvement posture toward potential disagreements; isolation from others.

All five modes were proposed to have unique effects upon conflict resulting from different combinations of task-oriented and people-oriented managerial behavior. Problem Solving was seen as the potentially most effective mode and characteristic of the "9-9" manager who is high in both task and interpersonal behavior. A problem solving approach is equivalent to both Sherif's optimal resolution state and Deutsch's constructive category. The other four modes were hypothesized to be less effective due to the lack of task and/or people behavior components.

Lawrence and Lorsch - Integrators.

Lawrence and Lorsch (1967) extended the work of Blake and Mouton by proposing a model of effective inter-departmental conflict resolution within organizations. According to their view, inter-departmental conflict resolution is a function of the degree to which:

- (a) Integrating units are intermediate in position with

- respect to goal and time orientation between laterally differentiated departments;
- (b) Influence of integrators is derived from their technical competence;
 - (c) Integrators' rewards are based on the combined performance of the units they service;
 - (d) A high level of total influence exists throughout the organization;
 - (e) Influence is centered at the level required by the environment; high levels in stable settings and lower levels as dynamism increases; and,
 - (f) The "proper" mode of conflict resolution behavior (i. e. Problem Solving) is employed, based on the five-factor framework of Blake and Mouton.

The six Lawrence and Lorsch resolution factors have the effect of directing the efforts of parties toward common organizational goals, and of monitoring the interdependence between parties so that more organizationally rational decisions can be made.

Other Models.

Although the four models above most closely met the selection criteria, they are by no means the only discussions of conflict resolution in the literature.

March and Simon describe the resolution of intra-party conflict as a search process during which each new alternative is compared to the individual's level of aspiration to determine whether or not it represents a

satisfactory solution. An individual desiring to reduce perceived conflict, either finds a satisfactory alternative or is forced to lower her/his level of aspiration. At the inter-party level, March and Simon discuss the resolution modes of Problem Solving, Persuasion, Bargaining and Politics (Bargaining at a macro level).

Boulding (1962) also identifies the conflict reducing techniques of Avoidance, Conquest (Forcing), Compromise, Award (by a third party, similar to Smoothing or Arbitration), and Reconciliation (Problem Solving).

March and Simon and Boulding agree with the authors reviewed above, that a problem solving approach yields a state of optimal potential for resolution. They argue that the various other modes discussed fail to deal with one or more of the antecedent conditions of conflict and should theoretically be less effective in reducing conflict over the long run.

Patchen (1970) reviewed a number of conflict resolution models which have more explicit logical structure. These models are generally based upon subjective probability estimates made by parties to a conflict concerning their own chances of 'victory' and their opponents chances of successful defense or retaliation. These models, although fertile areas for future research, have not been reviewed here for several reasons, some of which are also cited by Yukl (1974). First, they primarily describe adversary bargaining behaviors which assume that goals remain

incompatible throughout the resolution process. Also, these models assume a more microcosmic view than do the major theories of organization. They represent only one out of many possible strategies which may be adopted in managing conflict. Organizational managers are considerably less constrained by arbitrary limits to the range of possible resolution techniques.

Critique of Models

The conflict management models reviewed above appear to rest upon the same logical structure as the conflict models reviewed earlier, although their perspective of the process differs. The conflict management authors are concerned with the reduction of conflict, while the conflict authors deal primarily with the definition and generation of conflict.

The conflict management models predict the resolution of conflict on an issue by issue basis, since the incompatibility component concerns goals, wishes or desires related to a given issue. Given this perspective, they are really conflict reduction models which lead to optimal end states of harmony on the issue in question. It is only when the simultaneous existence of a multitude of issues is recognized, that conflict assumes a pervasive posture and becomes virtually inevitable in organizational behavior. This issue by issue perspective is compatible with the notion of management's "sequential attention to goals" in the "quasi-resolution of conflict" discussed by Cyert and March (1963). Pondy supports this perspective by

considering conflict dynamics as a "complex interaction of the effects of preceding episodes and the environmental milieu" (Pondy, 1967, p. 306). The aggravation, reduction or consequences of conflict in Pondy's view, is partially dependent on the conflict management techniques employed, as previously shown in Figure 3.

There is, therefore, an implied dimension underlying the theory and models reviewed in these chapters. At one extreme, lies the state of maximum likelihood of conflict and, at the other extreme, the state of maximum potential for harmonious resolution. This bi-polar relationship is shown diagrammatically in Figure 5. It would be, therefore, redundant to formulate a separate conflict management model to describe the critical components and logic of such processes, since the conflict model does this already.

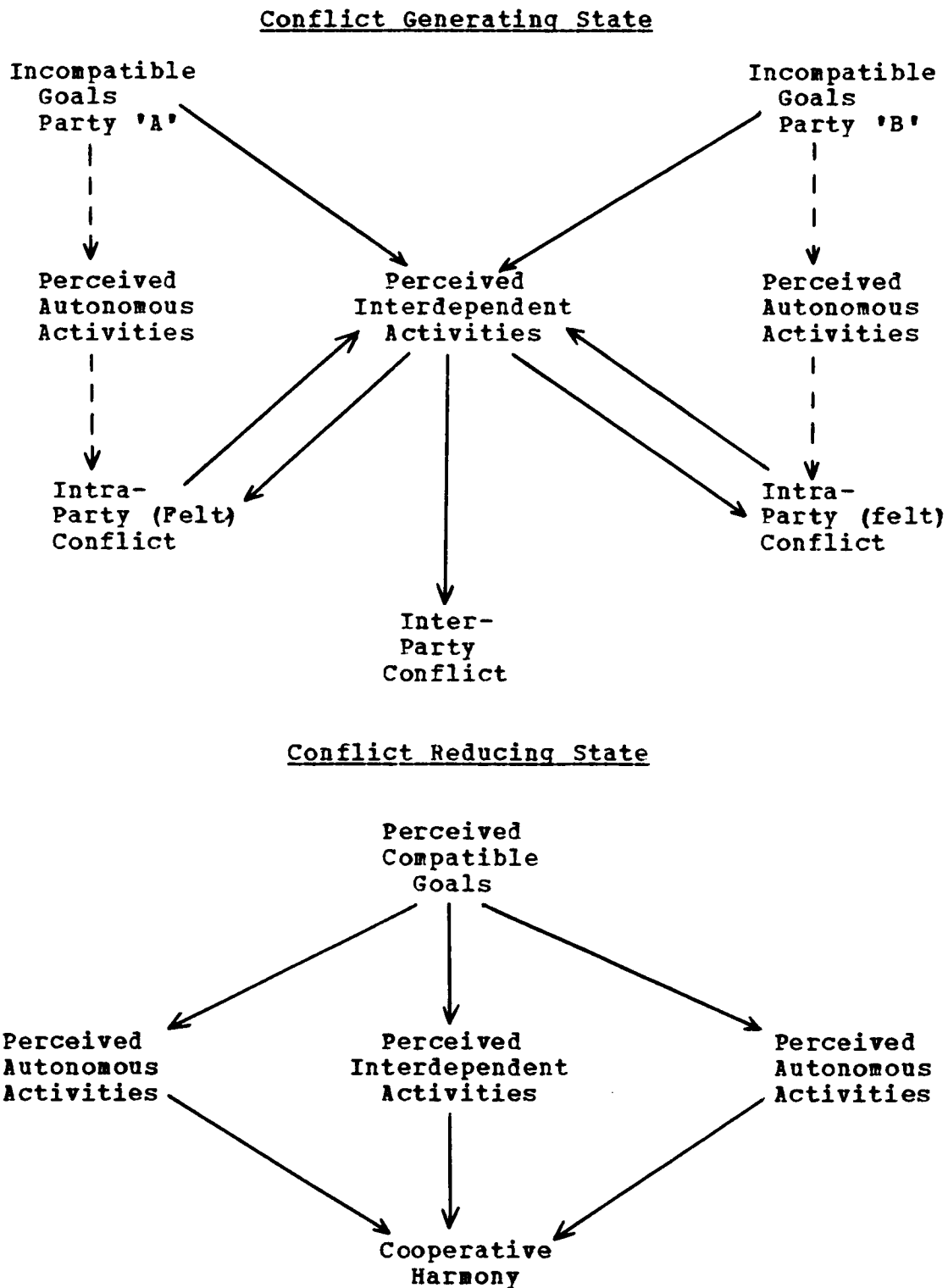
It should also be noted that the conflict management models are clearly stated from a managerial perspective. They all prescribe supervisory behaviors or organizational techniques which are under the control of management and are proposed to reduce or prevent conflict. According to these models, the study of conflict management may be viewed as a process of investigating the effects of specific managerial resolution or preventative techniques on the antecedent conditions of conflict as manifested by the reduction or aggravation of conflict.

Derivation of Propositions.

The scientific desirability of maintaining close ties

Figure 5

States of Maximum Potential for "Conflict" and "Harmony"
for a Given Issue in Conflict Model
(for Two-Party Situation)



between the particular operational variables included in this study and conflict theory, led this researcher to formulate three propositions based upon the components of the conflict model. These propositions were then used as guides in constructing research hypotheses concerning expected relationships between the included independent variables and conflict.

Proposition 1: The effectiveness of behaviors or mechanisms employed while attempting to reduce conflict in a given situation is a direct function of the degree to which the mechanism or behavior leads to perceptions of reduced incompatibility by involved parties.

Proposition 2: A mechanism or behavior which acts only to limit or modify the interdependence of parties in a conflict situation, without reducing perceptions of incompatibility, provides only temporary or "quasi" resolution of the conflict. The potential for recurrence remains high.

Proposition 3: Factors present in the task environment, organizational roles, interrelationships or personalities of parties to a conflict situation, which affect perceived incompatibilities or interdependencies, have corresponding impact on the generation or reduction of conflict and, therefore, on the conflict reducing properties of conflict management techniques.

In terms of managing conflict, the logical sequence underlying these propositions begins with managerial techniques and situational factors, which affect the antecedent conditions of conflict. These conditions, in turn, lead to an increase or decrease in conflict acts or feelings.

Chapter IV

VARIABLES AND HYPOTHESES

The independent variables included in this study were selected according to two criteria. First, each fell within one of Deutsch's categories of factors significant in conflict processes. Secondly, the variables are well published and discussed in both theoretical and empirical literature. It is also assumed that the predictors are independent, additive and linear in their relationships with conflict. This "straight line" design treats each predictor as having some measure of effect on conflict unique from that of the simultaneous effects of the other predictors. This design matches the logical structure of the conflict theory as summarized earlier in Figure 5 and in the three derived propositions. The validity of the linearity assumption is questionable pragmatically (Korman, 1973), but, since the theory gives no specific guidelines in this regard, the present research proceeds accordingly, with noted reservations.

Supervisory Modes of Conflict Management

Adherence to Formalized Rules and Chain of Command.

There has been, perhaps, no more widely discussed class of variables in the field of organizational study than Formalization of structure and procedures. Many prescriptions of classical organization theory contain the common assumption that highly formalized management practices will act to resolve conflict implicit in the various environmental and human factors confronting the

organization (Davis, 1951; Gulick & Urwick, 1937; Taylor, 1947). Cyert & March (1963), incorporated in their theory the notion of "Standard Operating Procedures" which serve the function of controlling repetitive intraorganizational decision processes. J. D. Thompson indentified structure as one of the primary means by which organizations achieve rationality of operation within their boundaries (J. D. Thompson, 1967, p. 54).

In direct contradiction, Argyris (1964) has condemned formalized, impersonal managerial practices as dehumanizing, restrictive to individual growth and, therefore, a major source of conflict in organizations.

Formalized practices are, by their very nature, incomplete responses to anticipated contingencies. They must be planned beforehand by management. It is, however, possible to reliably plan only for contingencies whose probability of recurrence is quite high. In dynamic environments or in one-time decision situations, fewer such predictions can be made. It is not surprising, therefore, that empirical evidence has consistantly shown formalization to be most strongly related to cooperative criteria in static environmental situations (Corwin, 1969; Harvey, 1968; Hall, 1962; Lawrence & Lorsch, 1967; Ryan, House & Clemence, 1972). Similarly, Corwin (1969) found that close supervision and emphasis on rules were negatively related to conflict in more bureaucratic, less professional schools while positively related in less bureaucratic, more

professional schools. Abuse of legitimate lines of authority has also been found to be associated with conflict among interdependent affiliates in a communications organization (Lourenco & Glidewell, 1975).

The Formalization construct can be related to Propositions 1 and 2 in several direct ways. Formalized mechanisms control information flow, define hierarchical authority, provide constraints and norms to control behavior and act as vehicles for the enforcement of organizational goals, policies, rewards and sanctions. They would act to direct effort toward superordinate organizational goals, foster organizational identification and to clarify and stabilize lines of interdependence. For example, a supervisor who adheres to formalized practices may be seen as a more effective information processor and as having more organizationally legitimate reward/punishment power. Accordingly, supervisory Adherence to Rules and Chain of Command in their independent effects, can be expected to be conflict reducing mechanisms.

Hypothesis 1a.

Supervisory Adherence to Formalized Chain of Command is negatively related to subordinate conflict.

Hypothesis 1b.

Supervisory Adherence to Formalized Rules is negatively related to subordinate conflict.

Problem Solving.

This is a process characterized by recognition of shared

objectives, open exchange of information, logical resolution of differences, attention fixed on the problem rather than personalities and concentration on evolving new solution alternatives. This mode specifically confronts both antecedent conditions of incompatibility and undesirable interdependencies and has been proposed by many authors as a method to achieve innovative, cooperative solutions both analytically and socially (Blake & Mouton, 1964; Maier, 1963; March & Simon, 1958). Proposition 1 clearly is consistent with this prediction.

The preponderance of evidence has indicated that Problem Solving is effective in reducing conflict (Blake & Mouton, 1964; Blake, Shepard & Mouton, 1964; Burke, 1970; Conway, 1967; Dutton & Walton, 1971; Katz, 1964; Lawrence & Lorsch, 1967; Maier, 1963, 1970; Ryan & Clemence, 1973; Sherif, 1958, 1966; Swinth, 1967; Vroom, Grant & Colton, 1969; Walton, Dutton & Fitch, 1966; Zand, 1972).

There is, however, evidence which suggests that this generally effective process may be limited in certain situations. Maier (1970) and Vroom, et. al. (1969) have discussed potential undesirable outcomes and side effects of the problem solving process such as, dominance by a leader, fixation on a solution alternative at too early a stage, group pressures toward conformity, reluctance to relinquish power, etc.. Other authors have argued that job pressures of time and effort may often make it too costly to undertake extensive, interactive resolution processes (E.

Boulding, 1964; Butler, 1973; Lawrence & Lorsch, 1967). There is also evidence that Problem Solving is not seen as the most desirable behavior in some organizations (Greiner, Leitch & Barnes, 1968). Finally, there is evidence that certain variables may be deleterious to the effectiveness of the problem solving process. Ryan and Clemence (1973) found, for example, that Problem Solving was less positively related to measures of perceived organizational effectiveness under conditions of high personal influence as opposed to respondents reporting low influence over their job decisions.

Independent of such suppressive pressures, however, theory strongly predicts Problem Solving to be a conflict reducing mechanism.

Hypothesis 2.

Supervisory Problem Solving is negatively related to subordinate conflict.

Bargaining.

While engaged in Bargaining, goals of parties remain different, there is a give and take of side payments and guarded, selective communication. Compromise solutions often result, which lie somewhere between the optimum desires of the individual parties.

Bargaining has probably been the most widely discussed and studied conflict management mode in the social sciences. (K. Boulding, 1962; Caplow, 1964; Coser, 1956; Cyert & March, 1963; Deutsch, 1966; March & Simon, 1958; Patchen.

1970; Schelling, 1960, 1971; J. D. Thompson, 1967).

A wide variety of bargaining strategies and moderating variables have been investigated in the experimental gaming literature. (Bedel & Sistrunk, 1973; Cole, 1972; Coser, 1956; Davis, 1972; Deutsch, 1966; Deutsch & Krauss, 1960; Patchen, 1970; Schelling, 1960, 1971; Shepard, 1964; Wahba, 1971; Yukl, 1974). As mentioned earlier, however, parties in an experimental venue are usually confined to a situation of enforced goal incompatibility and are restricted to strategies of interdependence to achieve an outcome. In organizational settings, there are rarely unmovable a priori constraints and, thus, it is not surprising that bargaining behavior has commonly been associated with continuation of conflict and low levels of satisfaction (Blake & Mouton, 1964; Blake, Shepard & Mouton, 1964; Burke, 1970; Lawrence & Lorsch, 1967).

Proposition 2 predicts that Bargaining leads to incomplete resolution of incompatibilities. Conflict will continue in a more or less latent internal state with a high probability of overt recurrence.

Hypothesis 3.

Supervisory Bargaining is positively related to subordinate conflict.

Forcing.

Forcing includes behavior in which one party attempts to unilaterally impose a solution on others. (Barnard, 1938; Kahn & Boulding, 1964; Litterer, 1966; Lawrence & Lorsch,

1967; Simon, 1947).

Forcing is usually described in the literature as having a single coercive, power-based dimension. There is, however, a second, instrumental dimension implied by some authors (Lawrence & Lorsch, 1967). Instrumentally, it is argued that Forcing should resolve a conflict since a clear decision results and uncertainty and incompatibility should be, at least from the forcer's point of view, eliminated. The coercive component, however, leads to quite opposite conclusions. The original unacceptability and/or goal incompatibility will likely still exist in the mind of the recipient. The character of such interdependence is also quite arbitrary, tending to create rather than resolve incompatibilities. Zechmeister and Druckman (1973) found, in a game setting, that unilateral imposition of behavioral constraints increased the rigidity and conflict behavior of individuals. Gemmil and Heisler (1972) found that high Machiavellian supervisors, who employed a great deal of Forcing-type behavior, were, indeed, successful as manipulators. The aftermath of such manipulation, however, was characterized by higher subordinate job strain and dissatisfaction.

Studies of Forcing in organizational settings have generally reported strong negative relationships with cooperative criteria, job satisfaction and perceptions of organizational characteristics (Burke, 1970; Ryan & Clemence, 1973; Walton, Dutton & Fitch, 1966).

In contrast, Greiner et. al. (1968) found that directing, Forcing behavior was rated by employees as most prevalent and as most desirable in relationships with customers in several internal revenue district offices. Lawrence and Lorsch (1967) also found that Forcing was the second most prevalent mode in effective organizations in a dynamic environment. They interpreted this as indicative that Forcing behavior was effective as a backup mode due to its hypothesized instrumental component. However, arithmetic means only describe central tendency and level of a given variable. No direct statistical inference of a relationship between two variables can be drawn from their prevalence in ordinal criterion categories. For example, the organizations cited may have been effective despite the fact that Forcing was common, rather than as a result of such behavior.

In explanation of the apparent contradictory nature of the construct, Proposition 1 leads to the deduction that Forcing is effective in reducing conflict only when such behavior happens to yield solutions compatible with the goals of all involved parties. The likelihood of such occurrences on a consistent basis, however, seems quite slim, particularly when the coercive nature of Forcing is considered. Thus, supervisory Forcing might reduce conflict from a managerial perspective and, according to Proposition 2, even from a subordinate perspective in the short run. As issues and episodes recur, however, Forcing would be

expected to aggravate the recipients' perceptions of incompatibility leading to increased long run probability of conflict.

Hypothesis 4.

Supervisory Forcing is positively related to subordinate conflict.

Smoothing.

Smoothing behavior centers on the interpersonal atmosphere between parties and stresses the reduction of emotional crises, appeals to common bonds of friendship, prevention of conflict escalation and restoration of a harmonious status quo. In other words, the effect of Smoothing is to dominate incompatibilities with superordinate values that all parties can agree upon.

Some writers have hypothesized, congruent with Proposition 2, that Smoothing is only a partially effective conflict management mechanism since it ignores the task-related incompatibilities of a conflict (Blake & Mouton, 1964; Lawrence & Lorsch, 1967). It may be further deduced from Propositions 1 and 2, that Smoothing is effective in reducing conflict only when the nature of the interdependence between parties is a prime determinant of the causal incompatibilities.

Lawrence and Lorsch (1967) found Smoothing to be the second most prevalent mode studied in firms facing stable environmental conditions. Others have found low positive relationships between Smoothing and organizational

effectiveness criteria (Burke, 1970; Ryan & Clemence, 1973). In addition, Ryan and Clemence found Smoothing to have positive relationships with cooperative criteria under conditions of low Personal Influence while these relationships approached zero in high influence situations.

Hypothesis 5.

Supervisory Smoothing is negatively related to subordinate conflict.

Avoiding.

Avoiding behavior consists of turning away from arguments, ignoring hassles and letting problems work themselves out. It is argued by some that Avoiding may have positive effects when parties are not prepared to assume the costs in time, effort and risk of physical and emotional resources required in active resolution processes. (Butler, 1973; Kahn & Boulding, 1964). It may also be true that initial avoidance communicates a desire not to argue and may lead to eventual cooperation.

It has, however, generally been hypothesized that avoidance is ineffective in reducing conflict since it does not confront the incompatibility antecedent in a positive manner. (Blake & Mouton, 1964; Lawrence & Lorsch, 1967). Propositions 1 and 2 support this notion.

It seems, accordingly, that widespread or long run supervisory avoidance behavior would aggravate rather than reduce conflict in a complex inter-personal system.

In support of this position, most organizational studies

have found that Avoiding is a negative correlate of cooperative criteria (Burke, 1970; Schmidt & Kochan, 1972; Walton, Dutton & Fitch, 1966).

Hypothesis 6.

Supervisory Avoiding is positively related to subordinate conflict.

Situational Variables

Variations in Patterns of Organizational Processes

Perhaps the most prominent body of research which has investigated situational patterns of organizational processes is that concerning the effects of environmental dynamism, technological demands and internal climate upon the relationships between organizational and behavioral practices and various effectiveness criteria.

When viewed as a whole, the findings of these studies suggest that more highly programmed, rigidly structured practices are more likely to be associated with effective operation under stable environmental conditions, as opposed to dynamic environments where more flexible, adaptive mechanisms tend to be related to effectiveness. The above effects have been found inter-organizationally (Burns & Stalker, 1961; Chandler, 1962; Harvey, 1968; Lawrence & Lorsch, 1967; Woodward, 1965; Zverman, 1971), between lateral sub-units and hierarchical levels (Aiken & Hage, 1968; Hage & Aiken, 1969; Hall, 1962), and between work groups and individuals (Duncan, 1972; House, 1971; Ryan, House & Clemence, 1972).

Such findings would seem also to have relevance to conflict management as a major subset of organizational behavior. Formalized structure, for example, can be viewed as a conflict management technique whose effect interacts with situational factors. Indeed, several studies have presented findings at the inter-organizational level which suggest that organizations in different environments are characterized by different patterns of relationships among conflict and conflict management variables (Corwin, 1969; Greiner, Lawrence & Lorsch, 1967; Walton & Dutton, 1969). A logical extension of this research is the investigation of such variations in conflict management processes at the intra-organizational level.

Boundary and Core Positions - Non-Routinization.

Most simply defined, core positions are those which are primarily oriented toward the performance of the technical or operational functions of the organization. Boundary positions, on the other hand, are those which are located at, and which must function across, the boundaries of technical sub-systems or of the organization and its environment (Kahn, et. al., 1964; J. D. Thompson, 1967).

The discussion of boundary and core positions in the context of modern organization theory, however, goes beyond the simple enumeration of positional characteristics. Inherent in these two categories are contrasts of major significance to J. D. Thompson's description of the fundamental manner in which organizations survive. Thompson

views organizations, at the most basic level, as simultaneously confronted by uncertainty and need for rationality of behavior. Upon this base he built his elegant framework of propositions. He proposed that the primary challenge to organizations is the removal of as much uncertainty as possible from the technical core by sealing off core technologies from environmental influences (J. D. Thompson, 1967, p. 19). This is accomplished by the creation of input and output activities whose function is to provide liason between the technical core and crucial exogenous constraints and contingencies not subject to the direct control of the organization. The characteristics of the task environment facing jobs isolated in the technical core would, therefore, be quite different than those facing boundary positions. Task environments have been catagorized along such dimensions as homogeneous - heterogeneous, stable - shifting and static - dynamic (Duncan, 1972; J. D. Thompson, 1967). The specific functions of boundary positions are to adapt to these environmental forces while core jobs must deal with the more closed-system requirements of the task technology. Finally, Thompson proposed that the more dynamic or non-routine the task environment, the more frequent the changes in organizational goals, a primary determinant of incompatibility (J. D. Thompson, 1967, p. 129).

The effects of environmental influences have been discussed from slightly different perspectives by many other

theorists and researchers. Lawrence and Lorsch (1967) incorporated in their model the concepts of Differentiation and Integration which may be loosely associated with Core and Boundary functions respectively. March and Simon (1958) have predicted more conflict in sub-units with dynamic as opposed to static task environments and at higher as opposed to lower organizational levels. They also proposed that the number of information sources and complexity of decisions in a given organizational situation increase the likelihood of conflict. Schelling, (1971) demonstrated the effect of task cues in guiding bargainers to cooperative solutions, even when inter-party communication was impossible. Todd, Hammond & Wilkens, (1966) found in a stable, two-person game setting, that cooperation was facilitated by exact feedback as to effects of strategies whereas conflict behavior resulted when ambiguous feedback was given. O'Brien & Owens (1969) found that organizational structure aided the resolution process in lower level jobs in manufacturing firms while the effects at managerial levels was negligible. Bernardin and Alvares (1975) found that individuals at different organizational levels rated different conflict resolution behaviors as effective. Specifically, they found that superiors preferred Forcing while subordinates preferred Confrontation (Problem Solving).

In terms of Proposition 3, Boundary positions tend to face higher levels of uncertainty, incomperability and unacceptability than more isolated Core positions. Goal incompatibilities are more probable in boundary situations

and interdependencies of people and activities are more difficult to structure in a predictable manner. It would therefore, be expected that incumbents of Boundary positions would perceive more conflict and be involved in more conflict episodes than would individuals in Core positions. It would also be expected, in accordance with the sub-characteristics of Boundary and Core roles, that the more non-routine an individual's role in an organization, the higher the potential for conflict within and across that role.

Hypothesis 7A.

Incumbents of Boundary positions perceive more conflict than individuals in Core positions.

Hypothesis 7B.

Non-Routinization of organizational role is positively related to conflict.

Personal Influence.

Many writers have argued that gaining the cooperation of others in organizations, depends heavily upon the amount of personal influence or power an individual perceives with respect to job duties and co-workers (Cartwright, 1965; Kahn & Boulding, 1964; Thibaut & Kelley, 1959). Indeed, Kahn and Boulding view conflict as primarily determined by the relative power differential between an individual and an "other".

J. D. Thompson included this notion in several of his propositions concerning individual discretion. He predicted

that people are more likely to exercise discretion, that is to make non-programmed decisions, when cause/effect resources are adequate and when consequences of error are less serious (J. D. Thompson, 1967, pp. 119-120). Personal Influence is certainly a major resource of a manager attempting to produce results (effects) in an organization. Influence very commonly acts to shield a person from some consequences of error. Thompson also predicts that individuals in highly discretionary jobs seek to maintain power at least equal to their dependence on others in the organization (J. D. Thompson, 1967, p. 125). A break in this balance of power would generate incompatibilities and potential conflict across those relationships (interdependencies) affected. Finally, he proposed that the more sources of uncertainty or contingency, as would be true, for example, in Boundary jobs, the more bases for power. Similarly, Hinings, Hickson, Pennings and Schneck (1974) view power as a partial function of uncertainty, centrality of workflow and non-substitutability of the bases of the power.

The majority of studies employing some measure of power or influence have found that the possession of power by parties to a conflict generally increases the tendency toward conflictful behavior, increases expected and actual influence attempts, produces negative sentiments and reduces the effect of otherwise cooperative modes (Coser, 1956; Deutsch, 1966; Deutsch & Krauss, 1960; Higbee, 1968; Hoyt,

Henley & Collins, 1972; Kelley, 1965; Kipnis, 1972; Mack & Snyder, 1957; Miller & Pyle, 1975; Mulder & Wilke, 1970; Ryan & Clemence, 1973; Solomon, 1960; Zald, 1962).

Conversely, Lawrence and Lorsch (1967) found that a high level of total influence was characteristic of high performing firms which appeared to resolve conflicts effectively. Similarly, Wahba (1971) found that coercive power generated cooperative behavior in a two by two prisoner's dilemma game whereas reward and referent power did not. Studies of cooperative behavior in game situations, however, suffer from a methodological bias concerning constraints placed upon subject behavior. The parties are restricted to game moves, the coercer has only limited behavioral choice and the coerced party has small latitude to maneuver evasively. Neither were supplementary measures of subject satisfaction or perceptions of the experiment presented in the cited studies. It is arguable, therefore, that such results may more fairly represent forced compliance than cooperation. If the former is the case, Coser (1956) and Hoyt, Henley & Collins (1972) present extensive argument and evidence of the potential negative side effects of coercion.

In terms of Proposition 3, high levels of perceived influence or power would appear to instill more secure commitment to one's own goals, increase acceptability of decision-making climate, make interdependence more aggressive, and act as a potent resource which could be

withheld from others or used to gain an advantage in resolution processes. People with low felt power with respect to their jobs would feel, conversely, vulnerable to the acts of powerful others, such as supervisors, leading to higher likelihood of incompatibilities and resultant conflict.

Hypothesis 8A.

Self-Perceived Personal Influence is negatively related to self-perceived conflict.

Hypothesis 8B.

Perceived Personal Influence of supervisors is positively related to subordinate conflict.

Open/Closed Mindedness - Dogmatism.

Individual personality traits have evolved slowly as significant variables in organization theory, although recognized as potentially significant to conflict processes in related areas (Nelson, 1974).

J. D. Thompson, in a discussion of the dynamics of individual discretion in organizations, pointed out that individuals differ in their attitudes and orientations toward the risk and ambiguity inherent in most discretionary behavior (J. D. Thompson, 1967, p. 118).

Harris (1974), in a review of the literature concerning the effects of personality variables on game behavior, concluded that the evidence of such effects is minor and inconsistent, a view shared by Korman (1973) with respect to research into contingency models of leadership. Harris,

however, notes that sample selection, sample size, weak controls and lack of consistent replication may be responsible for some of the weakness in such findings.

The personality variable of interest in this study was the degree of Dogmatism characteristic of the cognitive structure of individuals (Rokeach, 1960). Vacchiano, Strauss & Hachman (1969), in an extensive review of research on Dogmatism, describe the dogmatic person as one who is unable "to utilize novel responses which have been produced" by the surrounding environment. The above authors, together with some recent studies in conflict situations, have suggested that open-minded individuals are more flexible in their acceptance of cooperative processes than is the case with closed-minded people (Cheney, Harford & Solomon, 1972; Conway, 1967; Druckman, 1967; Goodstadt & Hjelle, 1973; Nevitt, 1964; Slack & Cook, 1973). In a related study, Korman (1974) found that respondents possessing external locus of control perspectives, a tendency of closed-minded individuals, demonstrated less tolerance for role ambiguity than internals, who tend to have open-minded personalities. Goodstadt and Hjelle (1973) found that external locus of control subjects made significantly greater use of coercive power than did internal individuals, who tended to rely on personal persuasive influence. Gemmil and Heisler (1972) came to similar conclusions regarding rigid, Machiavellian individuals. Close (1975) presented preliminary evidence to suggest that managers who have achieved (been promoted to

high levels) in an organization are less dogmatic than those at lower levels.

The more closed-minded individual, in accordance with Proposition 3, would appear to be less adaptable to goals of others and to instabilities of interdependence. Tolerance of uncertainty would be lower and incompatibilities with respect to one's own value system would tend to increase compared to more open-minded people.

Hypothesis 9.

Dogmatism is positively related to conflict.

Chapter V

THE STUDY

The Sample

The data of this study were collected in three organizations.

Social Service Agency.

The first group consisted of 83 people working in three offices of a social service agency located in a suburban community in the New York metropolitan area. The major function of this agency was to provide counseling, child day care, day schools, recreation opportunities, community education, drug control programs and similar services to needy families in the community. The three locations sampled included the main administrative and counseling center together with two field offices, both located within ten miles of the central office. The main office performed the overall administrative tasks for the agency, including liason with governmental and private sources upon whose funding the survival of the agency is contingent. The central office also provided professional services to the residents of it's immediate locale. The two field locations serviced the particular needs of the communities in which they resided. They operated autonomously with respect to their operational and professional tasks, but were linked to the central office for major policy guidelines, budgetary control, administrative support and managerial direction.

Industrial Products Plant.

The second organization studied was a small industrial

plant located in northeastern New Jersey. The plant is an semi-autonomous affiliate of a large corporate conglomerate with head offices in an eastern city. The plant manufactures a small range of special purpose industrial products which have a reputation for high product quality and workmanship. Interviews with plant management and other employees indicated that these norms of quality pervade the plant and its operations.

About half of the total work force of 103 employees moved with the plant when it relocated to it's present site about six years ago. These people brought with them highly conservative work and managerial perspectives. The move resulted in a heavy influx of new employees, particularly at the top two managerial levels, with more progressive expectations. Although severe instances of the inevitable ideological clash have largely disappeared, the interviews suggested that the resentments are not forgotten and sometimes are in evidence at meetings and at times of stress.

All production workers, 30 in number, were omitted from the study due to labor union resistance. The remaining 73 employees, which included all managers, foremen and white collar included manufacturing, marketing, financial, and R & D personnel were invited to participate. The duties of this group were primarily managerial, sales, technical support of production, clerical and secretarial.

Business College.

The third group investigated was faculty and students of

a large northeastern business college. Full time faculty members representing all professorial ranks, including the Department Chairmen, of four departments specializing in Quantitative Analysis were sampled. Full-time, non-teaching employees, graduate research assistants and undergraduate student aides working in the above areas also participated for a total of 65 respondents.

The Measures

A common criticism of correlational field research in organizations has been the use of predictor and criterion measures drawn from the same perceptual base, often individual self report questionnaires. This practice tends to yield data which are subject to various response biases or "halo" phenomena inherent in an individual's responses across the various questions. Conflict and many of its antecedents are, however, commonly defined in the literature as perceptual concepts. The test of such theory using perceptual measures, requires appropriate controls to minimize this bias. Accordingly, the present data were collected using measures drawn from four perceptual bases. Supervisors conflict management behavior was measured from the point of view of outside observers using ratings completed by peers or superiors. Situational variables were measured using self report responses of supervisors, who would tend to view the task environment from a managerial perspective. The dependent variables were measured using self report responses of subordinates, who would be perceptually involved in conflict. Boundary/Core

classifications since they have arbitrary definitions in the literature, were performed by this researcher and a top supervisor at each sample location.

Supervisor Job Behavior Descriptions (Ratings)

A forty-two item job behavior description form was completed on each participating supervisor by one or more superiors or peers who were familiar with the subject's work behavior. The description form contained 42 seven-point Likert-type items, composed by this researcher. The items are descriptive of specific behaviors representing the six conflict management techniques of Problem Solving, Bargaining, Forcing, Smoothing, Avoiding, and Formalization. Formalization was measured from the two perspectives of Adherence to Rules and Adherence to Chain of Command.

To assess the face validity of the individual items to naive readers, seven short definitions of each behavior class (scale) were composed, based on their common definition in the literature, and attached to a list of the 42 items. This form was distributed to 11 advanced doctoral students in Organizational Behavior and 38 undergraduate Computer Methodology students, who were asked to classify each of the items into one of the seven behavioral categories. The validation form, containing the definitions of the eight scales, their included items and the percentage of correct classifications for each item is listed separately in Appendix I. The complete rating document is shown in Appendix II. The high percentages of "correct" classifications suggest that the items are generally

perceived as being representative of the eight behaviors as defined. Scale scores were computed by averaging the individual item scores.

Self Report Questionnaire

Each participating subject completed a multi-scale questionnaire containing items descriptive of his/her job attitudes and perceptions. The questionnaire contained a variety of demographic and perceptual items. Each multi-item scale, with its corresponding items is listed in Appendix III. The entire questionnaire is shown in Appendix IV. A high score on any scale is indicative of a greater perceived presence of the phenomenon as defined by the corresponding scale name.

Non-Routinization of Job Duties.

The Routinization scale developed by Hage and Aiken (1969) was included to measure the degree of Routinization (Non-Routinization) which respondents perceive in their jobs. The scale consists of four-point items and demonstrated the ability to discriminate between job types known to differ in degree of Routinization (Hage & Aiken, 1969).

Personal Influence.

Four seven-point Likert-type items were included to measure the degree of influence respondents perceived themselves as having over their jobs. The two items referring to influence over higher management and co-workers were drawn from Tannenbaum (1968). The other two items were

added by this researcher to broaden the base of reference for the scale.

Dogmatism - D Scale.

The forty-item Form E of the D Scale, developed by Rokeach (1960) was included to measure the degree of dogmatic cognitive patterns characteristic of each respondent.

The D scale has been mentioned by Brown (1965) as superior to earlier authoritarian scales since it has the ability to measure authoritarianism of both the "left" and the "right". Vacchiano et. al. (1969), in a review of research on dogmatism, concluded that dogmatism, as measured primarily by the D scale, is a definite cognitive pattern which is predictably associated with a variety of behavioral outcomes.

Role Conflict.

The Role Conflict scale factorially developed by Rizzo, House and Lirtzman (1970), was included to measure perceived intra-individual conflict. This particular scale, which consists of eight seven-point Likert type items, was chosen primarily because of its demonstrated factorial independence from its accompanying Role Ambiguity scale.

Overt Conflict.

Fourteen seven-point Likert-type items, composed by this researcher, were included to measure respondents' perceptions of overt conflict behavior associated with their job, and its context.

Boundary/Core Classification

Each respondent's role was classified as being either a Boundary or a Core position. The classification was performed jointly by this researcher and a top supervisor in each of the sub-samples. The criterion for classification was J. D. Thompson's (1967) definitions of the two positional categories. Jobs were classified as Boundary if the substantial portion of their actual duties involved interaction with other organizational sub-units or contacts outside the organization. In the classification process, the nature of the position relative to the organization was also considered. For example, in the social service sample, case-workers and counselors were classified into Core positions, unless their duties involved substantial supervisory or integrative functions, or a large amount of autonomous field work. In the business college sample, professors were classified into Core positions unless they actually performed a noticeably greater amount of supervisory, administrative or liason duties at the department, college or university levels than their colleagues.

Data Collection

Prior to the administration of the questionnaires, the general nature of the study was communicated to respondents. At the Social Service Agency, meetings were held with all employees at each location to explain the study and answer questions. At the Industrial Plant, a similar meeting was held with the managing committee, who then communicated the

nature of the study to their subordinates. At the business college, an explanatory cover letter was attached to each questionnaire and participants were urged to contact the researcher to discuss any questions which might arise.

Supervisory rating forms (Appendix II) were distributed to the selected raters and completed, in a 48 hour period, on all participating supervisors. At this time, Boundary and Core classifications were performed.

The self report questionnaires (Appendix IV) were then distributed to all prospective respondents who were asked to complete them within five working days. They were given the choice of doing this either at home or during free time on the job. They returned the completed forms to a person specified by them as collector.

At the Social Service Agency, a total of 96 personnel including top directors, professional counselors, case workers, administrators and secretaries were invited to participate in the study. A total of 82 usable questionnaires were returned representing an 85% response rate.

In the Industrial Plant, usable data were returned from 54 of the 73 prospective respondents, a 74% response rate. Of those not responding, eight people in one area declined as a group to complete the questionnaires. The primary reasons appeared to be anxiety concerning the prevailing economic recession and mistrust of the use of the results by management.

In the 65 person Business College group, there were thirty four (34) faculty, seven (7) full-time, non-teaching and twenty four (24) student assistants who completed usable questionnaires out of 111 distributed, a 59% response rate.

Primary Data Analyses

Descriptive Statistics.

Table 2 lists, for descriptive purposes, the number of people responding in the various demographic categories included in the self-report questionnaire.

Reliability of Scales.

Scores were computed for each multi-item scale by averaging their subordinate item scores. Coefficient Alpha was computed for each of the self report questionnaire scales to assess their internal consistency reliability (Nunnally, 1967). Nunnally suggests an Alpha of .50 as minimally adequate for exploratory research. The Alpha coefficients together with the number of items for each self-report scale are listed in Table 3. As can be seen, the Alpha for all scales exceed Nunnally's suggested minimum standard.

Standardization of Scores.

An important characteristic of the conflict theories reviewed earlier and summarized in Figure 5, is the universal perspective of their component concepts and logical structure. The theories are worded to apply to conflict situations in general. They contain no situation-specific components. The same can be said of the conflict management techniques and contextual variables

Table 2

Number of People Responding
in Various
Demographic Categories

<u>Sample Size</u>	
Social Service Agency	83
Industrial Plant	54
Business College	<u>65</u>
Total N	202

SEX OF RESPONDENT:

86 FEMALE
116 MALE

MY JOB RESPONSIBILITIES
ARE BEST DESCRIBED AS:

122 NON-SUPERVISORY
80 SUPERVISORY

MY PRESENT AGE IS:

6 UNDER 20
46 20-24
26 25-29
30 30-34
18 35-39
20 40-44
17 45-49
24 50-54
14 55 OR OVER

THE HIGHEST LEVEL OF EDUCATION
I HAVE ATTAINED IS:

2 LESS THAN HIGH SCHOOL
26 HIGH SCHOOL DIPLOMA
67 SOME COLLEGE, NO DEGREE
40 BACHELOR'S DEGREE
37 MASTER'S DEGREE
27 DOCTOR'S DEGREE
3 OTHER

MY MAJOR FIELD OF STUDY WAS:

19 ENGINEERING, TECHNICAL
5 PHYSICAL OR BIOLOGICAL
SCIENCES
24 COMMERCIAL OR SECRETARIAL
71 LIBERAL ARTS, EDUCATION,
SOCIAL SCIENCES OR
HUMANITIES
47 BUSINESS OR ECONOMICS
10 MATHEMATICS
20 OTHER

DURING THE PAST SEVEN
YEARS, I HAVE WORKED FOR
(INCLUDING THIS ORGANIZATION):

I AM PRESENTLY:	59 ONE ORGANIZATION
62 SINGLE (NEVER MARRIED)	60 TWO ORGANIZATIONS
118 MARRIED	42 THREE ORGANIZATIONS
22 OTHER (PREVIOUSLY MARRIED, SEPERATED, ETC.)	20 FOUR ORGANIZATIONS
	18 FIVE OR MORE ORGANIZATIONS

Table 2 (Cont'd)

Number of People Responding
in Various
Demographic Categories

<u>TIME SPENT:</u>	WITH ORGANIZATION	ON PRESENT JOB	WITH PRESENT SUPERVISOR	DOING SIMILAR WORK
LESS THAN ONE YEAR	43	55	65	30
1 - 3 YEARS	77	84	83	79
4 - 6 YEARS	39	39	36	38
7 - 9 YEARS	13	9	8	15
10 OR MORE YEARS	29	14	8	37

TO THE BEST OF YOUR KNOWLEDGE,
HOW MANY PEOPLE HAVE JOINED
YOUR DEPARTMENT/WORK UNIT
IN THE LAST YEAR?

131 LESS THAN 5
51 5 - 10
6 11 - 15
6 16 - 20
2 21 - 25
5 MORE THAN 25

HOW MANY PEOPLE HAVE LEFT
YOUR WORK UNIT (TRANSFERRED,
RESIGNED, RETIRED, PROMOTED,
ETC.) IN THE LAST YEAR?

148 LESS THAN 5
31 5 - 10
12 11 - 15
4 16 - 20
1 21 - 25
4 MORE THAN 25

HOW MANY MEETINGS (COMMITTEES,
DISCUSSIONS, TRAINING SESSIONS,
ETC.) DO YOU ATTEND IN AN
AVERAGE WORK WEEK?

116 LESS THAN 2
46 2 OR 3
22 4 OR 5
5 6 OR 7
9 MORE THAN 7

HOW MANY TIMES DO YOU SPEAK WITH
YOUR SUPERVISOR ABOUT MATTERS
CONCERNING YOUR JOB IN AN AVERAGE
WORK WEEK?

80 LESS THAN 3 TIMES
60 3 - 5 TIMES
26 6 - 10 TIMES
6 11 - 15 TIMES
10 MORE THAN 15 TIMES

HOW MANY TIMES DOES YOUR WORK
REQUIRE YOU TO SPEAK WITH PEOPLE
FROM OTHER DEPARTMENTS/WORK UNITS
IN AN AVERAGE WORK WEEK?

17 NEVER
67 1 - 3 TIMES
29 4 - 6 TIMES
20 7 - 10 TIMES
68 MORE THAN 10 TIMES

HOW MANY TIMES DO YOUR JOB DUTIES
REQUIRE YOU TO SPEAK OR WORK
WITH PEOPLE FROM OUTSIDE THE
ORGANIZATION IN AN AVERAGE
WORK WEEK?

32 NEVER
80 1 - 3 TIMES
25 4 - 6 TIMES
14 7 - 10 TIMES
50 MORE THAN 10 TIMES

Table 2 (Cont'd)
 Number of People Responding
 in Various
 Demographic Categories

HOW MANY TIMES HAVE YOU RUN OUT OF OR BEEN UNABLE TO GET SOMETHING (RESOURCES) NEEDED TO DO YOUR JOB IN THE LAST YEAR?		TO WHAT EXTENT ARE YOU REQUIRED TO SHARE SOMETHING (RESOURCES) NEEDED IN YOUR JOB WITH SOMEONE ELSE?	
56	NEVER	10	NEVER
68	1 OR 2 TIMES	32	RARELY
28	3 OR 4 TIMES	72	SOMETIMES
23	5 TO 10 TIMES	52	OFTEN
25	MORE THAN 10 TIMES	35	ALWAYS

EVERY PERSON HAS A NUMBER OF GOALS OR OBJECTIVES WHICH THEY WORK TOWARD ON A JOB. THE ORGANIZATION HAS CERTAIN GOALS AND EACH WORK GROUP ALSO HAS GOALS. THINK ABOUT YOUR OWN JOB GOALS, THE GOALS OF YOUR WORK GROUP AND THE GOALS OF THE ORGANIZATION. HOW COMPATIBLE OR SIMILAR WOULD YOU SAY YOUR OWN PERSONAL JOB GOALS ARE WITH THOSE OF:

ABOUT		QUITE				
YOUR WORK GROUP.....THE SAME		1	2	3	4	5 DIFFERENT
		75	59	38	14	10

ABOUT		QUITE				
OTHER WORK GROUPS...THE SAME		1	2	3	4	5 DIFFERENT
		59	69	36	21	12

ABOUT		QUITE				
THE ORGANIZATION.....THE SAME		1	2	3	4	5 DIFFERENT
		50	65	37	20	23

HOW COMPATIBLE OR SIMILAR WOULD YOU SAY YOUR
WORK GROUP'S GOALS ARE WITH THOSE OF:

ABOUT		QUITE				
OTHER WORK GROUPS....THE SAME		1	2	3	4	5 DIFFERENT
		70	63	40	13	9

ABOUT		QUITE				
THE ORGANIZATION.....THE SAME		1	2	3	4	5 DIFFERENT
		41	50	57	26	22

Table 3

Coefficient Alpha
Internal Consistency Reliability Coefficients
for Self-Report Scales by Sub-Sample
(n = 202)

Scale Name	Final # of Items	Social Service (n=83)	Industrial Plant (n=54)	College (n=65)
Non-Routinization	5	.64	.81	.85
Personal Influence	4	.71	.77	.73
D Scale	40	.89	.83	.83
Role Conflict	8	.71	.74	.84
Overt Conflict	14	.84	.75	.71

included in this study. The various constructs are defined, a priori, by their source theories and are held to have constant properties in all organizations, over and above the effects of factors unique to a given setting. There is no statement in the theory, however, that restricts the prediction of conflict to this particular subset of variables. Instead, authors point out, pragmatically, that a broad and, as yet, incompletely specified, range of both general and situation-specific variables may be expected to affect conflict processes. The control of sample-specific factors is important to minimize their possible confounding effects on the variables under study.

The variable scores in this study were, therefore, standardized within each of the three sub-samples. The standardization of scores was accomplished by subtracting the scale score for each case from its corresponding sample mean and dividing by the standard deviation for that variable. The resultant standardized, or "Z" score, has a mean of zero, a standard deviation of 1.0 and, in effect, has had sample-specific variance removed from its total variance. The remaining variance in the standardized score is that due to general factors, exclusive of phenomena which are unique to the particular sample settings.

All subsequent analyses were performed using the standardized scores.

Boundary/Core Analyses.

T-tests were performed across positions classified as Boundary and Core for a range of variables expected

theoretically to differ between the positional types. The T values for Role and Overt Conflict constitute tests of Hypothesis 7a that Boundary incumbents perceive more conflict than people in Core positions.

Supervisory/Subordinate Analyses.

The conflict management models discussed earlier (Blake & Mouton, 1964; Deutsch, 1973; Lawrence & Lorsch, 1967; Sherif, 1966), all possess a managerial perspective. It is the manager who, through goal setting, behavioral style and adherence to organizational policies and structure, provides a preponderance of the input to job-related conflict management processes.

For these reasons, the data were grouped into 41 supervisory units across the three sub-samples. The number of subordinates reporting to each supervisor ranged from a low of one (1) to twelve (12), with an average for the three samples of 4.76 per supervisor. The number of subordinates in each work group is listed in Appendix V. Subordinate scores were averaged within each unit. Relationships were then analyzed using as predictors:

- (a). the standardized, ratings (job behavior description scales) scores of supervisors on the seven conflict management variables (Problem Solving, Bargaining, Forcing, Smoothing, Avoiding, Adherence to Rules and Adherence to Chain of Command);
- (b). the supervisor's self-perception scores for the contextual variables (Non-Routinization, Personal Influence and Dogmatism); and

(c) . the averaged subordinate (supervisory unit) self-perception scores for the contextual variables.

The criterion variables in these analyses were the averaged subordinate (unit) self-perception scores for Role (Intra-Individual) Conflict and Overt (Inter-Party) Conflict.

Means, standard deviations and predictor-criterion zero-order correlations across the 41 work units were computed for descriptive and comparative purposes.

As tests of the remaining hypotheses, which predict the independent relationships of each predictor variable with Role and Overt conflict, multiple linear regression analyses were performed. In a multiple linear regression, the standardized regression coefficients (partial corelations or BETAs) for each predictor indicate the direction and strength of the linear relationship of that variable with the dependent variable "in the presence of", or "holding constant", the effects of all other predictors in the equation. In terms of the present study, the BETAs, and their associated F values, constitute direct tests of the corresponding hypotheses for each independent variable.

The multiple correlation coefficient (R) indicates the overall strength and direction of the relationship between the entire predictor set and the dependent variable. The overall F value tests the statistical significance of this total relationship. The Multiple R squared and its

associated residual ($1 - R^2$) indicate the amount of explained and unexplained variance of the dependent variable in the equation. The residual, therefore, is a measure of prediction error from which can be inferred the adequacy of the linear model in describing the data. The residual can also give clues as to the nature of the remaining data variance.

The results of the primary regressions, together with several additional analyses which were subsequently suggested by the data, are presented and discussed in the following chapters.

Chapter VI

RESULTS AND ADDITIONAL ANALYSES

Boundary/Core Differences

The T-Tests of means between Boundary and Core positional classifications listed in Table 4, show several significant differences in variables that are hypothesized to discriminate between the two categories. Respondents in Boundary positions reported significantly greater numbers of weekly interpersonal contacts at meetings, with people outside their department/work unit and with people outside the organization. They run out of resources more frequently, they are required to share resources more often. They report greater goal differences and possess significantly higher scores on the Non-Routinization scale than do respondents in Core positions. Boundary incumbents also possess significantly lower Dogmatism scores. This extends prior findings that managers at higher levels tend to score lower on the D scale than those at lower levels (Close, 1975).

When viewed in total, these findings are strongly consistent with the characteristics of these positions as defined in theory (Kahn, et. al., 1964; J.D. Thompson, 1967; Lawrence and Lorsch, 1967). Boundary jobs in the present sample may be characterized as more dynamic and more uncertain. They possess, according to Proposition 3, a higher potential for conflict.

It was expected, according to Hypothesis 7A, that Boundary incumbents perceive greater conflict than do people

Table 4

T-Tests of Differences Between Standardized
Score Means of Boundary and Core Positional
Classifications
(n=202)

Scale	Boundary (n=50)		Core (n=152)		F Value	2 Tail Prob.	T Value	2 Tail Prob.
	Mean	SD	Mean	SD				
Non-Routinization	.40	.91	-.13	.99	1.19	.50	3.37	.001***
Role Conflict	.50	.89	-.17	.97	1.20	.47	4.24	.000***
Overt Conflict	.10	.96	-.03	1.01	1.12	.67	.80	.43
D Scale	-.70	.87	.09	1.02	1.38	.20	-2.20	.03*
# of Contacts Outside Department	3.98	1.17	3.04	1.44	1.52	.09	4.18	.000***
# of Contacts Outside Organization	3.90	1.17	2.50	1.36	1.36	.21	6.51	.000***
# of Meetings	2.66	1.60	1.53	1.10	2.11	.001***	4.65	.000*** (Seperate Variance Estimate)
# of Contacts with Supervisor	2.56	2.18	2.66	2.42	1.24	.39	-.25	.80
# of Times Lacking Resources	3.04	1.43	2.27	1.26	1.29	.25	3.61	.000***
Degree of Sharing of Resources	3.70	.95	3.23	1.11	1.37	.20	2.66	.008**

*** p <= .001

** p <= .01

* p <= .05

in Core positions. The results are only partially supportive in that Boundary incumbents report significantly greater levels of perceived Role Conflict, but equivalent levels of Overt Conflict. Strictly, this finding supports March and Simon (1958), who hypothesized greater levels of Intra-individual conflict in more dynamic positions. The present data, however, fail to support this contention at the inter-party level.

Supervisory - Subordinate Analyses

Zero-Order Correlations.

The zero-order correlations between rated supervisory conflict management behaviors, supervisor-perceived situational factors and averaged subordinate self report conflict are shown in Table 5. Three predictors show significant relationships with conflict. Adherence to Chain of Command is negatively correlated with Overt Conflict, suggesting support for Hypothesis 6. Supervisory self-perceived Non-Routinization shows strong positive BETAs with both conflict measures. This supports Hypothesis 7B that Non-Routinization is positively related to conflict. Supervisors' Dogmatism is negatively related to subordinate Role Conflict, a finding which directly contradicts Hypothesis 9.

Zero-order correlations, however, represent weak tests of the hypotheses because of the possibility of interaction among the predictor variables. Certain interactions may be suppressing actual relationships which exist with conflict. It may also be true that significant zero-order coefficients

Table 5

Means, Standard Deviations and Zero Order Correlations
Between Supervisory Predictor Scales and Average Subordinate
Conflict
(N = 41)

Scale	Mean	SD	Subordinate	
			Role Conflict	Overt Conflict
<u>Supervisory:</u>				
Problem Solving	.27	.86	-.10	-.15
Bargaining	-.01	.87	-.18	.14
Forcing	.07	.93	-.01	.10
Smoothing	-.03	1.08	-.02	.08
Avoiding	-.23	.96	-.02	.11
Adherence to Rules	.03	1.02	-.05	.01
Adherence to Chain of Command	-.30	.97	-.21	-.43**
Personal Influence	.72	.70	.21	.13
Non-Routinization	.56	.84	.49***	.50***
Dogmatism - D Scale	-.27	.93	-.26*	.00

*** p <= .001

** p <= .01

* p <= .05

may change significantly when the effects of other predictors are controlled. The multiple linear regression analyses control for such effects and, therefore, represent truer descriptions of the "pure" predictor - criterion relationships.

Intercorrelation of Predictor Variables.

The intercorelations among the included predictor measures are shown in Table 6. Coefficients among the three situational variables (Non-Routinization, Personal Influence and Dogmatism) are low and non-significant for both the supervisory and subordinate measures, indicating relative independence between these measures. The generally low relationships between the supervisory behavior ratings and the both situational groups also suggest independence of measures.

The correlations among the supervisory behavior scores, however, are quite high particularly between Problem Solving, Smoothing, Adherence to Chain of Command and Adherence to Rules. This situation gives rise to a "multicollinearity" problem in the regression analyses. The main consequence of such a problem is the resultant instability of BETA coefficients upon repeated sampling. Strict statistical procedure would suggest that these four measures be combined for purposes of regression. Since, however, the present interest is in the unique and separate relationships of each predictor with conflict, the scores were not combined. It is recognized, however, that replication of the study to assess stability of results is

Table 6

Intercorrelations Between
Included Predictor Variables

Variable:	COC	Rules	P/S	Barg	Forc	Smth	Avoid	Infl	Nrtn	Dog	Infl	Nrtn
Rules	.39*											
P/S	.60*	.53*										
Barg	-.18	.36*	.06									
Forc	-.29*	-.11	-.34*	.08								
Smooth	.45*	.66*	.63*	.26	-.34*							
Avoid	-.30*	-.09	-.44*	.30*	.03	-.16						
<u>Supervisory:</u>												
Infl	.00	.05	.14	-.28*	-.03	.25	-.37*					
NonRtn	-.36*	-.04	-.28*	-.06	.21	-.15	.03	.16				
Dog	-.123	-.26	-.28*	.11	.24	-.37*	.11	.20	-.10			
<u>Subordinate:</u>												
Infl	-.06	.12	.05	.24	-.27	.34*	.00	.15	-.08	-.03		
NonRtn	.01	.00	-.22	.04	-.02	.14	.06	.07	.39*	-.09	.19	
Dog	.05	.44*	.22	.30*	.32*	.13	-.13	.06	.02	.13	-.25	-.22

* p <= .05

particularly necessary.

Multiple Regression; All Predictors.

The summary figures for subordinate Role Conflict are shown in Table 7.

Examination of the normalized regression coefficients (BETAS or partial correlations), finds a single significant positive BETA between supervisory Non-Routinization and subordinate Role Conflict. This finding supports Hypothesis 7B that Non-Routinization is positively related to conflict. Table 7 also shows a multiple correlation of .57 explaining 32.7% of the criterion variance.

The size of a multiple correlation coefficient, however, depends not only upon the relationship between the variables, but also upon the number of independent variables involved in the calculation. The multiple R will always increase when additional variables are added. The increase may not be statistically significant and, in fact, may represent a decrease in strength if the number of predictors is considered. It is common, therefore, to adjust the multiple R to reflect the number of included variables yielding a fairer representation of the overall strength of the relationship. When, in the case of Table 7, the multiple R squared is adjusted for the number of variables entered into the equation, it drops to 12.5% indicating a very weak relationship. The F test for the total predictor set fails to reach significance indicating, again, a weak relationship, as a group, to Role Conflict.

The Overt Conflict equation, shown in Table 8, contains

Table 7

Multiple Regression Summary of all Supervisory
Predictors with Subordinate Role Conflict

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
<u>Supervisory:</u>				
Problem Solving	.0382	.0487	.2121	0.032
Bargaining	-.1358	-.1717	.1644	0.682
Forcing	-.0412	-.0567	.1302	0.100
Smoothing	.0416	.0648	.1629	0.065
Avoiding	.0258	.0348	.1608	0.026
Adherence to Chain of Command	-.1385	-.1975	.1556	0.792
Adherence to Rules	-.0193	-.0273	.1576	0.015
Personal Influence	.0394	.0409	.1832	0.046
Dogmatism - D Scale	-.1426	-.1964	.1255	1.292
Non-Routinization	.3294	.4111	.1414	5.427*
(Constant)	-.3379			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.572	Regression	10	5.866	0.587	1.409
R Squared	.327	Residual	29	12.073		
Adj R Sq.	.125					
Std Error	.645					

* p <= .05

Table 8

Multiple Regression Summary of all Supervisory
Predictors with Subordinate Overt Conflict

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
<u>Supervisory:</u>				
Problem Solving	.0567	.0643	.2213	0.066
Bargaining	-.0140	-.0158	.1715	0.007
Forcing	.0139	.0170	.1358	0.010
Smoothing	.2685	.3728	.1699	2.499
Avoiding	.0350	.0421	.1677	0.044
Adherence to Chain of Command	-.3372	-.4285	.1623	4.318*
Adherence to Rules	-.0498	-.0629	.1644	0.092
Personal Influence	-.0138	-.0127	.1911	0.005
Dogmatism - D Scale	.0599	.0735	.1309	0.210
Non-Routinization	.3786	.4209	.1475	6.591*
(Constant)	-.3174			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.647	Regression	10	9.480	.948	2.093#
R Squared	.419	Residual	29	13.137	.453	
Adj R Sq.	.245					
Std Error	.673					

p <= .10

* p <= .05

two significant BETAS. Supervisory Non-Routinization and Smoothing in a positive direction and negatively for Adherence to Chain of Command. The findings for Non-Routinization and Adherence to Chain of Command directly support Hypotheses 7B and 1A respectively. Table 8 shows an R squared of .42, adjusted to .24, and an F value of 2.09, significant at the 90% level of confidence, but falling just short of the 95% level.

The residual sum of squares are quite large with respect to the regression sum of squares in both equations, indicating a high degree of lack of fit and error variance. The orthogonal plots of standardized residuals versus standardized criterion are shown in Tables 9 and 10. Both plots indicate the substantial residual sum of squares through the large deviations from the mean residual. The data points are scattered in a rather unsystematic manner, and show a number of deviant groups or "outliers". The existence of outliers suggests that, for those groups, subordinate conflict was dependent upon factors other than the included predictor variables.

Some of the explanation for outlying cases may lie in the process by which subordinates were assigned to superiors. It is not unlikely that some of the supervisory groups, which were defined based on discussions with top supervisors at the sample locations, included subordinates who actually received much of their supervisory input from people other than their immediate formal supervisor. It is also likely, particularly considering the autonomous,

Table 9

Plot of Standardized Residual
Versus Subordinate Role Conflict
for All Supervisory Predictors

Standardized Residual: (Down)

Subordinate Role Conflict: (Across)

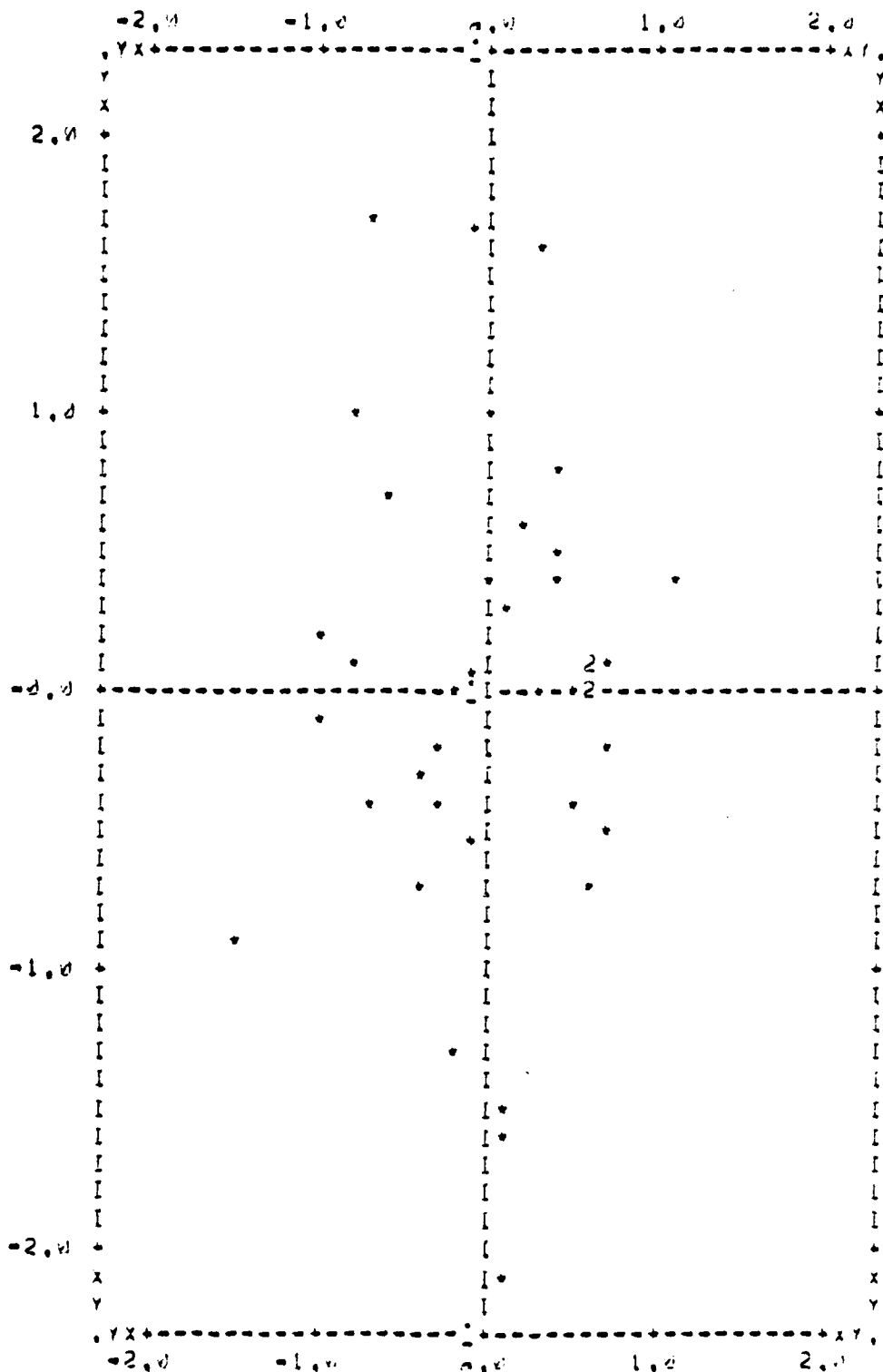
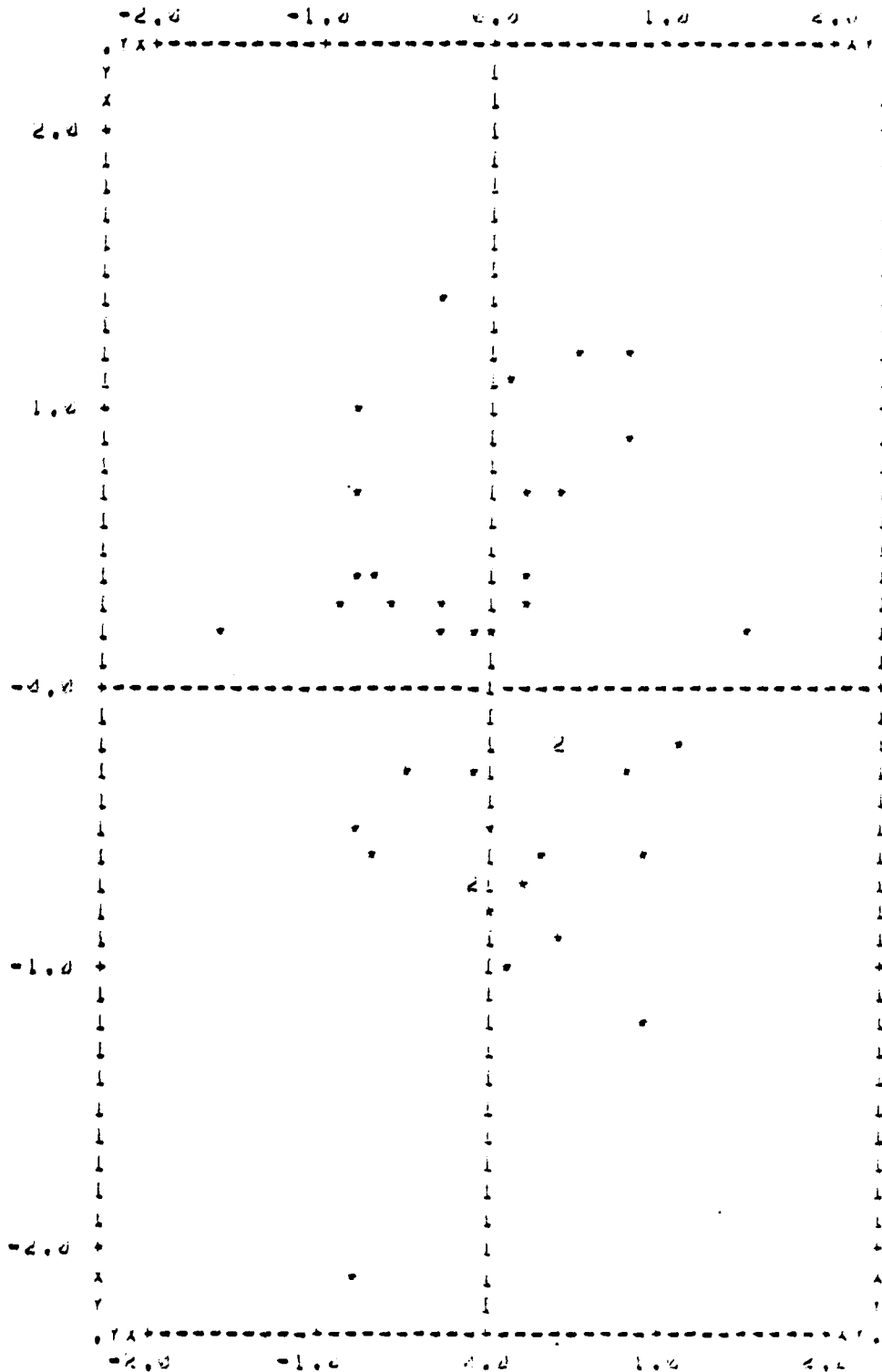


Table 10

Plot of Standardized Residual
Versus Subordinate Overt Conflict
for All Supervisory Predictors

Standardized Residual: (Down)
Subordinate Overt Conflict: (Across)



professional nature of many jobs in the social service and university samples, that some respondents operate quite independently of their superiors. For such people, the generation and reduction of conflict would be expected to emanate largely from sources other than their immediate work unit.

In summary, the primary regression analyses support hypothesized relationships for Non-Routinization and both conflict measures. The hypothesis for supervisory Adherence to Chain of Command was also supported for Overt Conflict, but not for Role Conflict. In addition, the total set of independent variables was found to be a weak, non-significant predictor in the case of both conflict indices.

Although many of the independent variables failed to show significant relationships with conflict, it was most surprising that this occurred for the five Blake and Mouton conflict management modes. So much of theory and prior research predicted significant relationships for these modes, particularly Problem Solving and Forcing, that further analysis of possible explanations seems warranted.

Additional Analyses

Regressions with Hierarchical Inclusion.

To more completely analyze the relationships of the five conflict management modes with conflict, a series of hierarchical regressions were computed. The five conflict management behaviors were entered as a group first, then, Adherence to Rules and Chain of Command and, finally, the

situational variables. This procedure was used to detect relationships for the nodes that might be suppressed by one or more of the other predictors. The results for the Role Conflict criterion are listed in Table 11.

When the five conflict management behaviors are entered, the overall F value and the F values for the individual BETA coefficients are all non-significant. When the Formalization variables are entered, a significant negative BETA appears for Chain of Command although the overall F value remains insignificant. Also, a non-significant negative BETA appears for supervisory Bargaining. Comparison of the BETAS for these two steps suggests that Chain of Command may account for much of the negative relationship between Problem Solving and Role Conflict which drops markedly between steps. In addition, Chain of Command may act as a suppressor to the negative BETA for Bargaining which approached significance between steps.

When the situational variables are entered on the third step, the overall F value remains insignificant and the BETAS for all of the prior variables decrease leaving the one significant coefficient for supervisory Non-Routinization.

Table 12 shows the hierarchical analysis for Overt Conflict. The initial entry of the conflict management behaviors yields non-significant F values both overall and for the individual predictors, although the BETAS for Problem Solving (negative) and Smoothing (positive) are moderately high. When the Formalization variables are

Table 11

Hierarchical Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Role Conflict

Step 1 - Variables Entered: Conflict Management Modes

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
<u>Supervisory:</u>				
Problem Solving	-.1560	-.1988	.1997	0.611
Bargaining	-.1457	-.1842	.1578	0.852
Forcing	-.0104	-.0143	.1367	0.006
Smoothing	.0922	.1438	.1456	0.401
Avoiding	-.0218	-.0294	.1634	0.018
(Constant)	-.0067			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.226	Regression	5	0.919	.184	0.367
R Squared	.051	Residual	34	17.021	.501	
Adj R Sq.	-.057					
Std Error	.708					

Table 11 (cont'd)

Hierarchical Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Role Conflict

Step 2 - Variables Entered: Adherence to Rules
Adherence to Chain of Command

Variable	b	BETA	Std Error b	F Value
<u>Supervisory:</u>				
Problem Solving	-.0251	-.0320	.2267	0.012
Bargaining	-.2470	-.3124	.1661	2.210
Forcing	-.0258	-.0355	.1386	0.035
Smoothing	.1042	.1624	.1591	0.429
Avoiding	-.0078	-.0106	.1656	0.002
Adherence to Chain of Command	-.2671	-.3810	.1543	2.997*
Adherence to Rules	.0696	.0987	.1668	0.174
(Constant)	-.1167			

	Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.366	Regression	7	2.397	.342
R Squared	.134	Residual	32	15.543	.486
Adj R Sq.	-.024				
Std Error	.697				

* p <= .10

Table 11 (cont'd)

Hierarchical Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Role Conflict

Step 3 - Variables Entered: Personal Influence
Non-Routinization
Dogmatism

Variable	b	BETA	Std Error b	F Value
<u>Supervisory:</u>				
Problem Solving	.0382	.0487	.2121	0.032
Bargaining	-.1358	-.1717	.1644	0.682
Forcing	-.0412	-.0567	.1302	0.100
Smoothing	.0416	.0648	.1629	0.065
Avoiding	.0258	.0348	.1608	0.026
Adherence to Chain of Command	-.1385	-.1975	.1556	0.792
Adherence to Rules	-.0193	-.0273	.1576	0.015
Personal Influence	.0394	.0409	.1832	0.046
Dogmatism - D Scale	-.1426	-.1964	.1255	1.292
Non-Routinization	.3294	.4111	.1414	5.427*
(Constant)	-.3379			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.572	Regression	10	5.866	0.587	1.409
R Squared	.327	Residual	29	12.073		
Adj R Sq.	.125					
Std Error	.645					

* = p <= .05

entered, the multiple R rises, although the overall F value fails to attain significance. Chain of Command shows a significant negative BETA and, as was the case with Role Conflict, appears to account for the Problem Solving relationship of the previous step.

When the situational variables were entered, the overall F value reaches significance at the 90% level and a significant positive BETA appears for Non-Routinization.

In summary, the hierarchical regressions suggest that supervisory Adherence to Chain of Command may account for the failure of Problem Solving to achieve the expected significant negative relationship with the conflict measures.

Stepwise Regressions: Individual Inclusion.

The lack of significance of the overall F value for the total predictor set in both equations is, as previously mentioned, a function of both the strength of the relationships and the number of variables involved in the equations (it should be noted that the F test employs the mean squares in its computation). A better prediction equation would likely be achieved if the weak or unassociated predictors were excluded from the calculations. To identify a better set of predictors for the data, stepwise regressions were performed for each conflict measure. The independent variables were allowed to enter, one at a time, according to their potential contribution to the equation, from strongest to weakest. The analyses were terminated when the adjusted R squared decreased on a

Table 12

Hierarchical Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Overt Conflict

Step 1 - Variables Entered: Conflict Management Modes

Variable	b	BETA	Std Error b	F Value
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Supervisory:

Problem Solving	-.2841	-.3223	.2198	1.670
Bargaining	.0894	.1007	.1737	0.265
Forcing	.0623	.0764	.1505	0.172
Smoothing	.2009	.2790	.1603	1.572
Avoiding	-.0307	-.0369	.1798	0.029
(Constant)	.0340			

	Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.298	Regression	5	2.00	.401
R Squared	.089	Residual	34	20.615	.606
Adj R Sq.	-.016				
Std Error	.779				

Table 12 (cont'd)

Hierarchical Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Overt Conflict

Step 2 - Variables Entered: Adherence to Rules
Adherence to Chain of Command

Variable	b	BETA	Std Error b	F Value
<u>Supervisory:</u>				
Problem Solving	-.0114	-.0130	.2310	0.002
Bargaining	-.0792	-.0892	.1693	0.219
Forcing	.0544	.0667	.1413	0.148
Smoothing	.2613	.3627	.1621	2.597
Avoiding	.0155	.0186	.1687	0.008
Adherence to Chain of Command	-.4673	-.5937	.1572	8.839**
Adherence to Rules	.0244	.0307	.1700	0.021
(Constant)	-.1581			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.535	Regression	7	6.482	.926	1.836
R Squared	.287	Residual	32	16.136	.504	
Adj R Sq.	.157					
Std Error	.710					

** p <= .01

Table 12 (cont'd)

Hierarchical Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Overt Conflict

Step 3 - Variables Entered: Personal Influence
Non-Routinization
Dogmatism

Variable	b	BETA	Std Error b	F Value
<u>Supervisory:</u>				
Problem Solving	.0567	.0643	.2213	0.066
Bargaining	-.0140	-.0158	.1715	0.007
Forcing	.0139	.0170	.1358	0.010
Smoothing	.2685	.3728	.1699	2.499
Avoiding	.0350	.0421	.1677	0.044
Adherence to Chain of Command	-.3372	-.4285	.1623	4.318*
Adherence to Rules	-.0498	-.0629	.1644	0.092
Personal Influence	-.0138	-.0127	.1911	0.005
Dogmatism - D Scale	.0599	.0735	.1309	0.210
Non-Routinization	.3786	.4209	.1475	6.591*
(Constant)	-.3174			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.647	Regression	10	9.480	.948	2.093#
R Squared	.419	Residual	29	13.137	.453	
Adj R Sq.	.245					
Std Error	.673					

= $p \leq .10$

* = $p \leq .05$

succeeding step.

Table 13 shows the stepwise analysis for Role Conflict, at the end of Step 4. The order of variable entry was supervisory Non-Routinization, D Scale, Bargaining; and Adherence to Chain of Command. The remaining predictors had the effect of lowering the adjusted R squared and were, therefore, omitted from the table. The overall F is significant at the .01 level and the BETAS for Non-Routinization and Dogmatism are significant at the .05 and .10 levels respectively. The adjusted R squared indicates that 25.8% of the variance in subordinates' Role Conflict is accounted for by the four supervisory predictors.

The BETA for Non-Routinization is positive and significant, as was the case in all other analyses. The negative BETA for supervisory Dogmatism is in direct contradiction of Hypothesis 9. The negative BETA for Bargaining is also opposite the expectations of Hypothesis 3, but fails to reach statistical significance.

The stepwise analysis for subordinate Overt Conflict is shown in Table 14. Three predictors, in the order of Non-Routinization, Adherence to Chain of Command and Smoothing, yield a significant overall F and significant individual BETAS.

The data of Table 14 again suggest support for the hypotheses for Non-Routinization (7B), and Adherence to Chain of Command (1A). The positive BETA for Smoothing,

Table 13

Stepwise Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Role Conflict

Summary Table at End of Step 4

Variables Entered: Non-Routinization
Dogmatism
Bargaining
Adherence to Chain of Command

Variable	b	BETA	Std Error b	F Value
<u>Supervisory:</u>				
Non-Routinization	.3169	.3955	.1248	6.449*
Dogmatism - D Scale	-.1733	-.2387	.1067	2.637#
Bargaining	-.1233	-.1569	.1150	1.150
Adherence to Chain of Command	-.1101	-.1571	.1139	0.934
(Constant)	-.3030			

	Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.561	Regression	4	5.650	1.413
R Squared	.315	Residual	35	12.289	.351
Adj R Sq.	.258				
Std Error	.593				

** p <= .01
* p <= .05
p <= .10

Table 14

Stepwise Regression Summary
Supervisory Predictors

Dependent Variable: Subordinate Overt Conflict

Summary Table at End of Step 3

Variables Entered: Non-Routinization
Adherence to Chain of Command
Smoothing

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
<u>Supervisory:</u>				
Non-Routinization	.3540	.3935	.1237	8.185**
Adherence to Chain of Command	-.3416	-.4341	.1183	8.343**
Smoothing	.2364	.3282	.1020	5.371*
(Constant)	-.3285			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.642	Regression	3	9.314	3.105	8.401***
R Squared	.412	Residual	36	13.304	.370	
Adj R Sq.	.380					
Std Error	.608					

*** p <= .001

** p <= .01

* p <= .05

however, is in direct contradiction of Hypothesis 5 as well as most prior research findings. The adjusted R squared indicates that the three supervisory predictors account for 38.0% of the variance in subordinate Overt Conflict.

To summarize the stepwise analyses, out of the entire set of 10 supervisory independent variables, four, Non-Routinization, Dogmatism, Bargaining and Adherence to Chain of Command, most powerfully relate to Role Conflict. Three supervisory predictors, Non-Routinization, Adherence to Chain of Command and Smoothing relate most strongly to Overt Conflict.

Inclusion of Subordinate Situational Variables.

Clearly, the situational variables, as perceived by subordinates, would be expected to influence the generation or reduction of conflict. They were withheld from the analyses to this point because of the likelihood of "halo" biases affecting their relationships with the subordinate-perceived conflict indices. Recognizing this, the subordinate variables were entered on an exploratory basis to investigate their general magnitude and direction in relating to conflict. Such information might guide future conflict studies. The inference of significant relationships was of only minor concern in this analysis.

To explore these relationships, additional stepwise regression analyses were performed allowing averaged subordinate Non-Routinization, Personal Influence and Dogmatism to enter into the equations along with the supervisory predictors. The results for Role Conflict and

Overt Conflict are shown in Tables 15 and 16 respectively.

Comparing Table 15 to Table 13, the positive BETA for supervisory Personal Influence, although not significant, is in the direction hypothesized (8B). Surprisingly, a negative, non-significant BETA appears for supervisory Forcing, in contradiction of Hypothesis 4 and the preponderance of prior research.

For Role Conflict, subordinate Personal Influence, with a significant negative BETA, shows the strongest single relationship. This finding supports Hypothesis 8A that self-perceived Influence is negatively related to conflict. Supervisory Forcing and Personal Influence also entered the equation and increased the adjusted R squared, although their individual BETAS were not significant. Supervisory Bargaining was dropped from the equation since it's F value for inclusion decreased upon the entry of the new variables. The adjusted R squared increased to 37.7% from the 25.8% of Table 8.

In the Overt Conflict equation of Table 15, only subordinate Personal Influence increased the adjusted R squared, showing a significant negative BETA, in support of Hypothesis 8A.

Patterns Analyses.

The general lack of relationship for the five Blake and Mouton/Lawrence and Lorsch conflict management modes suggested several alternative explanations. One possibility was that defineable patterns of the five variables as a group might exist in the data, that would be associated with

Table 15

Stepwise Regression Summary
Supervisory Predictors Plus Subordinate Situational Variables

Dependent Variable: Subordinate Role Conflict

Summary Table at End of Step 6

Variables Entered: Supervisory Non-Routinization
Subordinate Personal Influence
Supervisory Dogmatism
Supervisory Chain of Command
Supervisory Forcing
Supervisory Personal Influence

Variable	b	BETA	Std Error b	F Value
Supervisory Non-Routinization	.2947	.3678	.1149	6.576*
Subordinate Personal Influence	-.5100	-.4357	.1591	10.272***
Supervisory Dogmatism - D Scale	-.1472	-.2027	.1003	2.153
Supervisory Adherence to Chain of Command	-.1602	-.2286	.1032	2.411
Supervisory Forcing	-.1589	-.2187	.1029	2.385
Supervisory Personal Influence	.1617	.1679	.1275	1.608
(Constant)	-.4566			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.688	Regression	6	8.481	1.413	4.931**
R Squared	.473	Residual	33	9.459	.287	
Adj R Sq.	.377					
Std Error	.535					

*** p <= .001

** p <= .01

* p <= .05

Table 16

Stepwise Regression Summary
Supervisory Predictors Plus Subordinate Situational Variables

Dependent Variable: Subordinate Overt Conflict

Summary Table at End of Step 4

Variables Entered: Supervisory Non-Routinization
Supervisory Chain of Command
Supervisory Smoothing
Subordinate Personal Influence

Variable	b	BETA	Std Error b	F Value
Supervisory Non-Routinization	.3143	.3494	.1170	7.216**
Supervisory Adherence to Chain of Command	-.4260	-.5413	.1160	13.493**
Supervisory Smoothing	.3334	.4660	.1034	10.406**
Subordinate Personal Influence	-.4243	-.3228	.1726	6.040*
(Constant)	-.3685			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.706	Regression	4	11.272	2.818	8.693***
R Squared	.498	Residual	35	11.346	.324	
Adj R Sq.	.441					
Std Error	.569					

*** p <= .001

** p <= .01

* p <= .05

conflict in a regular manner.

To investigate this possibility, on a post hoc basis, a listing of the scores by supervisory unit, shown in Appendix V, was visually searched for patterns among the six conflict management techniques. The search criterion employed was to group scores into one standard deviation intervals from their means. Scores within these intervals were considered equal across variables. That is, a supervisor whose scores might be 2.10, .80, -1.50, .50, .55, 1.80 and 1.50 on Problem Solving, Bargaining, Forcing, Smoothing, Avoiding, Adherence to Chain of Command and Adherence to Rules respectively, would be classified as high on Problem Solving, Chain of Command and Rules, low on Forcing and average on the remaining predictors. The search was conducted both including and excluding Adherence to Chain of Command and Adherence to Rules.

The searches revealed no patterns among the modes which were associated with conflict in a consistent manner, other than the previously demonstrated negative relationship for Adherence to Chain of Command.

Another possible explanation was that defineable patterns of association between the modes, as a group, and conflict might exist for different levels of conflict or of the included situational variables.

The units were, therefore, divided into groups scoring "high", "medium" and "low" on each of the contextual predictors and conflict indices. The top third of scores for each variable, based on their frequency distributions,

were arbitrarily designated as the "high" group. The middle and lower thirds were assigned to the "medium" and "low" groups respectively. Means and correlation coefficients of the rated supervisory predictors with the averaged subordinate conflict indices were computed within each of the moderated groups and are shown in Appendix VI. A visual search for patterns of variation between the moderated groups was then conducted.

The moderations generally failed to reveal any major new patterns. The only consistantly strong relationships were those already indentified in the regression analyses. Non-Routinization and supervisory Personal Influence are consistent positive correlates of both conflict indices. Adherence to Chain of Command shows consistent negative relationships to both criteria, and Supervisory Dogmatism is generally negatively related to Role Conflict. The conflict managment variables show inconsistant relationships which suggest no new explanations for the lack of significant findings in the regressions.

Non-Linear Relationships.

The above analyses assessed the direction and strength of linear relationships in the data. It is also possible that many of the weak coefficients are due to the existence of non-linear patterns for certain predictor-criterion sets.

It should be noted that the overall strength of a regression equation, as well as the significance of individual BETAS, depends upon those variables already in the equation. Therefore, the the selection of which

variables to enter and the order of their inclusion is critical in shaping the resultant equation. To completely assess the empirical associations among a set of variables, all possible combinations and orders must be analyzed. Theory and the specific research objectives can reduce this task, which was imposing in the present case of two equations with ten independent variables in each. To investigate the presence of significant non-linearity in the data, two groups of analyses were performed.

First, the presence of significant non-linearity of unspecified form in the "best" predictor equations (Tables 13 through 16) was estimated by adding dummy variables to each equation. Dummy variables were created for each predictor by dividing the range of scores for the variable into five (5) equal intervals. If an individual's score for the variable fell into a given interval a value of one (1) was assigned to a dummy variable corresponding to that interval. Otherwise, a zero is assigned to the dummy variable. The original and dummy variables were then regressed as a group against each dependent measure. The resulting R squared is then compared to that of the original linear equation using an F test. A significant increase in R squared indicates the presence of a non-specific non-linear relationship in the data. It should be noted that this procedure yields equivalent results to the correlation Ratio (η).

It can be seen in Table 17, that the R's squared for these equations increased significantly only for Overt

Conflict with subordinate situational predictors. This suggests the presence of some degree of non-linearity for this equation, although the specific variables involved remain unknown.

Therefore, the presence of significant non-linearity for individual predictors was investigated. A series of polynomial regressions was performed in which successively higher powers of each independent variable were added to the equations. If a higher power of a variable increased the variance due to regression significantly, as measured by an F test between the steps, the relationship for that variable would be better described by an equation of that degree. The R's squared and comparative F values between the linear and second degree equations for each predictor-criterion pair are listed in Table 17.

Of these twenty equations, only one, Supervisory Personal Influence with Overt Conflict, yielded a significant increase in the R squared at the second degree. The successive equations for this variable are shown in Table 18. The third degree equation for this variable, as can also be seen in Table 18, failed to increase the R squared significantly over the second power results.

Inclusion of Second Power Influence Variable.

Finally, additional stepwise analyses were performed allowing the Supervisory Personal Influence second power variable to enter each "best predictors" equation (Tables 13 through 16) along with the original linear predictors. The summary results for these analyses, first excluding, then

Table 17

Non-Linearity Tests

Dependent Variable: Subordinate Role Conflict.Dummy Variable Analyses

Equation	R Squared (unadjusted)		F Value
	Linear	Dummy	
Stepwise Supervisory	.315 (Table 13)	.736	1.510
Stepwise Supervisory plus Subordinate	.473 (Table 15)	.811	0.990

Comparison of Linear and Second Degree Regression Equations for Individual Predictors

Variable	R Squared (unadjusted)		F Value
	Linear	Second Degree	
<u>Supervisory:</u>			
Problem Solving	.010	.057	1.894
Bargaining	.031	Insufficient to enter	
Forcing	Insufficient to Enter		
Smoothing	.003	.004	0.038
Avoiding	.001	.041	1.585
Adherence to Chain of Command	.045	.050	0.200
Adherence to Rules	.002	.023	0.817
Personal Influence	.044	.045	0.040
Non-Routinization	.238	.241	0.150
Dogmatism - D Scale	.065	.066	0.041
<u>Subordinate:</u>			
Personal Influence	.125	Insufficient to Enter	
Non-Routinization	.051	Insufficient to Enter	
Dogmatism - D Scale	.008	.009	0.038

* p <= .05

Table 17 (Cont'd)

Non-Linearity Tests

Dependent Variable: Subordinate Overt ConflictDummy Variable Analyses

Equation	R Squared (unadjusted)		F Value
	Linear	Dummy	
Stepwise Supervisory	.412 (Table 14)	.670	1.250
Stepwise Supervisory plus Subordinate	.498 (Table 16)	.855	2.340*

Comparison of Linear and Second Degree Regression Equations for Individual Predictors

Variable	R Squared (unadjusted)		F Value
	Linear	Second Degree	
<u>Supervisory:</u>			
Problem Solving	.024	.030	0.235
Bargaining	.020	.035	0.591
Forcing	.011	.024	0.506
Smoothing	.006	.019	0.768
Avoiding	.014	.089	3.128
Adherence to Chain of Command	.192	.242	2.510
Adherence to Rules	Insufficient to Enter		
Personal Influence	.018	.145	5.640*
Non-Routinization	.249	.253	0.203
Dogmatism - D Scale	.030	.033	0.118
<u>Subordinate:</u>			
Personal Influence	.025	.037	0.474
Non-Routinization	.048	.051	0.120
Dogmatism - D Scale	.056	.060	0.162

* p <= .05

Table 18

F Test of Linear versus Higher Power Regression

Dependent Variable: Subordinate Overt ConflictIndependent Variable: Supervisory Personal InfluenceLinear Equation:

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
Personal Influence	.143	.132	.174	0.679
(Constant)	-.132			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.132	Regression	1	.397	.397	0.679
R Squared	.018	Residual	38	22.221	.585	
Adj R Sq.	-.008					
Std Error	.765					

Second Degree Equation:

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
Personal Influence	.766	.711	.313	6.045
Pers. Infl. Squared	-.496	-.680	.211	5.531
(Constant)	-.085			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.381	Regression	2	3.287	1.643	3.145
R Squared	.145	Residual	37	19.331	0.522	
Adj R Sq.	.099					
Std Error	.723					

Hierarchical F Test (for Non-Linearity):

F Value= 5.640*

* p <= .05

Table 18 (Cont'd)

F Test of Linear versus Higher Power Regression

Dependent Variable: Subordinate Overt ConflictIndependent Variable: Supervisory Personal InfluenceThird Degree Equation:

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
Personal Influence	.744	.688	.3323	5.329
Pers. Infl. Squared	-.670	-.919	.506	1.755
Pers. Infl. Cubed	.106	.265	.280	0.144
(Constant)	-.035			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.386	Regression	3	3.364	1.121	2.097
R Squared	.149	Residual	36	19.254	.535	
Adj R Sq.	.078					
Std Error	.731					

Hierarchical F Test (for Non-Linearity):

F Value= 0.167

including, subordinate situational variables, are shown in Tables 19 through 22.

Table 19 for Role Conflict with the supervisory predictors was not affected by the squared influence variable. There was no change in the identity or order of variables entering, nor were the F values different from the linear case of Table 13. When the subordinate situational variables were also allowed to enter, as shown in Table 20, the second power influence variable, showing a low positive BETA, replaced the first power variable that entered in the linear equation of Table 15. The adjusted R squared, however, only showed a marginal increase to 38.2% from the 37.7% of Table 15. This suggests that there is no essential difference in the overall strength of the two equations in relating to Role Conflict.

For the Overt Conflict equation with supervisory predictors, shown in Table 21, five variables, as compared to the three of the linear case in Table 14, entered before the adjusted R squared decreased. The additional variables are the first and second power Personal Influence variables which show significant individual BETAs. The adjusted R squared increased to 46.4% from the 38.0% of Table 14. When the subordinate situational variables were allowed to enter this equation, as shown in Table 22, the two powers of the supervisory Personal Influence predictor again entered, along with the original variables of the linear equation of Table 16. The overall F and the individual BETAs for Supervisory Non-Routinization, Adherence to Chain of

Table 19

Stepwise Regression Summary
Supervisory Predictors plus
Supervisory Personal Influence Squared

Dependent Variable: Subordinate Role Conflict

Summary Table at End of Step 4

Variable	b	BETA	Std Error b	F Value
<u>Supervisory:</u>				
Non-Routinization	.317	.396	.125	6.449*
Dogmatism - D Scale	-.173	-.239	.107	2.637#
Bargaining	-.123	-.156	.115	1.152
Adherence to Chain of Command	-.110	-.157	.114	0.934
(Constant)	-.303			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.561	Regression	4	5.650	1.413	4.023**
R Squared	.315	Residual	35	12.289	0.351	
Adj R Sq.	.237					
Std Error	.593					
** p <=	.01					
* p <=	.05					
# p <=	.10					

Table 20

Stepwise Regression Summary
 Supervisory Predictors plus
 Subordinate Situational Variables and
 Supervisory Personal Influence Squared

Dependent Variable: Subordinate Role Conflict

Summary Table at End of Step 6

Variable	b	BETA	Std Error b	F Value
Supervisory: Non-Routinization	.299	.373	.114	6.903*
Subordinate Personal Influence	-.526	-.449	.160	10.767**
Supervisory Dogmatism	-.157	-.216	.099	2.512
Supervisory Influence Squared	.118	.181	.085	1.920
Supervisory Adherence to C of C	-.162	-.231	.103	2.477
Supervisory Forcing	-.155	-.214	.102	2.299
(Constant)	-.462			

	Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.691	Regression	6	8.565	1.428
R Squared	.477	Residual	33	9.374	0.284
Adj R Sq.	.382				
Std Error	.533				

*** p <= .001

** p <= .01

* p <= .05

Command, Smoothing, Personal Influence and Personal Influence squared are significant. In addition, Subordinate Dogmatism entered the equation before the adjusted R squared decreased, showing a non-significant positive BETA which suggests support for Hypothesis 9. The negative BETA for Subordinate Personal Influence, which was significant in the linear case, dropped to non-significance upon entry of the new variables. The adjusted R squared increased to 52.3% from the 44.1% of Table 16.

These analyses indicate that there is no compelling nonlinearity in the data for the "best" set of predictors. The relationship of the second power supervisory influence variable with Role Conflict (Table 20), was weakly positive indicating a second degree curve with the concave side "up". In this case, conflict would fall and then rise as supervisory influence increases. The adjusted R squared, however, showed no essential increase over the linear case of Table 15.

For Overt Conflict (Tables 21 and 22), the significant negative BETAs in the second power equations indicate a "concave down" curve where conflict rises and then falls as supervisory influence increases. The first power influence variable also enters the equations and has the effect of moving the curve toward higher values on the axes. The adjusted R squared increased by about 8% over the linear case for both Overt Conflict equations.

Table 21

Stepwise Regression Summary
Supervisory Predictors plus
Supervisory Personal Influence Squared

Dependent Variable: Subordinate Overt Conflict

Summary Table at End of Step 5

<u>Variable</u>	<u>b</u>	<u>BETA</u>	<u>Std Error b</u>	<u>F Value</u>
<u>Supervisory:</u>				
Non-Routinization	.331	.368	.115	8.183**
Adherence to Chain of Command	-.358	-.455	.109	10.798**
Smoothing	.261	.363	.098	7.097**
Pers. Infl. Squared	-.484	-.663	.164	8.745**
Personal Influence	.586	.542	.246	5.690*
(Constant)	-.257			

		<u>Analysis of Variance</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>Overall F Value</u>
Multiple R	.730	Regression	5	12.042	2.408	7.743***
R Squared	.532	Residual	34	10.576	0.311	
Adj R Sq.	.464					
Std Error	.558					

*** p <= .001

** p <= .01

* p <= .05

Table 22

Stepwise Regression Summary
 Supervisory Predictors plus
 Subordinate Situational Variables and
 Supervisory Personal Influence Squared

Dependent Variable: Subordinate Overt Conflict

Summary Table at End of Step 7

Variable	b	BETA	Std Error b	F Value
Supervisory Non-Routinization	.306	.340	.111	7.643**
Supervisory Adh. to C of C	-.405	-.515	.109	13.893****
Supervisory Smoothing	.312	.433	.101	9.582**
Subordinate Personal Influence	-.258	-.196	.182	2.004
Supervisory Pers. Infl. Squared	-.450	-.617	.157	8.213**
Supervisory Personal Influence	.552	.511	.233	5.635*
Subordinate Dogmatism	.171	.146	.146	1.370
(Constant)	-.300			

		Analysis of Variance	DF	Sum of Squares	Mean Square	Overall F Value
Multiple R	.780	Regression	7	13.757	1.965	7.099***
R Squared	.608	Residual	32	8.860	0.277	
Adj R Sq.	.523					
Std Error	.526					

*** p <= .001

** p <= .01

* p <= .05

Chapter VII

DISCUSSION

Summary of Results

The findings for each hypothesis are listed below and are summarized in Table 23.

Hypothesis 1A that supervisory Adherence to Chain of Command is negatively related to conflict received strong support. Chain of Command was consistently a negative correlate of both conflict indices.

Hypothesis 1B, that Adherence to Rules, is negatively related to conflict, was not supported. The variable was consistently unrelated to either conflict measure.

Hypothesis 2, that supervisory Problem Solving is negatively related to conflict, was not supported. The relationships between Problem Solving and both conflict indices, although negative when analyzed with its associated modes alone (Tables 11 and 12), dropped to non-significance when the effects of the other predictors were held constant. Apparently, Adherence to Chain of Command accounted for the larger portion of this initial negative relationship.

Hypothesis 3 that supervisory Bargaining is positively related to conflict, received no support. For Overt Conflict all relationships were nonsignificant. For Role Conflict, there was a direct contradiction in the stepwise analysis, where a weak negative relationship surfaced upon control of the other predictors. This would suggest that

Table 23

Summary of Study Results
by Corresponding Hypothesis

<u>Predictor Variable</u>	<u>Hypothesized Relationship</u>	<u>Results for:</u>	
		<u>Role Conflict</u>	<u>Overt Conflict</u>
<u>Supervisory:</u>			
Adherence to Chain of Command	-	-	-
Adherence to Rules	-	0	0
Problem Solving	-	0	0
Bargaining	+	-	0
Forcing	+	-	0
Smoothing	-	0	+
Avoiding	+	0	0
Personal Influence	+	+	+
Non-Routinization	+	+	+
Dogmatism	+	-	0
<u>Subordinate:</u>			
Personal Influence	-	-	-
Non-Routinization	+	0	0
Dogmatism	+	0	+
Boundary/Core	Difference	Difference	Same

+ = positive relationship
 - = negative relationship
 0 = no relationship

Bargaining may have conflict-reducing properties whose presence is masked by correlations with the other independent variables.

Hypothesis 4 that supervisory Forcing is positively related to conflict is not supported. No significant relationship appeared for Overt Conflict. A weak negative BETA appeared for Role Conflict (Table 14) when subordinate situational variables were entered. This contradicts Hypothesis 4 and tentatively suggests that Forcing may have residual instrumental effects in reducing conflict.

Hypothesis 5 that Smoothing is negatively related to conflict was directly contradicted in the Overt Conflict regression equation (Table 14). The residual relationship was positive and suggests that Smoothing is associated with increased levels of conflict. No significant relationship appeared with Role Conflict.

Hypothesis 6 that Avoiding is positively related to conflict was not supported in any of the analyses. It's relationships with conflict indices were all non-significant.

Hypothesis 7A that Boundary incumbents perceived greater levels of conflict than people in Core positions received partial support. Boundary positions showed significantly greater Role Conflict than Core positions. The Overt Conflict scores for these categories were, however, not significantly different.

Hypothesis 7B that Non-Routinization is positively related to conflict was strongly supported for both conflict

measures. Supervisory Non-Routinization was positively related to both Role and Overt Conflict in all analyses.

Hypothesis 8A that self perceived Influence is negatively related to conflict received consistent supported. Both Role Conflict, in Table 15, and Overt Conflict, in Table 16, show significant negative BETAs with subordinate Personal Influence.

Hypothesis 8B that perceived Influence of supervisors is positively related to conflict was supported for Role Conflict (Table 15), where a weak positive BETA appeared for supervisory Personal Influence.

In addition, the supervisory Personal Influence - Overt Conflict relationship was shown to be more adequately described by a second degree equation.

Hypothesis 9 that Dogmatism is positively related to conflict was both supported and contradicted. Subordinate D Scale showed a weak positive relationship with Overt Conflict as hypothesized (Table 22). Supervisory D Scale, however, showed a significant negative BETA with Role Conflict (Table 15).

Integration of Results

It is immediately apparent that as many questions are raised by the findings as possible answers are suggested. In assessing the findings it is important to recognize that causal flow cannot be empirically established given the present cross-sectional survey methodology. Consequently, one may as easily view the dependent variables as "causing" the predictors as well as the reverse flow. Indeed, it is

probably more pragmatically accurate to think in terms of reciprocal relationships.

Boundary/Core - Non-Routinization.

Boundary positions were shown to possess more dynamic characteristics than Core positions. Interpersonal contacts across system boundaries are more frequent, resource pressures and goal differences are greater, incumbents perceive their jobs as more non-routine and perceive greater Role Conflict. Overt Conflict, however, showed no difference between positional categories.

Supervisory Non-Routinization was found to be positively associated with both Role and Overt conflict. This finding suggests at least two interpretations. First, it may be that the behavior of supervisors who are faced with dynamic role demands is affected in ways which, in turn, affect the likelihood of conflict in their subordinates. This would probably be particularly true for supervisors in Boundary positions, as was the case for 35 of the 41 in this study. It may be hypothesized, therefore, that one of the major ways in which environmental dynamism manifests itself in organizational behavior is through the incompatibilities and resultant conflict it generates in individuals and their relationships. This interpretation is consistent with House and Rizzo (1972) who found that Role Ambiguity moderated the relationships of several organizational practices and leader behaviors with Role Conflict. Dynamic roles or sub-systems within an organization should receive, according to this

interpretation, correspondingly greater attention when managing conflict.

Alternatively, it may be that greater conflict in subordinates yields stronger perceptions of Non-Routinization in their supervisor. Certainly, a major part of the task environment of most supervisors is involved with their subordinates. The more conflict at the lower levels, the superior's job would almost have to seem more non-routine. If this is so, one of the important consequences of conflict, as well as a potential symptom of its presence, is the perceptions of non-routinization which may arise for parties. Further research concerning the importance of this construct in organizational conflict processes is strongly recommended.

Adherence to Rules/Chain of Command.

The consistent negative relationship of supervisory Adherence to Chain of Command to both forms of conflict was somewhat of a surprise. Prior studies have indicated that formalized practices are more closely related to effectiveness criteria in stable environments. In the present study, two of the three sub-samples (i.e. the social service agency and the business college) were, upon a priori observation, relatively dynamic organizational types apparently characterised by high degrees of individual autonomy and professional orientation. Yet, Adherence to

Chain of Command showed negative relationships to conflict, even when the effects of Non-Routinization were held constant.

In addition, Adherence to Rules was unrelated to either conflict measure. A possible reconciliation of these findings might be that Adherence to Rules is too rigid to deal with changing demands in relatively dynamic settings. The Chain of formal authority, however, since it involves interpersonal interaction, might be an inherently more flexible, adaptable mechanism. The actual operation of the chain of command may differ widely across various settings. More collegial interactions may result in the university and social service groups, whereas the industrial plant might be more traditionally hierarchical. The direct link of the chain of command to the decision making, reward and sanction powers of higher authority may cause it to be more effective than formalized rules in resolving conflicts.

Supervisory Adherence to Chain of Command also appeared to account for the apparent negative relationship between Problem Solving and subordinate Overt Conflict. Much of the assumed affect of Problem Solving has been attributed to its concentration on objective approaches to problems, its logical orientation and its characteristic of building trust among involved parties. The present data, however, suggest that many of these effects, particularly in a supervisor - subordinate setting, may rest in the predictability and consistency of the superior's behavior

with respect to organizational goals and power hierarchy. Perhaps this is due to the rewards and needed resources that emanate from the formal hierarchy.

It may also be due to increased efficiency of communication and information processing which consistent adherence to the chain of command can yield. It is also possible that adherence to chain of command establishes a perceptual link for subordinates with the power, rewards and sanctions in the hands of higher authority. Such behavior sets clear organizationally legitimate limits which may yield greater acceptance, cooperation or compliance among subordinates.

Secondly, Adherence to Chain of Command may offer an apparent means of counteracting the positive conflict - Non-Routinization relationship. The pressures generated by changing environmental constraints and demands may be averted or more easily tolerated if behavior of superiors predictably supports the goals and hierarchy of the enterprise.

In the particular case of professional workers whose jobs are operationally autonomous, major contacts with superiors tend to be for administrative support or broad policy guidelines. The potential for bureaucratic - professional conflict is high in such cases (Litvak, 1961; V. Thompson, 1961). However, superiors who can be expected not to bypass others, not to interfere informally and, who appear to hold the key to valued rewards/sanctions, may be easier for professional subordinates to deal with.

Finally, it is conversely possible that increased conflict in subordinates causes supervisors to desert the chain of command as its formalality and rigidity seem less able to cope with turbulent situations. In basically harmonious settings, adhering to chain of command might simply be the most efficient, generally acceptable way to deal with work problems. As the situation deteriorates, however, with attendant perceptions of non-routinization, the supervisor may tend to turn away from rigid organizational guidelines to more personally habitual, individualistic behaviors.

To be sure, interpretations such as the above are fertile areas for future organizational conflict research.

Personal Influence.

The present results clearly suggest that the relationship of perceived Personal Influence with conflict depends on the relative positional perspective of the individuals involved. The linear regression analyses have shown that subordinate conflict is related positively to supervisors' perceived influence and negatively to their own. This is precisely the position of many authors (Cartwright, 1965; Deutsch & Krauss, 1966; Kahn & Boulding, 1964; J. D. Thompson, 1967), and supports Hypotheses 8A and 8B.

It may be inferred that individuals who perceive themselves as having high influence over their organizational life possess alternatives to "surrender",

feel less vulnerable to outside influences and, therefore, are less prone to perceive conflict. This is particularly true, in the present data, for Role Conflict where subordinate Personal Influence was negatively related and the strongest single predictor (Tables 15 & 20).

The negative second degree relationship of supervisory Personal Influence with Overt Conflict, shown in Tables 18, 21 and 22, describes a "concave down" curve where conflict levels rise and then fall as supervisory influence increases.

Since the inter-sample stability of these findings has yet to be demonstrated, research into the particular shape and dynamics of the influence - conflict relationship is strongly recommended.

Relative power differentials are inherent in the bureaucratic model and are not realistically likely to disappear. In managing conflict, however, a more cooperative atmosphere may potentially be achieved if such differentials remain within the bounds of organizational rationality (J. D. Thompson, 1967). The findings above concerning Adherence to Chain of Command suggest that a conflict-reducing application of power is by adhering to the formal organizational hierarchy. That is, power applied in a legitimate, consistent manner, within the bounds of organizational rationality, may be easier to trust and accept by relatively vulnerable subordinates, than power applied for apparently personal or illegitimate reasons.

This argument would reconcile the positive relationships for conflict and supervisory influence and the negative relationships for chain of command, variable apparently also involving threat of power. The low intercorrelation (.00 in Table 6) of these variables suggests that they rest on different bases. Powerful supervisors, left to their own devices, may tend to behave in arbitrary, threatening ways. If they adhere to the chain of command, however, their bases of power in the eyes of subordinates would tend to shift toward the organization. These findings and interpretations warrant extensive future investigation.

Dogmatism.

The relationship of Dogmatism to conflict was found to also be dependent on the relative positional perspective of the parties involved. In the regression analyses, supervisory Dogmatism was found to be negatively related to subordinate Role Conflict, while subordinate Dogmatism showed positive association with Overt Conflict.

The average Dogmatism scores were substantially lower for supervisors than subordinates as can be seen in Appendix VI. This suggests that among relatively non-dogmatic supervisors, those who are more dogmatic behave in ways which somehow reduce the occurrence of conflict in subordinates. When viewed together with the findings for Adherence to Chain of Command, the negative relationship for supervisory Dogmatism suggests the interpretation that more

dogmatic supervisors may behave in ways more consistent with the hierarchical norms of the organization. There are well documented characteristics of dogmatic individuals indicating that they possess a greater tendency to submit to authority. They behave more narrowly, yet consistently, in accordance with a "stable and highly structured" value system. They also desire an "orderly existence, free from confusion and change" (Kahn, et. al., 1964). This interpretation is also consistent with the finding that subordinate Dogmatism is positively, albeit weakly, related to Overt Conflict. Highly structured individuals would be likely to perceive conflict since environmental factors would be less likely to match their systems of values. Therefore, Dogmatic subordinates see more conflict, but also react well to consistency on the part of authority figures. Conversely, extremely non-dogmatic supervisors may behave too flexibly or unpredictably for more cognitively rigid subordinates to tolerate.

A final note with respect to the use of the D Scale itself in future research. Dogmatism, as measured by the D Scale, was originally conceived as a predictor of mass political attitudes and behaviors.

The D Scale, as well as other general measures of authoritarianism, may be inappropriate to measure effects at a more micro level. Perhaps instruments that are more specifically related to tendencies toward rigid/flexible

decision making in organizations may be more sensitive to individual behavioral variance. Korman (1973) has previously argued for the use of personality measures more directly applicable to behavior in organizations. The lack of compelling relationships in the present data is consistent with this position.

Conflict Management Modes.

None of the hypotheses concerning the Blake and Mouton - Lawrence and Lorsch conflict resolution behaviors received support in the present data. This raises serious questions as to the previously assumed importance of these modes in reducing conflict in organizational settings.

First, the measures of the five behaviors were highly intercorrelated. This suggests that the treatment of the five constructs as significantly different approaches to conflict management is empirically inappropriate. Clearly, this study, as well as others (Lawrence & Lorsch, 1967; Lorsch & Lawrence, 1970; Ryan & Clemence, 1973; Thomas & Kilman, 1975) have provided repeated indication that the five modes are highly interrelated. They are seemingly logical, a priori classifications of behavior which provide tempting bases for hypothetical discussion. These hypotheses, however, have failed to receive consistent empirical support. At the very least, the five behaviors should be empirically reduced to some simpler combination applicable to the given setting.

Secondly, the present study questions the significance

of any of the above modes, either individually or in combination, as responses to conflict situations. When combined with other theoretically proposed variables, the variance accounted for by the modes was quite low and often in opposite directions than hypothesized. For example, in the regression analyses, Bargaining, and later Forcing, were found to have negative relationships with Role Conflict (Tables 13 and 15), while Smoothing showed strong positive relationships with Overt Conflict (Table 14). The biggest surprise was the lack of consistently strong relationships for Problem Solving and Forcing, two variables whose effects seemed so clear both theoretically and according to previous empirical findings.

Several interpretations of these results are possible. First, it may be the case that the set of behaviors really do not lend significantly to the resolution of conflict. Their effects may be superceded or made redundant by other more powerful constructs, such as Non-Routinization, Influence or Adherence to Chain of Command.

Secondly, it is conversely possible that this finding is unique to this particular sample and that replication would yield different results. The high intercorrelations among some of the predictors tends to make the BETA coefficients subject to instability upon repeated sampling.

Future investigation of these issues is both a necessary and exciting research goal.

Meaning of The Dependent Variables.

A major question that is not fully resolved by the present data concerns the meaning of the operational dependent variables. The Role Conflict items, as can be observed in Appendix III, deal with various types of impediments to job-related decision making. The Overt Conflict items mainly describe interpersonal disagreements and disruptions of smooth work flow.

Such phenomena may have dysfunctional consequences or may yield innovative outcomes. It is, therefore, difficult to ascribe a meaningful value to the presence or absence of such occurrences alone.

Also, the questions ask respondents about conflict affecting their jobs in general. The questions, as such, better measure an organizational climate-like dimension rather than specific superior-subordinate conflict incidents. A better measure would have been realized if the questions were directed at specific supervisors and answered by their subordinates.

In addition, the effects of other constructs often considered as organizational criteria, such as satisfaction, alienation, frustration, aggression, stress, etc., remain uncontrolled. It is likely that both the Role and Overt conflict measures suffer from marked operational and at least minor conceptual overlap with these other constructs.

Two problems are posed by such a situation. The first, controlling for the empirical effects of other variables, is

relatively easy to accomplish. Future studies should recognize these potential biases, include measure of the related constructs and control for their effects.

The second problem is far more complex, since it deals with the meaning of the residual conflict measure once satisfaction, et. al. are controlled for. If conflict has substantial independent identity, interpretable patterns may appear. If, however, as much theory would suggest, conflict is found to have a great deal of variance in common with these other constructs, the residual may be very difficult to interpret. The researcher is left with the problem of clearly defining conflict, which has troubled so many previous scholars.

Is organizational conflict a general climate variable that overlaps many others, or is it a specific, independent, defineable state or process which can be isolated, and meaningfully studied? This is perhaps the greatest immediate challenge to the future conflict researcher.

Role Conflict Versus Overt Conflict.

Given the above methodological reservations, the present data lend moderate support to the earlier contention that Intra-individual (Role) and Inter-Party (Overt) conflict are outcomes of a broad, common set of theoretical antecedents. Certain variables, specifically Non-Routinization, Personal Influence and Adherence to Chain of Command, relate quite similarly to both indices. Conversely, Role Conflict seems to be more dependent upon supervisory Dogmatism. Overt

Conflict relates strongly to supervisory Smoothing, which is understandable since Smoothing is conceptually directed toward inter-party attitudes and behaviors. The two conflict measures were only moderately intercorrelated (.38 - see Table 5).

Since the relationship between the two conflict forms is of secondary interest to this study, and, since the research design only allows speculation concerning their relationship, only two points are noted here. First, the study results support the contention of common antecedents strongly enough to warrant future research more specifically designed to investigate the question. Second, the validation of measures is vital to such research. Many items in the Role Conflict scale seem to also be interpretable as perceived Incompatibility. One must, therefore, wonder if the two constructs of incompatibility and perceived conflict are best combined or separated in the structure of conflict theory. Again, additional research, with great apparent potential for the development of the theory, is needed.

Conclusions and Future Directions

As a single event in a continuing process of research, this study offers several guidelines for future investigations.

(a). Organizational conflict and its management should be studied more frequently in actual field settings. Numerous studies both innovative and replicative are sorely

needed.

(b). Larger sample sizes are required to establish stability of relationships. Size must be supplemented with quality of sample content. Studies within homogeneous industries, and across industrial and organizational boundaries are needed.

(c). Zero-order correlations should not be the most rigorous form of analysis employed, since interactions between the components of conflict processes have been repeatedly shown to be powerful.

(d). Predictor and criterion measures drawn from the same perceptual base should, likewise, be avoided.

(e). A determined effort is needed to develop better measures of conflict related variables. The theory is best tested if components such as incompatibility and interdependence are more directly measured rather than the indirect propositional approach of the present study. Conflict indices themselves should be operationally distinct. The biasing effects of related constructs, such as satisfaction or aggression, should be controlled if the true nature of conflict is to be observed.

(f). Similarly, measures of conflict management effectiveness other than the reduction of conflict should be identified and investigated. Pondy (1967), for example, has suggested the constructs of Productivity, Flexibility and Stability as alternative, and probably conflicting, criteria.

(g). Beyond measurement refinement, studies purporting to investigate conflict should make more specific and visible efforts to link their objectives, hypotheses and findings to conflict theory.

(h). Investigation of more complex, non-linear logical mechanisms is also suggested. Although the present data do not exhibit strong curvilinear patterns, it is pragmatically unlikely that a linear, additive system will perfectly specify conflict process dynamics.

(i). Conflict in organizations is so pervasive a phenomenon that broad survey designs will soon begin to yield fewer and fewer new findings. The process of conflict is, by definition, an issue by issue problem. One can progress only so far in discussing conflict unless dealing with the question of "conflict with respect to what?". Future studies in organizational settings should attempt to define issues and analyze the patterns and dynamics of variables as they maintain both within and across such issues. The dynamics of episodes over time are also more precisely studied from an issue by issue perspective.

(j). When considering conflict systems, scholars should keep in mind the complex causal patterns that likely exist. The present conflict management literature is heavily biased in a managerial direction, with conflict in the position of a reactive variable. But, surely conflict in work groups causes reactive behaviors and affects the environmental perceptions of supervisors. Such dynamic

reciprocal relationships should not be overlooked.

In conclusion, the importance of including or controlling for the influence of situational variables has been highlighted by this study. Indeed, the present results suggest that organizational conflict and its management is more a function of the situational context and organizational norms than behaviors within that context. The previously assumed importance of the Blake and Mouton - Lawrence and Lorsch conflict management modes has been subject to serious question. The present results call for conflict managers to seek to shift the perceived bases of their power by exhibiting consistent, organizationally rational behavior and to concentrate particularly upon dynamic organizational subsystems. Numerous variables other than Non-Routinization, Dogmatism and Personal Influence are readily available in the literature for future investigation. The simple study of managerial styles, however, without recognizing other variables which may inflate or suppress associations, would be a backward step.

APPENDIX I

Job Behavior Description Item Validation Form

LISTED BELOW ARE DESCRIPTIONS OF BEHAVIORS WHICH MAY BE EXHIBITED BY PEOPLE WHILE WORKING IN ORGANIZATIONS. PLEASE READ EACH OF THE CLASSIFICATIONS CAREFULLY.

PROBLEM SOLVING

OPEN, TRUSTING ANALYSIS AND DISCUSSION WITH OTHERS BASED UPON THE RECOGNITION OF A COMMON PURPOSE, EMPLOYING FACTS AND REASON AND DEDICATED TO FINDING THE BEST SOLUTION POSSIBLE.

AVOIDING

AVOIDING FIGHTS, WITHDRAWAL FROM DISAGREEMENTS OR REFUSING TO DISCUSS A CONTROVERSIAL ISSUE.

BARGAINING

NEGOTIATING WITH THOSE HOLDING OPPOSING POSITIONS, MAKING CONCESSIONS, ISSUING THREATS AND EXCHANGING FAVORS IN ATTEMPTS TO ARRIVE AT A SATISFACTORY COMPROMISE.

SMOOTHING

SMOOTHING OVER QUARRELS BY CALMING DOWN HEATED DISCUSSIONS AND APPEALING TO PERSONAL FRIENDSHIP WHILE MINIMIZING THE PROBLEM ITSELF.

FORCING

FORCING, ORDERING OR OTHERWISE COMPELLING OTHERS TO ADOPT YOUR OWN SOLUTION USING AUTHORITY OR OTHER FORCES AT YOUR COMMAND.

FORMALIZATION

ESTABLISHING FORMAL, WRITTEN RULES AND PROCEDURES TO DEAL WITH JOB PROBLEMS AND ADHERING TO SUCH GUIDELINES WHEN PROBLEMS ACTUALLY ARISE. OBSERVING THE FORMAL LINE OF MANAGERIAL AUTHORITY.

APPENDIX I (Cont'd)

NOW READ EACH OF THE 42 ITEMS LISTED ON THE FOLLOWING 3 PAGES AND PLACE A LETTER IN THE SPACE PROVIDED TO THE LEFT OF EACH ITEM INDICATING BEHAVIORAL CLASSIFICATION INTO WHICH YOU FEEL THE ITEM FALLS. FOR EXAMPLE, IF YOU FEEL THAT A PARTICULAR ITEM IS REPRESENTATIVE OF A FORM OF SMOOTHING BEHAVIOR, PLACE A "S" IN THE SPACE. IF YOU FEEL AN ITEM DESCRIBES A FORM OF PROBLEM SOLVING, PLACE A "P" IN THE SPACE AND SO ON. PLEASE FILL IN ALL SPACES. USE THE FOLLOWING LETTERS TO CLASSIFY THE ITEMS:

1. PROBLEM SOLVING----- "P"
2. BARGAINING ----- "B"
3. FORCING----- "F"
4. SMOOTHING----- "S"
5. AVOIDING----- "A"
6. FORMALIZATION----- "X"

THANK YOU FOR YOUR COOPERATION.

APPENDIX I (Cont'd)

JOB BEHAVIOR DESCRIPTION ITEMS GROUPED BY SCALE MEMBERSHIP WITH
 PERCENTAGE OF CORRECT CLASSIFICATIONS DURING CONTENT VALIDATION
 (Negatively Scored Items Indicated by "****")

Percentage
 of
 Correct
Classifications

PROBLEM SOLVING

88.6%	CAREFULLY SEARCHES FOR FACTS AND FIGURES TO SUPPORT A POSITION OR OPINION
84.8%	COMMUNICATES OPENLY AND FULLY IN DIFFICULT SITUATIONS
95.7%	COMMITTED TO FINDING THE BEST POSSIBLE SOLUTION TO PROBLEMS
77.8%	MAINTAINS A BASIC FEELING OF TRUST IN DIFFICULT DISCUSSIONS
89.1%	EMPLOYS REASON AND LOGIC TO RESOLVE DIFFERENCES

BARGAINING

87.2%	BARTERS AND BARGAINS WITH OTHERS OVER SOLUTIONS TO DIFFERENCES
68.1%	DEALS WITH OTHERS ACCORDING TO PERSONAL GAINS AND LOSSES
72.3%	HANDLES THE RESOLUTION OF CONFLICTS AS GIVE AND TAKE PROCESSES
89.1%	GIVES UP ON SOME ISSUES IN ORDER TO GAIN AGREEMENT ON OTHER ISSUES
93.5%	EXCHANGES FAVORS TO GAIN A COMPROMISE WITH OPPONENTS

FORCING

93.6%	GIVES AN ORDER AND TOLERATES LITTLE DISCUSSION
87.2%	FORCES SOLUTIONS ON THOSE WHO ARE LESS POWERFUL
87.2%	SOLVES PROBLEMS BY GIVING ORDERS

APPENDIX I (Cont'd)

JOB BEHAVIOR DESCRIPTION ITEMS GROUPED BY SCALE MEMBERSHIP WITH
 PERCENTAGE OF CORRECT CLASSIFICATIONS DURING CONTENT VALIDATION
 (Negatively Scored Items Indicated by "****")

Percentage
 of
 Correct
Classifications

68.2% STANDS ON AUTHORITY WHEN DEALING
 WITH OTHERS

60.9% REFUSES TO BUDGE FROM A
 POSITION OR OPINION

SMOOTHING

93.5% IS THE PEACEMAKER IN QUARRELS

83.3% RESPONDS TO DISAGREEMENTS WITH
 RESTRAINT AND GOOD HUMOR

88.6% MINIMIZES AND JOKES ABOUT CONFLICTS

95.7% SMOOTHS OVER DISAGREEMENTS

89.4% CALMS DOWN DISAGREEMENTS BY KEEPING
 A COOL HEAD AND A SMILE

AVOIDING

86.0% DOESN'T "MAKE WAVES"

95.7% TURNS AWAY TO AVOID QUARRELS

91.5% RARELY DISCUSSES A TOUCHY ISSUE

93.5% WALKS AWAY OR KEEPS QUIET WHEN
 THINGS GET TOO HOT

88.9% LETS OTHERS RESOLVE IMPORTANT OR
 CONTROVERSIAL PROBLEMS

FORMALIZATION

ADHERENCE TO CHAIN OF COMMAND

68.1% *** FOLLOWS DIRECTIVES FROM OUTSIDE
 THE CHAIN OF COMMAND

65.3% STICKS CLOSELY TO THE CHAIN OF
 COMMAND WHEN INVOLVED IN QUARRELS

APPENDIX I (Cont'd)

JOB BEHAVIOR DESCRIPTION ITEMS GROUPED BY SCALE MEMBERSHIP WITH
 PERCENTAGE OF CORRECT CLASSIFICATIONS DURING CONTENT VALIDATION
 (Negatively Scored Items Indicated by "****")

Percentage
 of
 Correct
Classifications

ADHERENCE TO CHAIN OF COMMAND (Cont'd)

95.1%	*** BYPASSES SUPERIORS WHEN RESOLVING PROBLEMS AND DISAGREEMENTS
72.3%	HARDLY EVER TAKES ORDERS FROM OTHERS WITHOUT INFORMING THE PROPER BOSS

ADHERENCE TO RULES

85.1%	USES WRITTEN DOCUMENTS (SUCH AS BUDGETS SCHEDULES, PROCEDURES JOB DESCRIPTIONS, ETC) AS AN INTEGRAL PART OF THE JOB
95.7%	*** DOES NOT FOLLOW SCHEDULES OR RULES VERY CLOSELY
84.8%	HOLDS CLOSELY TO THE RULES OF THE ORGANIZATION WHEN RESOLVING CONFLICTS
87.2%	ADHERES CLOSELY TO FORMAL COMPANY POLICIES AND PROCEDURES

APPENDIX II

Job Behavior Description Rating Questionnaire

Job Behavior Description

PLEASE CIRCLE THE NUMBER ALONGSIDE EACH STATEMENT WHICH, IN YOUR OPINION, BEST DESCRIBES THE JOB BEHAVIOR OF THE PERSON NAMED ON THE PRECEDING PAGE WHEN DEALING WITH CONFLICT SITUATIONS (I.E. COMPLEX OR CRUCIAL DECISIONS; INTERPERSONAL DISAGREEMENTS; CONTORVERSIAL ISSUES; PERSONALITY CLASHES; TECHNICAL OR PROFESSIONAL DIFFERENCES OF OPINION; ETC.).

USE THE FOLLOWING SCALE:

COL. #	DEFINITELY NOT TRUE OF THIS PERSON							EXTREMELY TRUE OF THIS PERSON						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
1.	CAREFULLY SEARCHES FOR FACTS AND FIGURES TO SUPPORT A POSITION OR OPINION.....							1	2	3	4	5	6	7
2.	GIVES AN ORDER AND TOLERATES LITTLE DISCUSSION.....							1	2	3	4	5	6	7
3.	BARTERS AND BARGAINS WITH OTHERS OVER SOLUTIONS TO DIFFERENCES.....							1	2	3	4	5	6	7
4.	DOESN'T "MAKE WAVES".....							1	2	3	4	5	6	7
5.	IS THE PEACEMAKER IN QUARRELS.....							1	2	3	4	5	6	7
6.	FORCES SOLUTIONS ON THOSE WHO ARE LESS POWERFUL.....							1	2	3	4	5	6	7
7.	FOLLOWS DIRECTIVES FROM OUTSIDE THE CHAIN OF COMMAND.....							1	2	3	4	5	6	7
8.	USES WRITTEN DOCUMENTS (SUCH AS BUDGETS SCHEDULES, PROCEDURES JOB DESCRIPTIONS, ETC) AS AN INTEGRAL PART OF THE JOB..							1	2	3	4	5	6	7
9.	COMMUNICATES OPENLY AND FULLY IN DIFFICULT SITUATIONS.....							1	2	3	4	5	6	7
10.	TURNS AWAY TO AVOID QUARRELS.....							1	2	3	4	5	6	7
11.	DEALS WITH OTHERS ACCORDING TO PERSONAL GAINS AND LOSSES.....							1	2	3	4	5	6	7
12.	RESPONDS TO DISAGREEMENTS WITH RESTRAINT AND GOOD HUMOR.....							1	2	3	4	5	6	7
13.	RARELY TALKS BACK TO SUPERIORS.....							1	2	3	4	5	6	7

APPENDIX II (Cont'd)

Job Behavior Description Rating Questionnaire

14. DOES NOT FOLLOW SCHEDULES OR RULES VERY CLOSELY.....	1	2	3	4	5	6	7
15. DISAGREES CONSTANTLY AT MEETINGS.....	1	2	3	4	5	6	7
16. STICKS CLOSELY TO THE CHAIN OF COMMAND WHEN INVOLVED IN QUARRELS.....	1	2	3	4	5	6	7
17. SOLVES PROBLEMS BY GIVING ORDERS.....	1	2	3	4	5	6	7
18. COMMITTED TO FINDING THE BEST POSSIBLE SOLUTION TO PROBLEMS.....	1	2	3	4	5	6	7
19. MINIMIZES AND JOKES ABOUT CONFLICTS...	1	2	3	4	5	6	7
20. INTERFERES WITH THE ACTIVITIES OF OTHERS.....	1	2	3	4	5	6	7
21. SMOOTHS OVER DISAGREEMENTS.....	1	2	3	4	5	6	7
22. HANDLES THE RESOLUTION OF CONFLICTS AS GIVE AND TAKE PROCESSES.....	1	2	3	4	5	6	7
23. RARELY DISCUSSES A TOUCHY ISSUE.....	1	2	3	4	5	6	7
24. GIVES UP ON SOME ISSUES IN ORDER TO GAIN AGREEMENT ON OTHER ISSUES.....	1	2	3	4	5	6	7
25. WALKS AWAY OR KEEPS QUIET WHEN THINGS GET TOO HOT.....	1	2	3	4	5	6	7
26. BYPASSES SUPERIORS WHEN RESOLVING PROBLEMS AND DISAGREEMENTS.....	1	2	3	4	5	6	7
27. HARDLY EVER PUTS DOWN PEOPLE BEHIND THEIR BACKS.....	1	2	3	4	5	6	7
28. PLACES OBSTACLES IN THE PATHS OF THOSE WHO DO NOT AGREE.....	1	2	3	4	5	6	7
29. EXCHANGES FAVORS TO GAIN A COMPROMISE WITH OPPONENTS.....	1	2	3	4	5	6	7
30. "OMITS" OR FAILS TO DO REQUIRED DUTIES AS A FORM OF RESENTMENT.....	1	2	3	4	5	6	7
31. LETS OTHERS RESOLVE IMPORTANT OR CONTROVERSIAL PROBLEMS.....	1	2	3	4	5	6	7
32. MAINTAINS A BASIC FEELING OF TRUST IN DIFFICULT DISCUSSIONS.....	1	2	3	4	5	6	7

APPENDIX II (Cont'd)

Job Behavior Description Rating Questionnaire

33. HOLDS GRUDGES FOR LONG PERIODS.....	1	2	3	4	5	6	7
34. HOLDS CLOSELY TO THE RULES OF THE ORGANIZATION WHEN RESOLVING CONFLICTS.	1	2	3	4	5	6	7
35. OFTEN INVOLVED IN HEATED ARGUMENTS....	1	2	3	4	5	6	7
36. STANDS ON AUTHORITY WHEN DEALING WITH OTHERS.....	1	2	3	4	5	6	7
37. CALMS DOWN DISAGREEMENTS BY KEEPING A COOL HEAD AND A SMILE.....	1	2	3	4	5	6	7
38. ADHERES CLOSELY TO FORMAL COMPANY POLICIES AND PROCEDURES.....	1	2	3	4	5	6	7
39. EMPLOYS REASON AND LOGIC TO RESOLVE DIFFERENCES.....	1	2	3	4	5	6	7
40. HARDLY EVER TAKES ORDERS FROM OTHERS WITHOUT INFORMING THE PROPER BOSS.....	1	2	3	4	5	6	7
41. ENGAGES IN STRUGGLES AND SQUABBLES DURING THE WORK DAY.....	1	2	3	4	5	6	7
42. REFUSES TO BUDGE FROM A POSITION OR OPINION.....	1	2	3	4	5	6	7
PLEASE RATE THE JOB PERFORMANCE OF THIS PERSON ON A SCALE FROM 1 (VERY POOR) TO 7 (TRULY EXCEPTIONAL):							
43. QUALITY OF JOB PERFORMANCE.....	1	2	3	4	5	6	7
44. QUANTITY OF JOB PERFORMANCE.....	1	2	3	4	5	6	7
45. EFFORT ON THE JOB.....	1	2	3	4	5	6	7

APPENDIX III

Self-Report Questionnaire Items Grouped by Scale
(Negatively Scored Items Indicated by "****")

Role Conflict

I HAVE TO DO THINGS THAT SHOULD BE DONE
DIFFERENTLY

I RECEIVE AN ASSIGNMENT WITHOUT THE MANPOWER
TO COMPLETE IT

I HAVE TO BUCK A RULE OR POLICY IN ORDER TO
CARRY OUT AN ASSIGNMENT

I WORK WITH TWO OR MORE GROUPS WHO OPERATE
QUITE DIFFERENTLY

I RECEIVE INCOMPATIBLE REQUESTS FROM TWO
OR MORE PEOPLE

I DO THINGS THAT ARE APT TO BE ACCEPTED BY
ONE PERSON AND NOT BY OTHERS

I RECEIVE AN ASSIGNMENT WITHOUT ADEQUATE
RESOURCES AND MATERIALS TO COMPLETE IT

I WORK ON UNNECESSARY THINGS

Personal Influence

I HAVE A GREAT DEAL OF INFLUENCE IN
DECISIONS CONCERNING MY JOB

*** I DON'T HAVE MUCH SAY OR INFLUENCE WITH
MY SUPERIORS

*** I DON'T HAVE MUCH SAY OR INFLUENCE WITH MY
CO-WORKERS

I HAVE CONSIDERABLE INFLUENCE WITH OTHER
PEOPLE IN THE ORGANIZATION

Non-Routinization

WOULD YOU DESCRIBE YOUR JOB
AS BEING HIGHLY ROUTINE,
SOMEWHAT ROUTINE, SOMEWHAT
NON-ROUTINE OR HIGHLY
NON-ROUTINE?

PEOPLE HERE DO THE SAME JOB
IN THE SAME WAY EVERY DAY

APPENDIX III (Cont'd)

Self-Report Questionnaire Items Grouped by Scale
(Negatively Scored Items Indicated by "****")

Non-Routinization (Cont'd)

- *** ONE THING PEOPLE LIKE AROUND
HERE IS THE VARIETY OF WORK
- *** MOST JOBS HAVE SOMETHING NEW
HAPPENING EVERY DAY
- *** THERE IS SOMETHING DIFFERENT
TO DO EVERY DAY

Overt Conflict

- HEATED ARGUMENTS ARE COMMON IN THIS
ORGANIZATION
- GRUDGES ARE HELD FOR LONG PERIODS
- QUARRELS AND DISAGREEMENTS OCCUR AT MEETINGS
- OBSTACLES ARE PLACED IN MY WAY BY THOSE
WHO DO NOT AGREE WITH ME
- IT OFTEN SEEMS LIKE AN ARMED CAMP
AROUND HERE
- *** SUBORDINATES RARELY TALK BACK TO SUPERIORS
- PEOPLE INTERFERE WITH EACH OTHER'S
ACTIVITIES
- SUPERVISORS "CHEW OUT" SUBORDINATES WHEN
PROBLEMS ARISE
- CONFLICTS SEEM TO SPREAD AND AFFECT MANY
AREAS IN THE ORGANIZATION
- THINGS ARE FOULED UP ON MY JOB WHEN
SOMEONE ELSE FAILS TO DO THEIR JOB
- COMPLAINTS AND GRIPES FLARE INTO
LOUD VOICES AND SHOUTING MATCHES
- *** BACK-STABBING HARDLY EVER OCCURS IN THIS
COMPANY
- PEOPLE EXPRESS RESENTMENTS BY FAILING TO
DO WHAT IS EXPECTED OF THEM
- A LOT OF STRUGGLING AND SQUABBLING GOES ON
BEHIND THE SCENES

APPENDIX III (Cont'd)

Self-Report Questionnaire Items Grouped by Scale
(Negatively Scored Items Indicated by "****")

Dogmatism Scale (D Scale - Form E)

THE UNITED STATES AND RUSSIA HAVE JUST ABOUT NOTHING IN COMMON

THE HIGHEST FORM OF GOVERNMENT IS A DEMOCRACY, AND THE HIGHEST FORM OF DEMOCRACY IS A GOVERNMENT RUN BY THOSE WHO ARE MOST INTELLIGENT

EVEN THOUGH FREEDOM OF SPEECH FOR ALL GROUPS IS A WORTHWHILE GOAL, IT IS UNFORTUNATELY NECESSARY TO RESTRICT THE FREEDOM OF CERTAIN POLITICAL GROUPS

IT IS ONLY NATURAL THAT A PERSON WOULD HAVE A MUCH BETTER ACQUAINTANCE WITH IDEAS HE BELIEVES IN THAN WITH IDEAS HE OPPOSES

MAN, ON HIS OWN, IS A HELPLESS AND MISERABLE CREATURE

FUNDAMENTALLY, THE WORLD WE LIVE IN IS A PRETTY LONESOME PLACE

MOST PEOPLE JUST DON'T GIVE A "DAMN" FOR OTHERS

I'D LIKE IT IF I COULD FIND SOMEONE WHO WOULD TELL ME HOW TO SOLVE MY PERSONAL PROBLEMS

IT IS ONLY NATURAL FOR A PERSON TO BE RATHER FEARFUL OF THE FUTURE

THERE IS SO MUCH TO BE DONE AND SO LITTLE TIME TO DO IT IN

ONCE I GET WOUND UP IN A HEATED DISCUSSION, I JUST CAN'T STOP

IN A DISCUSSION, I OFTEN FIND IT NECESSARY TO REPEAT MYSELF SEVERAL TIMES TO MAKE SURE I AM BEING UNDERSTOOD

IN A HEATED DISCUSSION, I GENERALLY BECOME SO ABSORBED IN WHAT I AM GOING TO SAY, THAT I FORGET TO LISTEN TO WHAT THE OTHERS ARE SAYING

IT IS BETTER TO BE A DEAD HERO THAN A LIVE COWARD

WHILE I DON'T LIKE TO ADMIT THIS, EVEN TO MYSELF, MY SECRET AMBITION IS TO BECOME A GREAT MAN, LIKE EINSTEIN, OR BEETHOVEN, OR SHAKESPEARE

APPENDIX III (Cont'd)

Self-Report Questionnaire Items Grouped by Scale
(Negatively Scored Items Indicated by "****")Dogmatism Scale (D Scale - Form E) (Cont'd)

THE MAIN THING IN LIFE IS FOR A PERSON TO WANT
TO DO SOMETHING IMPORTANT

IF GIVEN THE CHANCE, I WOULD DO SOMETHING OF GREAT
BENEFIT TO THE WORLD

IN THE HISTORY OF MANKIND, THERE HAVE PROBABLY BEEN JUST
A HANDFUL OF REALLY GREAT THINKERS

THERE ARE A NUMBER OF PEOPLE I HAVE COME TO HATE BECAUSE
OF THE THINGS THEY STAND FOR

A MAN WHO DOES NOT BELIEVE IN SOME GREAT CAUSE HAS NOT
REALLY LIVED

IT IS ONLY WHEN A PERSON DEVOTES HIMSELF TO AN IDEAL OR
CAUSE THAT LIFE BECOMES MEANINGFUL

OF ALL THE DIFFERENT PHILOSOPHIES WHICH EXIST IN THIS
WORLD, THERE IS PROBABLY ONLY ONE THAT IS CORRECT

A PERSON WHO GETS TOO ENTHUSIASTIC ABOUT TOO MANY CAUSES
IS LIKELY TO BE A PRETTY "WISHY-WASHY" SORT OF PERSON

TO COMPROMISE WITH OUR POLITICAL OPPONENTS IS DANGEROUS
BECAUSE IT USUALLY LEADS TO THE BETRAYAL OF OUR OWN SIDE

WHEN IT COMES TO DIFFERENCES OF OPINION IN RELIGION, WE
MUST BE CAREFUL NOT TO COMPROMISE WITH THOSE WHO BELIEVE
DIFFERENTLY FROM THE WAY WE DO

IN TIMES LIKE THESE, A PERSON MUST BE PRETTY SELFISH
IF HE CONSIDERS PRIMARILY HIS OWN HAPPINESS

THE WORST CRIME A PERSON COULD COMMIT IS TO ATTACK
PUBLICALLY THE PEOPLE WHO BELIEVE IN THE SAME
THINGS HE DOES

IN TIMES LIKE THESE, IT IS OFTEN NECESSARY TO BE MORE
ON GUARD AGAINST IDEAS PUT OUT BY PEOPLE OR GROUPS IN
ONE'S OWN CAMP THAN BY THOSE IN THE OPPOSING CAMP

A GROUP WHICH TOLERATES TOO MUCH DIFFERENCES OF OPINION
AMONG ITS OWN MEMBERS CANNOT EXIST FOR LONG

THERE ARE TWO KINDS OF PEOPLE IN THIS WORLD: THOSE WHO
ARE FOR THE TRUTH AND THOSE WHO ARE AGAINST THE TRUTH

APPENDIX III (Cont'd)

Self-Report Questionnaire Items Grouped by Scale
(Negatively Scored Items Indicated by "****")

Dogmatism Scale (D Scale - Form E) (Cont'd)

MY BLOOD BOILS WHENEVER A PERSON STUBBORNLY REFUSES TO
ADMIT HE'S WRONG

A PERSON WHO THINKS PRIMARILY OF HIS OWN HAPPINESS IS
BENEATH CONTEMPT

MOST OF THE IDEAS WHICH GET PRINTED NOWADAYS AREN'T WORTH
THE PAPER THEY ARE PRINTED ON

IN THIS COMPLICATED WORLD OF OURS, THE ONLY WAY WE CAN
KNOW WHAT'S GOING ON IS TO RELY ON LEADERS OR EXPERTS
WHO CAN BE TRUSTED

IT IS OFTEN DESIREABLE TO RESERVE JUDGEMENT ABOUT WHAT'S
GOING ON UNTIL ONE HAS HAD A CHANCE TO HEAR THE OPINIONS
OF THOSE ONE RESPECTS

IN THE LONG RUN, THE BEST WAY TO LIVE IS TO PICK FRIENDS
AND ASSOCIATES WHOSE TASTES AND BELIEFS ARE THE SAME AS
ONE'S OWN

THE PRESENT IS ALL TOO OFTEN FULL OF UNHAPPINESS IT IS
ONLY THE FUTURE THAT COUNTS

IF A MAN IS TO ACCOMPLISH HIS MISSION IN LIFE, IT IS
SOMETIMES NECESSARY TO GAMBLE "ALL OR NOTHING AT ALL"

UNFORTUNATELY, A GOOD MANY PEOPLE WITH WHOM I HAVE
DISCUSSED IMPORTANT SOCIAL AND MORAL PROBLEMS DON'T
REALLY UNDERSTAND WHAT'S GOING ON

MOST PEOPLE JUST DON'T KNOW WHAT'S GOOD FOR THEM

APPENDIX IV

Self-Report Questionnaire

BACKGROUND INFORMATION

CARD 01

COL. #

1. SEX OF RESPONDENT:

- 1 _____ FEMALE
2 _____ MALE

2. MY PRESENT AGE IS:

- 1 _____ UNDER 20
2 _____ 20-24
3 _____ 25-29
4 _____ 30-34
5 _____ 35-39
6 _____ 40-44
7 _____ 45-49
8 _____ 50-54
9 _____ 55 OR OVER

3. THE HIGHEST LEVEL OF EDUCATION I HAVE ATTAINED IS:

- 1 _____ LESS THAN HIGH SCHOOL
2 _____ HIGH SCHOOL DIPLOMA
3 _____ SOME COLLEGE, NO DEGREE
4 _____ BACHELOR'S DEGREE
5 _____ MASTER'S DEGREE
6 _____ DOCTOR'S DEGREE
7-OTHER (SPECIFY BELOW)

4. MY MAJOR FIELD OF STUDY WAS:

- 1 _____ ENGINEERING, TECHNICAL
2 _____ PHYSICAL OR BIOLOGICAL SCIENCES
3 _____ COMMERCIAL OR SECRETARIAL
4 _____ LIBERAL ARTS, EDUCATION, SOCIAL SCIENCES OR HUMANITIES
5 _____ BUSINESS OR ECONOMICS
6 _____ MATHEMATICS
7-OTHER (SPECIFY BELOW)

5. I AM PRESENTLY:

- 1 _____ SINGLE (NEVER MARRIED)
2 _____ MARRIED
3 _____ OTHER (PREVIOUSLY MARRIED, SEPERATED, ETC.)

COL. #

6. MY JOB RESPONSIBILITIES ARE BEST DESCRIBED AS:

- 1 _____ NON-SUPERVISORY
2 _____ SUPERVISORY

7. MY TOTAL EARNINGS IN 1974 (SALARY, COMMISSION, BONUS, ETC.) WERE: (YOUR BEST ESTIMATE)

- 1 _____ UNDER \$8,000
2 _____ \$8,000 - \$10,000
3 _____ \$10,000 - \$12,000
4 _____ \$12,000 - \$15,000
5 _____ \$15,000 - \$20,000
6 _____ \$20,000 - \$25,000
7 _____ OVER \$25,000

8. COMPARED TO 1973, MY 1974 EARNING LEVEL WAS:

- 1 _____ LOWER BY MORE THAN 10%
2 _____ LOWER BY FROM 6% TO 10%
3 _____ LOWER BY FROM 1% TO 5%
4 _____ ABOUT THE SAME
5 _____ HIGHER BY FROM 1% TO 5%
6 _____ HIGHER BY FROM 6% TO 10%
7 _____ HIGHER BY FROM 11% TO 20%
8 _____ HIGHER BY MORE THAN 20%

9. HOW MANY PEOPLE REPORT DIRECTLY TO YOUR IMMEDIATE SUPERVISOR?

- 1 _____ 1 - 4
2 _____ 5 - 7
3 _____ 8 - 10
4 _____ 11 - 15
5 _____ MORE THAN 15

10. DURING THE PAST SEVEN YEARS, I HAVE WORKED FOR (INCLUDING THIS ORGANIZATION):

- 1 _____ ONE ORGANIZATION
2 _____ TWO ORGANIZATIONS
3 _____ THREE ORGANIZATIONS
4 _____ FOUR ORGANIZATIONS
5 _____ FIVE OR MORE ORGANIZATIONS

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CARD 01 (CONT'D)

COL. #

11. HOW MANY LEVELS OF MANAGEMENT ARE BETWEEN YOU AND THE PRESIDENT OF THE ORGANIZATION?

- 1 _____ NONE
- 2 _____ ONE
- 3 _____ TWO
- 4 _____ THREE
- 5 _____ FOUR
- 6 _____ FIVE
- 7 _____ SIX
- 8 _____ SEVEN OR MORE

<u>TIME SPENT:</u>	12. WITH ORGANIZATION	13. ON PRESENT JOB	14. WITH PRESENT SUPERVISOR	15. DOING SIMILAR WORK
LESS THAN ONE YEAR	1 _____	1 _____	1 _____	1 _____
1 - 3 YEARS	2 _____	2 _____	2 _____	2 _____
4 - 6 YEARS	3 _____	3 _____	3 _____	3 _____
7 - 9 YEARS	4 _____	4 _____	4 _____	4 _____
10 OR MORE YEARS	5 _____	5 _____	5 _____	5 _____

16. TO THE BEST OF YOUR KNOWLEDGE, HOW MANY PEOPLE HAVE JOINED YOUR DEPARTMENT/WORK UNIT IN THE LAST YEAR?

- 1 _____ LESS THAN 5
- 2 _____ 5 - 10
- 3 _____ 11 - 15
- 4 _____ 16 - 20
- 5 _____ 21 - 25
- 6 _____ MORE THAN 25

17. HOW MANY PEOPLE HAVE LEFT YOUR WORK UNIT (TRANSFERRED, RESIGNED, RETIRED, PROMOTED, ETC.) IN THE LAST YEAR?

- 1 _____ LESS THAN 5
- 2 _____ 5 - 10
- 3 _____ 11 - 15
- 4 _____ 16 - 20
- 5 _____ 21 - 25
- 6 _____ MORE THAN 25

18. HOW MANY MEETINGS (COMMITTEES, DISCUSSIONS, TRAINING SESSIONS, ETC.) DO YOU ATTEND IN AN AVERAGE WORK WEEK?

- 1 _____ LESS THAN 2
- 2 _____ 2 OR 3
- 3 _____ 4 OR 5
- 4 _____ 6 OR 7
- 5 _____ MORE THAN 7

19. HOW MANY TIMES DO YOU SPEAK WITH YOUR SUPERVISOR ABOUT MATTERS CONCERNING YOUR JOB IN AN AVERAGE WORK WEEK?

- 1 _____ LESS THAN 3 TIMES
- 2 _____ 3 - 5 TIMES
- 3 _____ 6 - 10 TIMES
- 4 _____ 11 - 15 TIMES
- 5 _____ MORE THAN 15 TIMES

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CARD 01 (CONT'D)

- | | |
|--|--|
| <p><u>COL. #</u>
 20. HOW MANY TIMES DOES YOUR WORK REQUIRE YOU TO SPEAK WITH PEOPLE FROM OTHER DEPARTMENTS/WORK UNITS IN AN AVERAGE WORK WEEK?
 1 _____ NEVER
 2 _____ 1 - 3 TIMES
 3 _____ 4 - 6 TIMES
 4 _____ 7 - 10 TIMES
 5 _____ MORE THAN 10 TIMES</p> | <p><u>COL. #</u>
 21. HOW MANY TIMES DO YOUR JOB DUTIES REQUIRE YOU TO SPEAK OR WORK WITH PEOPLE FROM OUTSIDE THE ORGANIZATION IN AN AVERAGE WORK WEEK?
 1 _____ NEVER
 2 _____ 1 - 3 TIMES
 3 _____ 4 - 6 TIMES
 4 _____ 7 - 10 TIMES
 5 _____ MORE THAN 10 TIMES</p> |
|--|--|

EVERY PERSON IN AN ORGANIZATION REQUIRES CERTAIN RESOURCES IN ORDER TO PERFORM THEIR JOBS PROPERLY. THESE MAY BE IN THE FORM OF MATERIALS, TOOLS, EQUIPMENT, OFFICE SUPPLIES, TYPING SERVICES, PEOPLE, INFORMATION, ETC. THINK OF THE RESOURCES THAT YOU REQUIRE TO DO YOUR JOB.

- | | |
|---|--|
| <p>22. HOW MANY TIMES HAVE YOU RUN OUT OF OR BEEN UNABLE TO GET SOMETHING (RESOURCES) NEEDED TO DO YOUR JOB IN THE LAST YEAR?
 1 _____ NEVER
 2 _____ 1 OR 2 TIMES
 3 _____ 3 OR 4 TIMES
 4 _____ 5 TO 10 TIMES
 5 _____ MORE THAN 10 TIMES</p> | <p>23. TO WHAT EXTENT ARE YOU REQUIRED TO SHARE SOMETHING (RESOURCES) NEEDED IN YOUR JOB WITH SOMEONE ELSE?
 1 _____ NEVER
 2 _____ RARELY
 3 _____ SOMETIMES
 4 _____ OFTEN
 5 _____ ALWAYS</p> |
|---|--|

EVERY PERSON HAS A NUMBER OF GOALS OR OBJECTIVES WHICH THEY WORK TOWARD ON A JOB. THE ORGANIZATION HAS CERTAIN GOALS AND EACH WORK GROUP ALSO HAS GOALS. THINK ABOUT YOUR OWN JOB GOALS, THE GOALS OF YOUR WORK GROUP AND THE GOALS OF THE ORGANIZATION. HOW COMPATIBLE OR SIMILAR WOULD YOU SAY YOUR OWN PERSONAL JOB GOALS ARE WITH THOSE OF:

- | | | | |
|--|---------------------------|------------------------------|----------------------------|
| <p><u>COL. #</u>
 24. YOUR WORK GROUP.....</p> | <p>ABOUT
THE SAME</p> | <p>1 2 3 4 5</p> | <p>QUITE
DIFFERENT</p> |
| <p>25. OTHER WORK GROUPS....</p> | <p>ABOUT
THE SAME</p> | <p>1 2 3 4 5</p> | <p>QUITE
DIFFERENT</p> |
| <p>26. THE ORGANIZATION.....</p> | <p>ABOUT
THE SAME</p> | <p>1 2 3 4 5</p> | <p>QUITE
DIFFERENT</p> |

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CARD 01 (CONT'D)

HOW COMPATIBLE OR SIMILAR WOULD YOU SAY YOUR
WORK GROUP'S GOALS ARE WITH THOSE OF:

27. OTHER WORK GROUPS.....
 ABOUT THE SAME 1 2 3 4 5 QUITE DIFFERENT

28. THE ORGANIZATION.....
 ABOUT THE SAME 1 2 3 4 5 QUITE DIFFERENT

 THINK ABOUT THE CONFLICTS AND DISAGREEMENTS THAT YOU HAVE EXPERIENCED ON YOUR JOB. SOME OF THESE WILL HAVE BEEN MINOR DIFFERENCES OF OPINION WHILE OTHERS MAY HAVE BEEN MORE SEVERE ARGUMENTS. INDICATE BELOW YOUR BEST ESTIMATE OF THE NUMBER OF TIMES THAT YOU HAVE HAD BOTH MINOR AND SEVERE DISAGREEMENTS IN THE TIME PERIODS LISTED.

NUMBER OF MINOR DISAGREEMENTS IN THE LAST ** MONTH **	NUMBER OF SEVERE DISAGREEMENTS IN THE LAST ** MONTH **	NUMBER OF SEVERE DISAGREEMENTS IN THE LAST ** YEAR **
<u>COL. #</u>	<u>COL. #</u>	<u>COL. #</u>
29. _____	30. _____	31. _____

 THE STATEMENTS ON THE FOLLOWING PAGES DESCRIBE PARTICULAR METHODS AND BEHAVIORS WHICH PEOPLE OFTEN USE TO RESOLVE JOB PROBLEMS AND DISAGREEMENTS. READ EACH STATEMENT CAREFULLY, THEN CIRCLE THE NUMBER WHICH YOU FEEL BEST DESCRIBES HOW TRUE THE STATEMENT IS IN YOUR ORGANIZATION.

<u>COL. #</u>	DEFINITELY NOT TRUE	1	2	3	4	5	6	7	EXTREMELY TRUE
32. PEOPLE TURN AWAY TO AVOID QUARRELS.....		1	2	3	4	5	6	7	
33. IN ORDER TO GAIN AGREEMENT ON SOME ISSUES, YOU MUST GIVE UP ON OTHER ISSUES.....		1	2	3	4	5	6	7	
34. DISAGREEMENTS ARE CALMED DOWN BY PEACEMAKERS.....		1	2	3	4	5	6	7	
35. THE LESS POWERFUL HAVE SOLUTIONS FORCED UPON THEM.....		1	2	3	4	5	6	7	
36. A BASIC FEELING OF TRUST IS MAINTAINED IN DIFFICULT DISCUSSIONS.....		1	2	3	4	5	6	7	
37. CAREFUL SEARCH IS MADE FOR FACTS AND FIGURES TO SUPPORT A POSITION OR OPINION....		1	2	3	4	5	6	7	

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CARD 01 (CONT'D) COL. #	DEFINITELY NOT TRUE							EXTREMELY TRUE
	1	2	3	4	5	6	7	
38. PEOPLE BARTER AND BICKER OVER SOLUTIONS TO DIFFERENCES.....	1	2	3	4	5	6	7	
39. TOUCHY ISSUES ARE NOT DISCUSSED.....	1	2	3	4	5	6	7	
40. PEOPLE FOCUS ON THE PROBLEMS INVOLVED RATHER THAN ON PERSONALITIES.....	1	2	3	4	5	6	7	
41. WHEN THINGS GET TOO HOT, PEOPLE WALK AWAY OR KEEP QUIET.....	1	2	3	4	5	6	7	
42. PEOPLE COMPROMISE WITH OTHERS.....	1	2	3	4	5	6	7	
43. PEOPLE ARGUE PERSUASIVELY FOR THEIR OWN POINT OF VIEW.....	1	2	3	4	5	6	7	
44. FAVORS ARE EXCHANGED TO GAIN A COMPROMISE.....	1	2	3	4	5	6	7	
45. ORDERS ARE GIVEN AND THAT'S THAT!.....	1	2	3	4	5	6	7	
46. THERE IS FULL AND OPEN COMMUNICATION IN DIFFICULT SITUATIONS.....	1	2	3	4	5	6	7	
47. REASON AND LOGIC ARE USED IN RESOLVING DIFFERENCES.....	1	2	3	4	5	6	7	
48. PEOPLE RESPOND TO DISAGREEMENTS WITH RESTRAINT AND GOOD HUMOR.....	1	2	3	4	5	6	7	
49. CONFLICT IS HANDLED AS A GIVE AND TAKE PROCESS.....	1	2	3	4	5	6	7	
50. LITTLE DISCUSSION OF ORDERS IS TOLERATED....	1	2	3	4	5	6	7	
51. CONTROVERSIAL PROBLEMS ARE LEFT FOR OTHERS TO SOLVE.....	1	2	3	4	5	6	7	
52. YOU HAVE CONFIDENCE THAT SOLUTIONS ARE GOOD EVEN IF YOU DON'T ENTIRELY AGREE.....	1	2	3	4	5	6	7	
53. CONTROVERSIAL DECISIONS ARE MADE QUIETLY BY ONE OR TWO PEOPLE.....	1	2	3	4	5	6	7	
54. PEOPLE STAND ON AUTHORITY WHEN DEALING WITH OTHERS.....	1	2	3	4	5	6	7	
55. THE REASONS FOR IMPORTANT AND CONTROVERSIAL DECISIONS ARE FULLY EXPLAINED TO ALL.....	1	2	3	4	5	6	7	

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CARD 01 (CONT'D)COL. #

	DEFINITELY NOT TRUE	1	2	3	4	5	6	7	EXTREMELY TRUE
56. PEOPLE JOKE ABOUT PROBLEMS AND MINIMIZE CONFLICTS.....	1	2	3	4	5	6	7		
57. PEOPLE DEAL WITH OTHERS ACCORDING TO THE PERSONAL GAINS AND LOSSES THEY MAY ACHIEVE..	1	2	3	4	5	6	7		
58. DISAGREEMENTS ARE SMOOTHED OVER.....	1	2	3	4	5	6	7		
59. PEOPLE REFUSE TO BUDGE FROM THEIR OWN POSITIONS OR OPINIONS.....	1	2	3	4	5	6	7		
60. PEOPLE ARE COMMITTED TO FINDING THE BEST POSSIBLE SOLUTION TO PROBLEMS.....	1	2	3	4	5	6	7		
61. THE GOOD OF THE ORGANIZATION IS HELD ABOVE PERSONAL VIEWS.....	1	2	3	4	5	6	7		
62. ALL PEOPLE CONCERNED IN A DISAGREEMENT HAVE A PART IN WORKING IT OUT.....	1	2	3	4	5	6	7		
63. CONFLICTS OFTEN RESULT IN EXCELLENT SOLUTIONS THAT NO ONE THOUGHT OF PREVIOUSLY.....	1	2	3	4	5	6	7		
64. PLANS ARE MADE BEFOREHAND TO AVOID PROBLEMS LATER ON.....	1	2	3	4	5	6	7		
65. PEOPLE AVOID "MAKING WAVES".....	1	2	3	4	5	6	7		
66. PEOPLE MAKE GENUINE EFFORTS TO CONVINC THOSE WHO HOLD OPPOSING VIEWS.....	1	2	3	4	5	6	7		

APPENDIX IV (Cont'd)

Self-Report Questionnaire

THE STATEMENTS LISTED BELOW WILL DESCRIBE SOME SPECIFIC CHARACTERISTICS ABOUT YOUR PARTICULAR JOB. RATE HOW TRUE EACH STATEMENT IS FOR YOUR JOB ACCORDING TO THE FOLLOWING SCALE:

DEFINITELY NOT TRUE OF MY JOB	1	2	3	4	5	6	7	EXTREMELY TRUE OF MY JOB
-------------------------------------	---	---	---	---	---	---	---	--------------------------------

READ EACH STATEMENT CAREFULLY AND CIRCLE THE NUMBER THAT BEST REFLECTS YOUR OPINION. PLEASE FILL IN ALL STATEMENTS.

CARD 02
COL. #

JOB CHARACTERISTICS

- | | | | | | | | |
|--|---|---|---|---|---|---|---|
| 1. CLEAR, PLANNED GOALS AND OBJECTIVES FOR MY JOB..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. I HAVE TO DO THINGS THAT SHOULD BE DONE DIFFERENTLY..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I KNOW I HAVE DIVIDED MY TIME PROPERLY..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. I RECEIVE AN ASSIGNMENT WITHOUT THE MANPOWER TO COMPLETE IT..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I KNOW WHAT MY RESPONSIBILITIES ARE..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I HAVE A GREAT DEAL OF INFLUENCE IN DECISIONS CONCERNING MY JOB..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. I HAVE TO BUCK A RULE OR POLICY IN ORDER TO CARRY OUT AN ASSIGNMENT..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. I WORK WITH TWO OR MORE GROUPS WHO OPERATE QUITE DIFFERENTLY..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. I DON'T HAVE MUCH SAY OR INFLUENCE WITH MY SUPERIORS..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. I KNOW EXACTLY WHAT IS EXPECTED OF ME..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. I RECEIVE INCOMPATIBLE REQUESTS FROM TWO OR MORE PEOPLE..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I FEEL CERTAIN ABOUT HOW MUCH AUTHORITY I HAVE..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. I DON'T HAVE MUCH SAY OR INFLUENCE WITH MY CO-WORKERS..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I DO THINGS THAT ARE APT TO BE ACCEPTED BY ONE PERSON AND NOT BY OTHERS..... | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX IV (Cont'd)

Self-Report Questionnaire

	DEFINITELY NOT TRUE OF MY JOB	1	2	3	4	5	6	7	EXTREMELY TRUE OF MY JOB
<u>CARD 02 (CONT'D)</u>									
<u>COL. #</u>									
15. I RECEIVE AN ASSIGNMENT WITHOUT ADEQUATE RESOURCES AND MATERIALS TO COMPLETE IT.....	1	2	3	4	5	6	7		
16. EXPLANATION IS CLEAR OF WHAT HAS TO BE DONE.	1	2	3	4	5	6	7		
17. I WORK ON UNNECESSARY THINGS.....	1	2	3	4	5	6	7		
18. I HAVE CONSIDERABLE INFLUENCE WITH OTHER PEOPLE IN THE ORGANIZATION.....	1	2	3	4	5	6	7		

PLEASE CHECK THE APPROPRIATE ANSWER TO EACH OF THE FOLLOWING STATEMENTS:

	HIGHLY ROUTINE	SOME- WHAT ROUTINE	SOME- WHAT NON- ROUTINE	HIGHLY NON- ROUTINE
19. WOULD YOU DESCRIBE YOUR JOB AS BEING HIGHLY ROUTINE, SOMEWHAT ROUTINE, SOMEWHAT NON-ROUTINE OR HIGHLY NON-ROUTINE?.....	1 _____	2 _____	3 _____	4 _____
	DEFIN- ITELY TRUE	MORE TRUE THAN FALSE	MORE FALSE THAN TRUE	DEFIN- ITELY FALSE
20. PEOPLE HERE DO THE SAME JOB IN THE SAME WAY EVERY DAY.....	1 _____	2 _____	3 _____	4 _____
21. ONE THING PEOPLE LIKE AROUND HERE IS THE VARIETY OF WORK...	1 _____	2 _____	3 _____	4 _____
22. MOST JOBS HAVE SOMETHING NEW HAPPENING EVERY DAY.....	1 _____	2 _____	3 _____	4 _____
23. THERE IS SOMETHING DIFFERENT TO DO EVERY DAY.....	1 _____	2 _____	3 _____	4 _____

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CIRCLE THE NUMBER WHICH, IN YOUR OPINION, BEST DESCRIBES YOUR ORGANIZATION. PLEASE FILL IN ALL STATEMENTS.

DEFINITELY NOT TRUE 1 2 3 4 5 6 7 EXTREMELY TRUE

CARD 02 (CONT'D)

COL. #

CHARACTERISTIC

- 24. THE ORGANIZATION WORKS TO A WRITTEN LAW..... 1 2 3 4 5 6 7
25. HEATED ARGUMENTS ARE COMMON IN THIS ORGANIZATION..... 1 2 3 4 5 6 7
26. PERFORMANCE APPRAISALS ARE BASED ON WRITTEN PERFORMANCE STANDARDS OR CRITERIA..... 1 2 3 4 5 6 7
27. GRUDGES ARE HELD FOR LONG PERIODS..... 1 2 3 4 5 6 7
28. STANDARDS OF PERFORMANCE AND CONTROL SYSTEMS HAVE BEEN ESTABLISHED IN WRITING..... 1 2 3 4 5 6 7
29. QUARRELS AND DISAGREEMENTS OCCUR AT MEETINGS 1 2 3 4 5 6 7
30. MY DUTIES, AUTHORITY AND ACCOUNTABILITY ARE DOCUMENTED IN POLICIES, PROCEDURES OR JOB DESCRIPTIONS..... 1 2 3 4 5 6 7
31. OBSTACLES ARE PLACED IN MY WAY BY THOSE WHO DO NOT AGREE WITH ME..... 1 2 3 4 5 6 7
32. MY IMMEDIATE SUPERIOR IS THE ONLY ONE WHO CAN REQUIRE THAT I REVISE MY PRIORITIES..... 1 2 3 4 5 6 7
33. IT OFTEN SEEMS LIKE AN ARMED CAMP AROUND HERE..... 1 2 3 4 5 6 7
34. THE CHAIN OF COMMAND IS HARDLY EVER BYPASSED IN ASSIGNING TASKS..... 1 2 3 4 5 6 7
35. SUBORDINATES RARELY TALK BACK TO SUPERIORS.. 1 2 3 4 5 6 7
36. WRITTEN PROCEDURES AND GUIDES ARE AVAILABLE. 1 2 3 4 5 6 7
37. PEOPLE INTERFERE WITH EACH OTHER'S ACTIVITIES..... 1 2 3 4 5 6 7
38. SCHEDULES, PROGRAMS OR PROJECT SPECIFICATIONS ARE USED TO GUIDE WORK..... 1 2 3 4 5 6 7
39. SUPERVISORS "CHEW OUT" SUBORDINATES WHEN PROBLEMS ARISE..... 1 2 3 4 5 6 7

APPENDIX IV (Cont'd)

Self-Report Questionnaire

	DEFINITELY NOT TRUE	1	2	3	4	5	6	7	EXTREMELY TRUE
<u>CARD 03 (CONT'D)</u>									
<u>COL. #</u>									
40. CONFLICTS SEEM TO SPREAD AND AFFECT MANY AREAS IN THE ORGANIZATION.....	1	2	3	4	5	6	7		
41. WRITTEN DOCUMENTS (SUCH AS BUDGETS, SCHEDULES, PROJECT SPECIFICATIONS, PROCEDURES OR PROGRAM PLANS, JOB DESCRIPTORS, ETC.) ARE USED AS AN INTEGRAL PART OF THE JOB.....	1	2	3	4	5	6	7		
42. THINGS ARE FOULED UP ON MY JOB WHEN SOMEONE ELSE FAILS TO DO THEIR JOB.....	1	2	3	4	5	6	7		
43. I RECEIVE ASSIGNMENTS FROM OUTSIDE THE CHAIN OF COMMAND.....	1	2	3	4	5	6	7		
44. COMPLAINTS AND GRIPES FLARE INTO LOUD VOICES AND SHOUTING MATCHES.....	1	2	3	4	5	6	7		
45. THERE IS SOME QUESTION ABOUT WHO IS REALLY RUNNING MY GROUP.....	1	2	3	4	5	6	7		
46. SUPERVISORS BYPASS LEVELS BELOW THEM IN ASSIGNING WORK.....	1	2	3	4	5	6	7		
47. BACK-STABBING HARDLY EVER OCCURS IN THIS COMPANY.....	1	2	3	4	5	6	7		
48. SOMEONE IN ADDITION TO MY IMMEDIATE SUPERIOR GIVES ME DIRECT ORDERS.....	1	2	3	4	5	6	7		
49. PEOPLE EXPRESS RESENTMENTS BY FAILING TO DO WHAT IS EXPECTED OF THEM.....	1	2	3	4	5	6	7		
50. THE CHAIN OF COMMAND IS CLEAR TO EVERYONE...	1	2	3	4	5	6	7		
51. A LOT OF STRUGGLING AND SQUABBLING GOES ON BEHIND THE SCENES.....	1	2	3	4	5	6	7		

APPENDIX IV (Cont'd)

Self-Report Questionnaire

THE FOLLOWING IS A STUDY OF WHAT THE GENERAL PUBLIC THINKS AND FEELS ABOUT A NUMBER OF IMPORTANT SOCIAL AND PERSONAL QUESTIONS. THE BEST ANSWER TO EACH STATEMENT BELOW IS YOUR PERSONAL OPINION. WE HAVE TRIED TO COVER MANY DIFFERENT AND OPPOSING POINTS OF VIEW; YOU MAY FIND YOURSELF AGREEING STRONGLY WITH SOME OF THE STATEMENTS, DISAGREEING JUST AS STRONGLY WITH OTHERS, AND PERHAPS, UNCERTAIN ABOUT OTHERS. WHETHER YOU AGREE OR DISAGREE WITH ANY STATEMENT, YOU CAN BE SURE THAT MANY PEOPLE FEEL THE SAME AS YOU DO.

PLEASE MARK EACH STATEMENT IN THE RIGHT MARGIN ACCORDING TO HOW MUCH YOU AGREE OR DISAGREE WITH IT, AS INDICATED BELOW:

- 6 = I AGREE VERY MUCH
- 5 = I AGREE ON THE WHOLE
- 4 = I AGREE A LITTLE
- 3 = I DISAGREE A LITTLE
- 2 = I DISAGREE ON THE WHOLE
- 1 = I DISAGREE VERY MUCH

PLEASE MARK ALL STATEMENTS

CARD 03
COL. #

- 1. THE UNITED STATES AND RUSSIA HAVE JUST ABOUT NOTHING IN COMMON..... _____
- 2. THE HIGHEST FORM OF GOVERNMENT IS A DEMOCRACY, AND THE HIGHEST FORM OF DEMOCRACY IS A GOVERNMENT RUN BY THOSE WHO ARE MOST INTELLIGENT..... _____
- 3. EVEN THOUGH FREEDOM OF SPEECH FOR ALL GROUPS IS A WORTHWHILE GOAL, IT IS UNFORTUNATELY NECESSARY TO RESTRICT THE FREEDOM OF CERTAIN POLITICAL GROUPS..... _____
- 4. IT IS ONLY NATURAL THAT A PERSON WOULD HAVE A MUCH BETTER ACQUAINTANCE WITH IDEAS HE BELIEVES IN THAN WITH IDEAS HE OPPOSES..... _____
- 5. MAN, ON HIS OWN, IS A HELPLESS AND MISERABLE CREATURE.... _____
- 6. FUNDAMENTALLY, THE WORLD WE LIVE IN IS A PRETTY LONESOME PLACE..... _____
- 7. MOST PEOPLE JUST DON'T GIVE A "DAMN" FOR OTHERS..... _____
- 8. I'D LIKE IT IF I COULD FIND SOMEONE WHO WOULD TELL ME HOW TO SOLVE MY PERSONAL PROBLEMS..... _____
- 9. IT IS ONLY NATURAL FOR A PERSON TO BE RATHER FEARFUL OF THE FUTURE..... _____
- 10. THERE IS SO MUCH TO BE DONE AND SO LITTLE TIME TO DO IT IN..... _____
- 11. ONCE I GET WOUND UP IN A HEATED DISCUSSION, I JUST CAN'T STOP..... _____

APPENDIX IV (Cont'd)

Self-Report Questionnaire

6 = I AGREE VERY MUCH	3 = I DISAGREE A LITTLE
5 = I AGREE ON THE WHOLE	2 = I DISAGREE ON THE WHOLE
4 = I AGREE A LITTLE	1 = I DISAGREE VERY MUCH

CARD 03 (CONT'D)

COL. #

12. IN A DISCUSSION, I OFTEN FIND IT NECESSARY TO REPEAT MYSELF SEVERAL TIMES TO MAKE SURE I AM BEING UNDERSTOOD.. _____
13. IN A HEATED DISCUSSION, I GENERALLY BECOME SO ABSORBED IN WHAT I AM GOING TO SAY, THAT I FORGET TO LISTEN TO WHAT THE OTHERS ARE SAYING..... _____
14. IT IS BETTER TO BE A DEAD HERO THAN A LIVE COWARD..... _____
15. WHILE I DON'T LIKE TO ADMIT THIS, EVEN TO MYSELF, MY SECRET AMBITION IS TO BECOME A GREAT MAN, LIKE EINSTEIN, OR BEETHOVEN, OR SHAKESPEARE..... _____
16. THE MAIN THING IN LIFE IS FOR A PERSON TO WANT TO DO SOMETHING IMPORTANT..... _____
17. IF GIVEN THE CHANCE, I WOULD DO SOMETHING OF GREAT BENEFIT TO THE WORLD..... _____
18. IN THE HISTORY OF MANKIND, THERE HAVE PROBABLY BEEN JUST A HANDFUL OF REALLY GREAT THINKERS..... _____
19. THERE ARE A NUMBER OF PEOPLE I HAVE COME TO HATE BECAUSE OF THE THINGS THEY STAND FOR..... _____
20. A MAN WHO DOES NOT BELIEVE IN SOME GREAT CAUSE HAS NOT REALLY LIVED..... _____
21. IT IS ONLY WHEN A PERSON DEVOTES HIMSELF TO AN IDEAL OR CAUSE THAT LIFE BECOMES MEANINGFUL..... _____
22. OF ALL THE DIFFERENT PHILOSOPHIES WHICH EXIST IN THIS WORLD, THERE IS PROBABLY ONLY ONE THAT IS CORRECT..... _____
23. A PERSON WHO GETS TOO ENTHUSIASTIC ABOUT TOO MANY CAUSES IS LIKELY TO BE A PRETTY "WISHY-WASHY" SORT OF PERSON.... _____
24. TO COMPROMISE WITH OUR POLITICAL OPPONENTS IS DANGEROUS BECAUSE IT USUALLY LEADS TO THE BETRAYAL OF OUR OWN SIDE. _____
25. WHEN IT COMES TO DIFFERENCES OF OPINION IN RELIGION, WE MUST BE CAREFUL NOT TO COMPROMISE WITH THOSE WHO BELIEVE DIFFERENTLY FROM THE WAY WE DO..... _____
26. IN TIMES LIKE THESE, A PERSON MUST BE PRETTY SELFISH IF HE CONSIDERS PRIMARILY HIS OWN HAPPINESS..... _____
27. THE WORST CRIME A PERSON COULD COMMIT IS TO ATTACK PUBLICALLY THE PEOPLE WHO BELIEVE IN THE SAME THINGS HE DOES..... _____

APPENDIX IV (Cont'd)

Self-Report Questionnaire

- | | |
|--------------------------|-----------------------------|
| 6 = I AGREE VERY MUCH | 3 = I DISAGREE A LITTLE |
| 5 = I AGREE ON THE WHOLE | 2 = I DISAGREE ON THE WHOLE |
| 4 = I AGREE A LITTLE | 1 = I DISAGREE VERY MUCH |

CARD 03 (CONT'D)

COL. #

- 28. IN TIMES LIKE THESE, IT IS OFTEN NECESSARY TO BE MORE ON GUARD AGAINST IDEAS PUT OUT BY PEOPLE OR GROUPS IN ONE'S OWN CAMP THAN BY THOSE IN THE OPPOSING CAMP..... _____
- 29. A GROUP WHICH TOLERATES TOO MUCH DIFFERENCES OF OPINION AMONG ITS OWN MEMBERS CANNOT EXIST FOR LONG..... _____
- 30. THERE ARE TWO KINDS OF PEOPLE IN THIS WORLD: THOSE WHO ARE FOR THE TRUTH AND THOSE WHO ARE AGAINST THE TRUTH.... _____
- 31. MY BLOOD BOILS WHENEVER A PERSON STUBBORNLY REFUSES TO ADMIT HE'S WRONG..... _____
- 32. A PERSON WHO THINKS PRIMARILY OF HIS OWN HAPPINESS IS BENEATH CONTEMPT..... _____
- 33. MOST OF THE IDEAS WHICH GET PRINTED NOWADAYS AREN'T WORTH THE PAPER THEY ARE PRINTED ON..... _____
- 34. IN THIS COMPLICATED WORLD OF OURS, THE ONLY WAY WE CAN KNOW WHAT'S GOING ON IS TO RELY ON LEADERS OR EXPERTS WHO CAN BE TRUSTED..... _____
- 35. IT IS OFTEN DESIREABLE TO RESERVE JUDGEMENT ABOUT WHAT'S GOING ON UNTIL ONE HAS HAD A CHANCE TO HEAR THE OPINIONS OF THOSE ONE RESPECTS..... _____
- 36. IN THE LONG RUN, THE BEST WAY TO LIVE IS TO PICK FRIENDS AND ASSOCIATES WHOSE TASTES AND BELIEFS ARE THE SAME AS ONE'S OWN..... _____
- 37. THE PRESENT IS ALL TOO OFTEN FULL OF UNHAPPINESS. IT IS ONLY THE FUTURE THAT COUNTS..... _____
- 38. IF A MAN IS TO ACCOMPLISH HIS MISSION IN LIFE, IT IS SOMETIMES NECESSARY TO GAMBLE "ALL OR NOTHING AT ALL".... _____
- 39. UNFORTUNATELY, A GOOD MANY PEOPLE WITH WHOM I HAVE DISCUSSED IMPORTANT SOCIAL AND MORAL PROBLEMS DON'T REALLY UNDERSTAND WHAT'S GOING ON..... _____
- 40. MOST PEOPLE JUST DON'T KNOW WHAT'S GOOD FOR THEM..... _____

APPENDIX IV (Cont'd)

Self-Report Questionnaire

BELOW YOU SEE DESCRIPTIONS OF SEVEN WAYS IN WHICH PEOPLE IN ORGANIZATIONS CAN TRY TO SETTLE DIFFERENCES THAT ARISE DURING THE COURSE OF WORK. PLEASE READ THE DEFINITION GIVEN FOR EACH METHOD.

PROBLEM SOLVING

OPEN, TRUSTING ANALYSIS AND DISCUSSION WITH OTHERS BASED UPON THE RECOGNITION OF A COMMON PURPOSE, EMPLOYING FACTS AND REASON AND DEDICATED TO FINDING THE BEST SOLUTION POSSIBLE.

AVOIDING

AVOIDING FIGHTS, WITHDRAWAL FROM DISAGREEMENTS OR REFUSING TO DISCUSS A CONTROVERSIAL ISSUE.

BARGAINING

NEGOTIATING WITH THOSE HOLDING OPPOSING POSITIONS, MAKING CONCESSIONS, ISSUING THREATS AND EXCHANGING FAVORS IN ATTEMPTS TO ARRIVE AT A SATISFACTORY COMPROMISE.

SMOOTHING

SMOOTHING OVER QUARRELS BY CALMING DOWN HEATED DISCUSSIONS AND APPEALING TO PERSONAL FRIENDSHIP WHILE MINIMIZING THE PROBLEM ITSELF.

FORCING

FORCING, ORDERING OR OTHERWISE COMPELLING OTHERS TO ADOPT YOUR OWN SOLUTION USING AUTHORITY OR OTHER FORCES AT YOUR COMMAND.

PERSUASION

PERSUADING OTHERS TO ACCEPT YOUR OWN VIEWS THROUGH HONEST DISCUSSION, CONVINCING SPEECH AND ALL OF YOUR POWERS OF LOGICAL ARGUMENT.

FORMALIZATION

ESTABLISHING FORMAL, WRITTEN RULES AND PROCEDURES TO DEAL WITH JOB PROBLEMS AND ADHERING TO SUCH GUIDELINES WHEN PROBLEMS ACTUALLY ARISE.

WE WOULD LIKE TO KNOW HOW SIMILAR YOU FEEL THESE SEVEN METHODS ARE - ONE TO ANOTHER. TO MAKE THIS EASIER FOR YOU THEY ARE SHOWN TO YOU ONE PAIR AT A TIME. USE THE SCALE ALONGSIDE EACH PAIR AS FOLLOWS: THE MORE SIMILAR YOU FEEL THE METHODS ARE, THE LARGER THE NUMBER YOU WOULD CHOOSE. THE LESS SIMILAR YOU FEEL THEY ARE, THE SMALLER THE NUMBER YOU'D CHOOSE. PLEASE CIRCLE AN ANSWER FOR EACH PAIR. USE THE FOLLOWING SCALE:

NOT AT ALL SIMILAR 1 2 3 4 5 6 7 ALMOST IDENTICAL

CARD 03 (CONT'D)
COL. #

41. PROBLEM SOLVING - AVOIDING..... 1 2 3 4 5 6 7

APPENDIX IV (Cont'd)

Self-Report Questionnaire

CARD 03 (CONT'D) COL. #	NOT AT ALL SIMILAR							ALMOST IDENTICAL
	1	2	3	4	5	6	7	
42. PROBLEM SOLVING - BARGAINING.....	1	2	3	4	5	6	7	
43. PROBLEM SOLVING - SMOOTHING.....	1	2	3	4	5	6	7	
44. PROBLEM SOLVING - FORCING.....	1	2	3	4	5	6	7	
45. PROBLEM SOLVING - PERSUASION.....	1	2	3	4	5	6	7	
46. PROBLEM SOLVING - FORMALIZATION.....	1	2	3	4	5	6	7	
47. AVOIDING - BARGAINING.....	1	2	3	4	5	6	7	
48. AVOIDING - SMOOTHING.....	1	2	3	4	5	6	7	
49. AVOIDING - FORCING.....	1	2	3	4	5	6	7	
50. AVOIDING - PERSUASION.....	1	2	3	4	5	6	7	
51. AVOIDING - FORMALIZATION.....	1	2	3	4	5	6	7	
52. BARGAINING - SMOOTHING.....	1	2	3	4	5	6	7	
53. BARGAINING - FORCING.....	1	2	3	4	5	6	7	
54. BARGAINING - PERSUASION.....	1	2	3	4	5	6	7	
55. BARGAINING - FORMALIZATION.....	1	2	3	4	5	6	7	
56. SMOOTHING - FORCING.....	1	2	3	4	5	6	7	
57. SMOOTHING - PERSUASION.....	1	2	3	4	5	6	7	
58. SMOOTHING - FORMALIZATION.....	1	2	3	4	5	6	7	
59. FORCING - PERSUASION.....	1	2	3	4	5	6	7	
60. FORCING - FORMALIZATION.....	1	2	3	4	5	6	7	
61. PERSUASION - FORMALIZATION.....	1	2	3	4	5	6	7	

APPENDIX IV (Cont'd)

Self-Report Questionnaire

NOW, WE'D LIKE TO KNOW WHICH OF THESE SEVEN METHODS OF SETTLING DIFFERENCES YOU YOURSELF MOST PREFER TO USE. BELOW IS A LIST OF THE SEVEN METHODS. JUST PLACE A 1 NEXT TO THE METHOD YOU MOST PREFER TO USE. THEN INDICATE A 2 FOR THE METHOD YOU NEXT MOST PREFER, AND SO ON UNTIL YOU PUT THE NUMBER 7 NEXT TO THE METHOD YOU LEAST PREFER TO USE. MAKE SURE TO PLACE A NUMBER BY EACH METHOD.

- | <u>COL. #</u> | | |
|---------------|-----------------|-------|
| 62. | SMOOTHING | _____ |
| 63. | FORCING | _____ |
| 64. | PROBLEM SOLVING | _____ |
| 65. | FORMALIZATION | _____ |
| 66. | AVOIDING | _____ |
| 67. | BARGAINING | _____ |
| 68. | PERSUASION | _____ |

FINALLY, WE'D LIKE YOU TO RANK THE SEVEN METHODS AGAIN, BUT THIS TIME IN TERMS OF WHAT METHOD YOU FEEL YOUR MANAGEMENT (SUPERVISORS) PREFERS TO USE. JUST PLACE A 1 ALONGSIDE THE METHOD YOU FEEL YOUR MANAGEMENT MOST PREFERS TO USE, A 2 BESIDE THE METHOD THEY NEXT PREFER TO USE AND SO ON UNTIL YOU PLACE A 7 BESIDE THE METHOD YOU FEEL THEY LEAST PREFER TO USE. PLEASE MAKE SURE THAT YOU RANK ALL SEVEN METHODS.

CARD 03 (CONT'D)

- | <u>COL. #</u> | | |
|---------------|-----------------|-------|
| 69. | SMOOTHING | _____ |
| 70. | FORCING | _____ |
| 71. | PROBLEM SOLVING | _____ |
| 72. | FORMALIZATION | _____ |
| 73. | AVOIDING | _____ |
| 74. | BARGAINING | _____ |
| 75. | PERSUASION | _____ |

THANK YOU FOR YOUR TIME AND INTEREST IN COMPLETING THIS LONG AND DEMANDING QUESTIONNAIRE. I HOPE YOU WILL FIND THE EXPERIENCE HELPPFUL IN THINKING ABOUT YOUR JOB AND YOUR ORGANIZATION. I SINCERELY APPRECIATE YOUR EFFORTS.

Appendix V

Mean Scale Scores by Supervisory Group
for all Rated Supervisory Conflict Management
Scales and Subordinate Conflict Indices
(n = 41)

# of Subs.	<u>Rated Supervisory</u>					<u>Subordinate</u>			
	Prob	Barg	Force	Smooth	Avoid	Adh to C of C	Adh to Rules	Role Conf	Overt Conf
<u>Social Service Sub-Sample</u>									
10	1.02	.09	.22	.23	-1.16	.32	.51	.29	.08
5	.68	-.45	-.19	.03	-.11	-.52	-.62	.19	-.01
7	1.01	.09	-.55	.97	-.21	.42	.56	-.95	-.65
2	1.50	.45	-.75	1.75	-.40	.32	.67	.32	1.33
9	.60	-.47	-1.09	.09	-.52	.22	.06	-.49	-.35
6	.81	-.87	-.75	1.14	-.87	1.24	-.73	-.02	-.10
2	1.33	.45	.99	.73	1.01	1.24	1.63	.08	.17
2	.02	.57	-.55	.84	-.75	-1.83	-.52	.32	1.25
5	.02	-.15	1.09	-.98	-.28	-1.83	.13	.40	1.53
1	.02	-.39	2.94	-.18	-.75	-1.21	.77	.14	-.31
1	-.67	1.42	-.96	-.78	2.76	-1.37	.88	.26	1.29
1	.98	1.90	.37	1.04	1.12	-.60	1.53	-.59	-.64
11	-.32	-1.35	-.55	-1.79	-.75	-.91	-.73	.73	.11
2	.89	-1.11	-1.16	1.24	-.52	2.46	1.20	-.83	-1.04
12	-.15	-.87	-.34	-.78	-.75	-.91	-.95	-.17	-.25
3	.37	.82	.27	-.18	.18	.32	-.95	-.43	-.77
1	-.15	-1.11	-.14	-1.59	-.28	-.91	-.72	.50	-.40
<u>Industrial Sub-Sample</u>									
5	1.25	-.66	.00	1.27	-.61	.30	.66	-.16	-.43
8	1.74	1.40	-.77	.99	-1.12	-.28	1.34	.62	-.23
5	-.68	-.73	1.54	-1.47	-1.12	.01	.11	.50	-.37
3	.38	.08	.71	-.13	.08	-1.35	.27	-1.07	-.42

Appendix V (Cont'd)

Mean Scale Scores by Supervisory Group
for all Rated Supervisory Conflict Management
Scales and Subordinate Conflict Indices
(n = 41)

# of Subs.	<u>Rated Supervisory</u>					<u>Subordinate</u>			
	Prob	Barg	Force	Smooth	Avoid	Adh to C of C	Adh to Rules	Role Conf	Overt Conf
7	.19	.94	1.06	-.13	-.33	-.43	.48	-.77	.78
3	.58	.79	-.97	.54	-1.56	-.57	.60	-.81	-.63
2	-.49	1.40	.96	-1.25	-.22	-.43	-.14	-1.65	-.48
2	1.16	1.09	.19	.09	-.45	.59	.84	.65	-.25
4	-1.65	-.13	-.39	.09	1.34	-1.73	-1.00	.54	.72
1	.38	-.73	1.54	-.80	-1.86	-.77	-1.94	.43	.91
5	-.07	.89	.32	-.43	-.22	-1.35	-.39	.23	.35
3	-1.29	.79	.13	-.58	.60	-.86	-1.53	1.05	.41
1	.96	.48	-.58	.09	-.67	.88	-.14	-1.43	-.67
6	-.39	-1.34	.58	-1.69	1.79	-1.15	-2.35	.05	-.11
6	.48	-.43	-.10	.21	-.67	.74	.84	1.20	-.11
<u>University Sub-Sample</u>									
8	-.85	.86	1.07	1.99	.16	-.76	1.85	.03	.25
5	2.04	-1.72	-1.74	1.76	-2.21	1.39	1.85	.44	.08
12	.70	-.04	-.10	-.78	-1.52	-1.03	-.59	-.04	.14
5	-1.02	-.30	.44	-.89	.26	-1.03	-.35	.92	.86
6	.35	-.17	-.81	1.10	.75	-.76	-.35	.11	.30
2	-1.53	-1.20	1.07	-2.66	-.04	-.22	-1.81	-1.08	-1.00
11	.70	.21	.60	.77	-.43	.85	-.11	-.57	-1.02
4	.10	.21	.21	-.01	.25	-.49	.87	-.53	.65
1	.01	-.17	-1.12	-1.11	.56	-.49	-.59	-.46	-2.24
Sample Means	.27	.01	.07	-.03	-.23	-.30	.03	-.05	-.03

Appendix VI
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Supervisory Personal Influence

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=14 Med Group: n=12 Hi Group: n=15
Scores: <.55 .55 TO 1.16 >1.16

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.24	.03	.49	.28	-.55*	-.14	-.01	-.14	-.32
Bargaining	.48	-.25	-.21	-.10	.05	-.27	.15	.54*	-.05
Forcing	.19	.02	-.02	-.12	.19	.00	.23	.44	-.21
Smoothing	-.43	.13	.21	.31	-.34	-.28	.14	.06	-.06
Avoiding	.13	-.11	-.67	.03	.21	-.10	.17	-.02	.20
Adherence to Chain of Command	-.29	-.26	-.36	-.06	-.57*	-.04	-.43	-.46	-.49
Adherence to Rules	.15	-.37	.23	.40	-.55*	-.06	.41	-.15	-.33
Personal Influence	-.02	.65	1.46	.07	-.12	.17	.44	.02	-.06
Non-Routinization	.52	.36	.76	.27	.60**	.69**	.55*	.59**	.55*
Dogmatism	.07	-.37	-.52	-.59**	.20	-.05	.09	.01	-.06
<u>Subordinate Conflict Indices:</u>									
Role Conflict	-.24	.01	-.09						
Overt Conflict	-.14	.15	-.07						

*** p <= .001
** p <= .01
* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Supervisory Non-Routinization

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=14 Med Group: n=13 Hi Group: n=14
Scores: <.43 .43 to .92 >.92

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.59	.36	-.06	.39	.25	-.36	.15	.13	-.16
Bargaining	.21	-.32*	.09	-.23	.34	-.50*	.15	.28	.23
Forcing	-.14	-.06	.26	-.05	-.34	.05	.52*	.08	-.33
Smoothing	.24	-.13	-.08	.16	.34	-.23	.14	.28	.14
Avoiding	-.24	-.60	-.13	.09	-.18	.03	-.13	-.09	.41
Adherence to Chain of Command	.22	-.36	-.58	.14	-.09	-.32	-.05	-.25	-.64***
Adherence to Rules	.27	-.22	.15	-.05	.07	.05	.14	-.04	.08
Personal Influence	.64	.72	.79	.02	.51*	.25	.27	.00	.05
Non-Routinization	-.43	.77	1.43	.19	.29	.11	.24	.15	.13
Dogmatism	-.22	-.17	-.34	-.47	-.27	-.14	.10	.17	-.04
<u>Subordinate Conflict Indices:</u>									
Role Conflict	-.45	.13	.27						
Overt Conflict	-.48	.04	.37						

*** p <= .001

** p <= .01

* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Supervisory Dogmatism - D Scale

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=13 Med Group: n=15 Hi Group: n=13
Scores: <-.74 -.74 TO .095 >.095

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.53	.34	-.07	-.16	-.33	-.01	-.16	-.24	-.07
Bargaining	-.11	.14	-.01	-.29	.19	-.49	.16	.22	.09
Forcing	-.26	.04	.42	.22	.35	-.39	.16	.45	-.40
Smoothing	.60	-.29	-.35	-.22	-.33	.18	.05	-.16	.26
Avoiding	-.52	-.11	-.09	.10	.00	-.03	.35	.16	-.04
Adherence to Chain of Command	-.19	-.14	-.61	.12	-.38	-.43	-.16	-.49	-.55*
Adherence to Rules	.38	.04	-.33	.02	-.13	-.21	-.05	-.01	.06
Personal Influence	1.01	.53	.65	-.28	.16	.48	-.12	.18	.16
Non-Routinization	.67	.58	.43	.58*	.28	.66***	.57*	.50*	.49
Dogmatism	-1.30	-.24	.81	-.33	.02	-.03	-.48	.51*	.12
<u>Subordinate Conflict Indices:</u>									
Role Conflict	.12	-.01	-.26						
Overt Conflict	.09	-.16	.00						

*** p <= .001

** p <= .01

* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Subordinate Personal Influence

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=15 Med Group: n=12 Hi Group: n=14
Scores: <-.27 -.27 TO .08 >.08

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.10	.65	.13	-.17	-.01	-.09	-.10	-.39	-.37
Bargaining	-.26	.01	.30	-.30	-.05	.03	.08	.37	.04
Forcing	.53	-.40	-.03	-.06	.03	-.34	.39	.23	-.17
Smoothing	-.60	.36	.25	-.21	.07	.35	.03	-.19	.31
Avoiding	-.27	-.43	-.02	-.23	-.05	.26	-.21	.33	.51*
Adherence to Chain of Command	-.38	.03	-.51	.01	-.46	-.29	-.20	-.78***	-.60**
Adherence to Rules	-.23	.27	.10	.06	.14	-.10	-.04	.10	-.17
Personal Influence	.74	.53	.86	.01	.44	.31	.25	.07	.34
Non-Routinization	.52	.92	.30	.66***	.37	.54*	.34	.54*	.55*
Dogmatism	-.39	-.05	-.34	-.39	-.22	-.21	-.10	-.05	.02
<u>Subordinate Conflict Indices:</u>									
Role Conflict	.23	-.10	-.30						
Overt Conflict	-.13	.31	-.23						

*** p <= .001

** p <= .01

* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Subordinate Non-Routinization

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=13 Med Group: n=13 Hi Group: n=15
Scores: <-.16 -.16 TO .10 >.10

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.33	.51	.01	-.24	-.43	-.19	-.31	-.02	-.05
Bargaining	.18	.09	-.20	-.31	-.20	.04	.06	.17	.40
Forcing	.02	.16	.02	-.01	-.09	.05	.33	.07	-.06
Smoothing	-.36	.14	.11	-.56*	.18	.06	-.22	.07	.23
Avoiding	-.09	-.24	-.36	.00	.18	.10	.04	.31	.22
Adherence to Chain of Command	-.54	-.03	-.34	-.03	-.29	-.29	-.38	-.44	-.60**
Adherence to Rules	-.13	.19	.02	-.35	.00	.10	-.06	.07	.06
Personal Influence	.60	.74	.80	-.05	.48	.22	.07	.01	.22
Non-Routinization	.19	.39	1.03	.59**	.51*	.32	.68***	.25	.40
Dogmatism	.02	-.10	-.65	.25	-.73***	-.08	.34	-.31	.11
<u>Subordinate Conflict Indices:</u>									
Role Conflict	-.20	-.10	.13						
Overt Conflict	-.19	-.14	.20						

*** p <= .001

** p <= .01

* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Subordinate Dogmatism - D Scale

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=14 Med Group: n=13 Hi Group: n=14
Scores: <-.20 -.20 TO .31 >.31

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.03	.54	.38	-.18	-.54*	-.05	-.34	-.77***	-.13
Bargaining	-.25	-.17	.26	-.10	-.26	-.21	.07	-.04	.16
Forcing	-.08	-.15	.50	-.09	.17	.20	-.04	.24	-.13
Smoothing	-.07	.23	.02	-.07	-.34	-.34	.22	-.54*	-.19
Avoiding	.00	-.37	-.30	.03	.00	.07	.20	.20	.38
Adherence to Chain of Command	-.13	-.37	-.27	-.32	-.15	-.10	-.55*	-.51*	-.48
Adherence to Rules	-.20	.09	.27	-.01	-.46	-.17	-.04	-.71***	-.04
Personal Influence	.48	1.09	.70	.34	.15	-.21	.55*	.04	-.73***
Non-Routinization	.49	.80	.54	.25	.73***	.56*	.38	.69***	.47
Dogmatism	-.29	-.81	-.20	-.26	-.31	-.26	-.13	-.13	-.10
<u>Subordinate Conflict Indices:</u>									
Role Conflict	-.04	-.18	.03						
Overt Conflict	-.25	-.06	.31						

*** p <= .001

** p <= .01

* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Subordinate Role Conflict

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=14 Med Group: n=13 Hi Group: n=14
Scores: <-.43 -.43 TO .29 >.29

Scale	Means			Correlations with Role Conflict			Correlations with Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.34	.32	.16	-.18	-.13	-.31	.04	-.38	-.14
Bargaining	.24	-.02	-.17	-.04	.18	.09	.33	.52*	.16
Forcing	-.04	.23	.00	.34	.06	.04	.43	-.34	.12
Smoothing	-.04	.12	-.17	-.05	-.06	-.23	.16	-.07	.20
Avoiding	-.19	.05	-.55	.13	.22	.32	-.12	.55*	.22
Adherence to Chain of Command	.02	-.40	-.51	.01	-.30	-.17	-.23	-.37	-.53*
Adherence to Rules	.21	-.04	-.07	-.01	-.28	-.06	.38	.34	-.30
Personal Influence	.49	.73	.92	-.03	.28	-.33	-.14	-.26	-.04
Non-Routinization	-.09	.65	1.08	-.34	.24	-.14	.24	.28	.33
Dogmatism	.01	-.46	-.36	-.34	-.11	-.24	.31	-.01	.07
<u>Subordinate Conflict Indices:</u>									
Role Conflict	-.86	.04	.62						
Overt Conflict	-.59	.04	.42						

*** p <= .001

** p <= .01

* p <= .05

Appendix VI (Cont'd)
Means and Zero Order Correlations
of Predictor Variables and Conflict Indices
Moderated by

Subordinate Overt Conflict

Score Cutoffs (by thirds of Frequency Distribution)

Lo Group: n=14 Med Group: n=13 Hi Group: n=14
Scores: <-.37 -.37 TO .14 >.14

Scale	Means			Correlations with Role Conflict			Overt Conflict		
	Lo	Med	Hi	Lo	Med	Hi	Lo	Med	Hi
<u>Supervisory:</u>									
Problem Solving	.31	.65	-.12	-.07	.21	-.42	.09	.13	.10
Bargaining	.06	-.41	.36	-.43	.21	-.27	.11	-.34	-.08
Forcing	.07	-.13	.24	.12	-.01	-.17	.45	-.30	-.22
Smoothing	.18	-.05	.14	-.12	.11	-.28	.12	-.30	-.28
Avoiding	.27	-.70	.23	-.11	-.14	.07	-.36	-.10	-.14
Adherence to Chain of Command	.05	-.12	-.83	-.12	.26	-.31	-.16	.06	-.40
Adherence to Rules	.03	.02	.03	-.03	.45	-.56*	.25	-.11	-.12
Personal Influence	.59	.92	.66	.19	-.11	.38	.44	.03	-.05
Non-Routinization	.26	.47	.94	.41	.48	.51*	.39	.45	.59**
Dogmatism	-.20	-.28	-.34	-.42	-.23	-.20	.03	.18	.18
<u>Subordinate Conflict Indices:</u>									
Role Conflict	-.64	.27	.24						
Overt Conflict	-.77	-.10	.77						

*** p <= .001
** p <= .01
* p <= .05

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