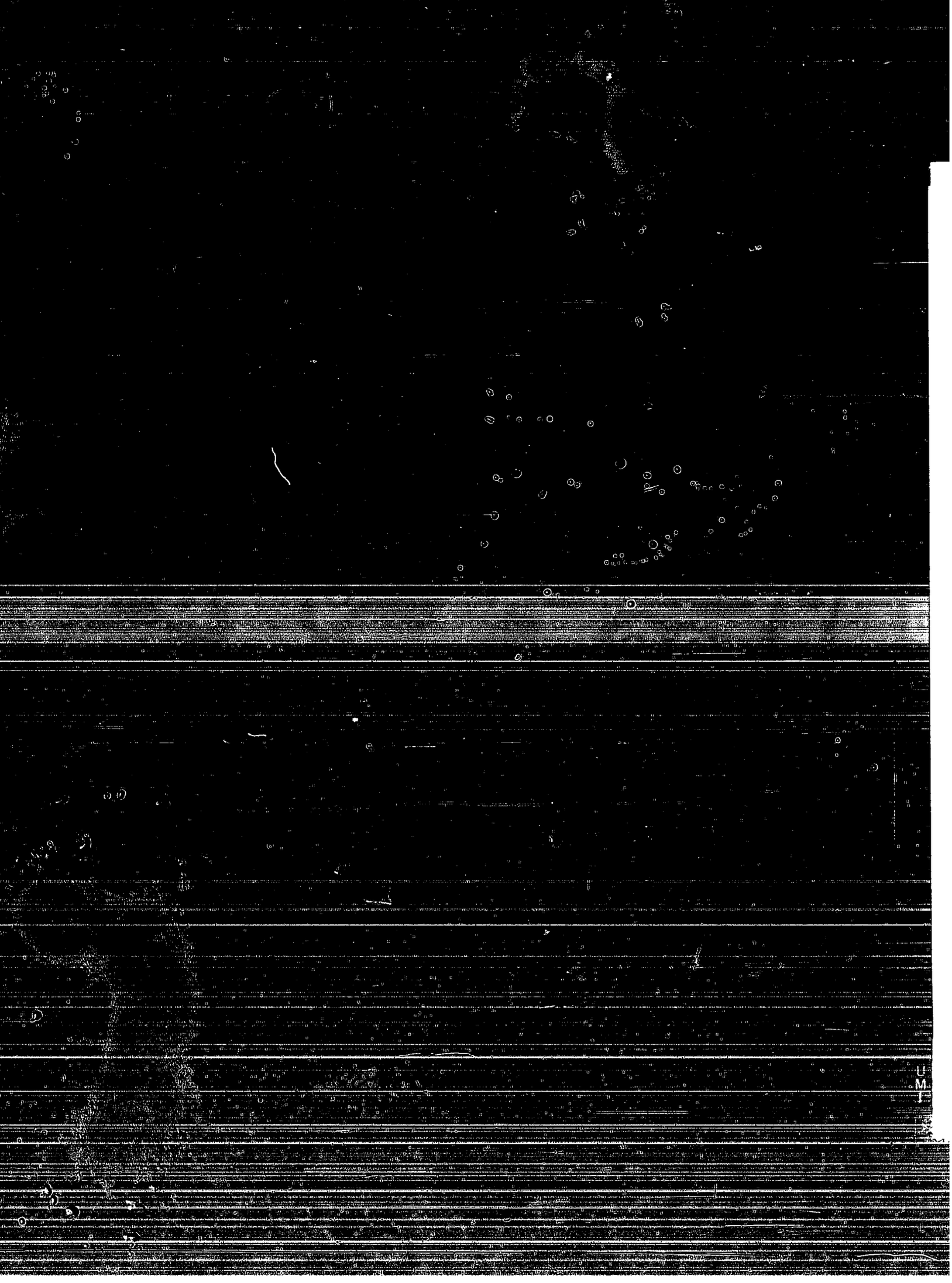


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THE UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE RELATIONSHIP BETWEEN SUPERVISORY COMMUNICATION STYLE AND AMBIGUITY IN SUPERIOR-SUBORDINATE COMMUNICATION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

DOCTOR OF PHILOSOPHY

by

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Norman, Oklahoma

1981

THE RELATIONSHIP BETWEEN SUPERVISORY COMMUNICATION STYLE

AND AMBIGUITY IN SUPERIOR-SUBORDINATE COMMUNICATION

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DEDICATION

To my dad, Kenny, and my daughters Allison and Kathleen

ACKNOWLEDGMENTS

I have many people to thank for a variety of reasons but I must start by giving special thanks to my dissertation advisor, Bonnie Johnson, who far exceeded the role of advisor. I thank her for believing in me, particularly during a time I was having trouble believing in myself.

Thanks go to my dear friends, Charline Burton and Jane Burman Holtem, who loved me, typed and proofread for me, and even provided homes away from home when I needed one.

Thanks also go to Karl Krayer who found time to listen and dry my tears despite the fact that he was also working on his dissertation. Finally, I would like to thank Brad and Velma Lashbrook for their continued support even though we are separated by miles. It takes more than miles to sever the bonds of friendship.

THE RELATIONSHIP BETWEEN SUPERVISORY COMMUNICATION STYLE AND AMBIGUITY IN SUPERIOR-SUBORDINATE COMMUNICATION

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This study was designed to understand better the relationship among supervisory communication style, role ambiguity and communication ambiguity. In addition, an intervening variable, understanding, was expected to provide an explanation for that relationship. Supervisory communication style was conceptualized as having three levels: traditional, problem-solving, and coorienting. Significant differences in role and communication ambiguity scores were predicted for superiors perceived as having different supervisory communication styles. Research questions were posed concerning the level of understanding shared by superiors and subordinates based on superiors' supervisory communication style. Finally, research questions were asked concerning the relationship between role and communication ambiguity and understanding.

Subjects for the study were personnel in a small, family-run bank in a large, midwestern city. Fifteen subjects were superiors and forty-five were subordinates. They completed questionnaires designed to measure supervisory communication style, role and communication ambiguity, and understanding.

The results indicated that problem-solving superiors were perceived by their subordinates as being more effective in reducing role ambiguity than superiors having other styles, and that problem-solving superiors shared a low degree of understanding with their subordinates.

Conversely, traditional superiors were perceived by their subordinates as being lower in communication ambiguity than the other styles and also shared higher understanding with their subordinates than the other styles. This relationship is explained by the fact that traditional superiors share higher understanding with subordinates than superiors having the other styles and that understanding is negatively correlated with communication ambiguity.

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THE RELATIONSHIP BETWEEN SUPERVISORY COMMUNICATION STYLE AND AMBIGUITY IN SUPERIOR-SUBORDINATE COMMUNICATION

CHAPTER I

INTRODUCTION

> The human race is a myriad of refractive surfaces staining the white radiance of eternity. Each surface refracts the refraction of refractions of refractions. Each self refracts the refractions of other's refractions of self's refractions of others' refractions...(Laing, Phillipson, and Lee, 1966, p. 3).

Associated with the myriad "refractions" of life is the potential for misunderstanding. An important role of communication is to put into clearer focus the fuzzy images we reflect. The importance of communication should not be underestimated. Communication is critical in an organization.

The study reported here was conducted to ascertain if certain supervisory communication styles (the independent variable) are more effective than others in reducing role ambiguity (the dependent variable) for subordinates. A second dependent variable, understanding between superiors and subordinates, was studied to see if it would provide an

explanation for the relationship between style and role ambiguity. After examining the nature of the problem addressed in this project, this chapter presents the conceptualization of variables, including definitions, and a review of the previous investigations of these variables. The hypotheses and rationale are in the final section.

Statement of the Problem

In this study I examined some "refractions" of perceptions. First, measures of how supervisors perceived their own style in communicating with their subordinates were obtained. Details of this measure are discussed in the following chapter. In essence, supervisors were asked to rank order three possible communicative responses to certain supervisory situations. Subordinates of those superiors were then asked to describe the extent to which they perceive that their own organizational roles are ambiguous. The measure used here was a well established one frequently used in other studies of role ambiguity. Subordinates were also asked to describe the extent to which they perceive their superiors' messages to be ambiguous. A measure of "communicative ambiguity" developed by Krayer and myself (1980) for a previous study was used.

"Refractions" were examined by comparing a superiors' self-reported style with the measures of role and communication ambiguity filled out by his or her subordinates. The question explored was, can the superior's description of his or her communication behaviors be used to predict the level of role ambiguity reported by subordinates? Can the superiors description of his or her communication behaviors be used to

predict how ambiguously his or her subordinates will report the superiors communication to be? I hypothesized that, indeed, the communicative style of the superior would be statistically related to the role and communicative ambiguity reported by the supordinate.

Although no previous studies have investigated a relationship between supervisory communicative style and how subordinates perceive both their own role ambiguity or their superior's communicative ambiguity, it is reasonable to expect to find such relationships because each style is associated with a distinct set of behaviors. The styles, which are more fully described later in this chapter are "traditional", "problem-solving", and "coorienting". A traditional superior uses downward communication; a problem-solver uses two-way communication; a coorienter uses repetition and restatement. These different supervisor styles are likely to lead to differences in superior-subordinate relationship. For example, a problem-solver is more likely to have friendly, open relationships with subordinates than a traditional superior. These relationships, in turn, have an impact on the way subordinates perceive their roles and on the way subordinates perceive their superiors' job related messages.

Because I take Laing's notion of "refractions" of perceptions seriously as a key to appreciating human behavior, more than the relationship between a superior's self-perceptions and subordinates' perceptions of their own roles and their superior's messages were examined. The relationship between the superiors self-reported communicative style and a measure of "understanding" of work related topics was investigated. The variable called "understanding" was constructed by examining how accurately

superiors and subordinates predict how each other will answer questions about work-related matters. If people are to have a good working relationship, they need to "understand"--predict-- what the other perceives about matters such as what the critical work problems are and how formally/informally decisions are made. The understanding measure is based directly on Laing's concept of refractions of perceptions. For example, it asks superiors to report their perceptions of what subordinates perceive the work climate to be.

The study of "understanding" in work relationships is fairly new, and therefore, no hypotheses about understanding were posed. Rather understanding was conceived as an "intervening" variable. I asked the research questions:

> Is a supervisor's perception of his communicative style a predictor of the level of understanding that is shared by the supervisor and the subordinate?
>
> Is the level of understanding of work related matters between a superior and a subordinate statistically related to the subordinate's perceptions of his or her role ambiguity?
>
> Is the level of understanding of work related matters statistically related to the subordinate's perceptions of the ambiguity of his or her supervisor's communication?

Investigating the relationship between understanding and role ambiguity promises to add conceptual depth to the concept of role ambiguity. To date, researchers have been content to measure role ambiguity as a

simple direct perception of the subordinate. A subordinate responds to questions such as "I know exactly what is expected of me." Measures to date have not gone beyond the self-report to investigate whether or not subordinates do know what is expected of them. The understanding measure developed for this investigation does exactly that. For example, one item asks:

> To what extent are friendships used for obtaining information quickly in this organization:
>
> This is what I would say:
>
> This is what my supervisor would say:

Understanding between superiors and subordinates is high if they accurately predict what the other would say. If superiors and subordinates have a mutual understanding on this item, for example, then subordinates should be clear about whether they are expected to build friendships in order to obtain information quickly in the organization.

Role ambiguity has always been measured as a perceptual variable. This dissertation makes the argument that the traditional measure is too simple. Role ambiguity can be measured as something more than the paper and pencil self-report of an organizational member, although that direct measure is important as an indirect indication of the members' attitude toward their roles. In this study I examined whether it also makes sense to measure accuracy of mutual perception (understanding) as a variable related to role ambiguity.

Ambiguity is an important variable for organizational communication researchers. There is ample evidence that role ambiguity is significantly related to outcomes relevant to organizations.[1] For example,

several studies have found statistically significant negative correlations between measures of role ambiguity and job satisfaction (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Lyons, 1971; Johnson & Stinson, 1975; Keller, 1975; and Miles, 1975). Anxiety, stress, and tension appear to be outcomes of role ambiguity. Kahn, et. al. (1964) report a significant correlation ($r = .51$, $p < .01$) between role ambiguity and tension. A study of insurance company employees reveals that role ambiguity is a source of anxiety (Wispe' & Thayer, 1957).

Communication ambiguity, a measure of perceived message clarity, (Bacon & Krayer, 1980) has also been shown to be correlated with negative organizational outcomes. Bacon (1980) found a strong negative correlation ($\underline{r} = -.84$, $p < .001$) between subordinates' satisfaction with their supervision and their perceptions of their supervisor's communication ambiguity, and a moderate negative correlation ($\underline{r} = -.49$, $p < .001$) between job dissatisfaction and communication ambiguity.

Outcomes like stress, turnover, job dissatisfaction, tension, and anxiety may cost organizations a great deal of money and tend to reduce overall levels of productivity. Reducing role and communication ambiguity may be a way to reduce these costs. Much research is yet to be conducted to determine if supervisory style is related to role ambiguity, which in turn can contribute to negative organizational outcomes. This study takes the first step by examining the relationship between supervisory communication style and role ambiguity.

The rationale connecting role ambiguity and communication ambiguity has not been made in the literature. In this study I propose that rationale. It takes three forms. First and most basic, a relationship

between the concept of role ambiguity and communication ambiguity is proposed. In Bacon's and Krayer's study of hospital workers a statistical relationship between the two measures was found ($r = -.49$, $p < .01$). That investigation, with some refinements,is being repeated here. The variable of understanding provides insight into a second relevance of communication for role ambiguity. Clear communication between supervisors and subordinates should produce understanding. Understanding, in turn, should lead to subordinates reporting low role ambiguity. Although understanding is "only" an intervening variable in this relationale, it may be more important to organizations than ambiguity. Recall from previous paragraphs that role ambiguity is an attitudinal measure; understanding is a direct measure of a condition of work. Understanding measures the extent to which supervisors and subordinates know the work-related perceptions of the other. This research investigates the relationship between understanding and how subordinates perceive their superiors' messages. In communication we preach the importance of clarity of messages. This investigation provides the possibility for falsification of that proposition. If it were found that high levels of understanding were related to high levels of perceived communication ambiguity, we would have reason to question the importance of clear messages, at least in supervisory communication. On the other hand, a positive statistical relationship between understanding and perceived message ambiguity offers evidence of the importance of the message skills we teach.

The third and most direct rationale relating communication and role ambiguity is that communicative behaviors can directly reduce role

ambiguity. This research asks the question: does a certain communication style of the supervisor predict the level of subordinate role ambiguity? The correlational design employed here cannot be used for causal inferences. But it can establish whether a causal investigation is warranted. Hence, the research results of this investigation have pragmatic implications for organizational communication instruction. The measures of communication style used in this study have been designed to be useful in instruction if they are found to be related to outcomes such as role ambiguity, perceived communication ambiguity, and mutual understanding of work-related issues.

Conceptualization of Variables

The purpose of this investigation is to determine the nature of the relationship between how supervisors report their communication and how subordinates report their own role ambiguity and their perception of ambiguity in their supervisors' messages. In addition, it is expected that an intervening variable, understanding, will provide an explanation for the relationship. This section describes in more detail, background information about the three variables: ambiguity and understanding (the two dependent variables), and supervisory communication style (the independent variable).

Ambiguity

Most of the literature in management concerning ambiguity describes the impact of ambiguity on organizational decision making (Pfeffer, Salancik, & Leblebici, 1976) or examines ambiguity in organizational roles

(Kahn, et al., 1964). Psychologists have tended to focus on the cognitive responses to perceived ambiguity which they refer to as tolerance-intolerance of ambiguity (Broen, 1960; Budner, 1962; and others). In the communication literature, ambiguity is seen as a language and syntax variable (Goss, 1972). Communication researchers have studied the impact of communication ambiguity on other organizational variables such as role ambiguity and job satisfaction (Bacon, 1980; Bacon & Krayer, 1980).

Norton (1975), after reviewing all of the ambiguity literature in Psychological Abstracts from 1933 to 1970, reports a very wide disparity among definitions and was only able to reduce them to eight categories. Little consensus on definition has emerged since that time. Keller (1975) refers to ambiguity as "unclear" or "vague" (p. 57). Weick (1969) and Dacey (1978) equate ambiguity with equivocation. Some researchers use the term interchangeably with ambivalence (Frenkel-Brunswik, 1969).

These definitions present several ways of approaching ambiguity as a variable. The approach most related to this investigation treats ambiguity as a probability. Broen (1960), in discussing "interpretive ambiguity" and "response ambiguity," claims that in responding to a stimulus, people have a certain amount of interpretive choices. The greater the number of interpretations (with relatively equal probabilities) the more difficult it is to predict the "correct" interpretation, hence, the more "ambiguous" the message. Broen's definition has relevance for the present research because it provides a way of understanding ambiguity in supervisory messages. If subordinates find "interpretive ambiguity" in messages received from superiors, they may find it difficult to predict the

superiors' meanings accurately.

Norton's (1975) content analysis of the literature on ambiguity (cited earlier in this section) concludes that most researchers investigate tolerance-intolerance of ambiguity (Budner, 1962; Rydell & Rosen, 1966; Ehrlich, 1965; and others). The wide variations of definitions of ambiguity provide no clear constructs for researchers to use in investigating the concept. For the purposes of this investigation, ambiguity is defined as existing when a situation, a person, or a message is indefinite, vague or uncertain. Ambiguity is further conceived along two dimensions: "role ambiguity," and a related concept, "communication ambiguity."

Role Ambiguity. Kahn, Wolfe, Quinn, Snoek, & Rosenthal (1964) define role ambiguity as the "discrepancy between the information available to the person and that which is required for adequate performance of his role" (p. 73). To the extent a person occupying a given organizational role is not provided with the amount of information to know with some degree of certainty the requirements of their role in their position, the person will perceive role ambiguity. Many researchers have examined role ambiguity: some to find conditions which create ambiguous role perceptions, and others to determine the consequences of role ambiguity.

Several organizational factors appear to contribute to role ambiguity. The larger and more differentiated the organization, the more ambiguity workers are likely to experience (Kahn, et al., 1964; Lyons, 1971). The rate of organizational change, technological change, and growth requiring reorganization, appear to lead to an increase in role

ambiguity (Lyons, 1971). This investigation was conducted in one organization to hold constant organizational variables that may affect perceptions of ambiguity. Hence, my conceptualization is a limited one. Additional investigations will be necessary to determine what effect organizational variables have on relationships between style and ambiguity.

A third predictor of role ambiguity is the quantity and quality of feedback (Brief & Aldag, 1976). Rizzo, House, and Lirtzman (1970) report that a source of ambiguity for subordinates is the predictability of the response of the supervisor to the subordinate's behavior. A subordinate predicts a supervisor's behaviors on the basis of past experience with the superior. When the superior's behavior is inconsistent, the subordinate experiences higher levels of role ambiguity. These studies provide some evidence for believing that role ambiguity and communication ambiguity should be related.

Communication Ambiguity. The definition of role ambiguity in this study involves the discrepancy between information received and information required by subordinates. Implicit in this definition is the understanding that information is carried in communicative messages. "Communication ambiguity" looks more directly at the perception of messages.

Communication ambiguity exists when a subject perceives multiple meanings, difficult language, and too much or too little information in messages. Most of the ambiguity literature in the communication field concerns ambiguity as a language and syntax variable (MacKay, 1966; Goss, 1972; Goldstein, 1976). Although ambiguity of this type must certainly be a contributor to overall perceptions of ambiguity, it is not a very useful

construct for examining organizational phenomena directly. Zimbardo (1960) found a relationship between the structure of messages and the perception of meaning. In messages that were well structured, and written in clear, simple sentences, subjects perceived very similar meaning. However, when the subjects read poorly constructed, complex messages, they reported wide variation in their interpretation of what the messages meant. Therefore, the better messages are structured, using clear, simple sentences, the less ambiguity should be perceived by subordinates.

The factors which are perceived by subordinates as constituting communication ambiguity are information load (Farace, Monge & Russell, 1977), complexity of language used by the superior, and degree of specificity in the message. When people experience conditions of overload they tend to process information selectively (Farace, et al., 1977). These factors, in turn, can contribute to role ambiguity. The concept of communication ambiguity employed in this study is based on these factors: Information load, complexity of language, specificity of messages. This is an investigation of information load factors that are part of supervisory messages. Investigations of other sources of overload and underload are left to later research projects.

Understanding

This investigation provides an "explanation" in a deductive-nomological sense (von Wright, 1971) for the relationship between style and ambiguity. I examined the direct relationship between how supervisors report their communication behavior and how their subordinates describe their own role ambiguity and their perceptions of their supervisors' messages. I asked: What is the relationship (if any)? By looking at understanding as

an intervening variable, the reasons for the relationship between style and ambiguity may become clearer.

The concept "understanding" has several commonsense meanings. One definition refers to a sympathetic way one person behaves toward another. One understands how the other feels. Another definition of understanding is a mutual agreement two people might have. A couple dating each other exclusively may be said to have an "understanding."

The term understanding has also been used as a technical term in social science and philosophy. For example, von Wright (1971) defines understanding as the prerequisite stage of scientific thinking leading to explanation, involving the psychological state of the scientist. Understanding, for the scientist, is the "mental atmosphere, the thoughts and feelings, and motivation, of the objects of his study (p. 6)," and, through this intentional mental process of understanding, the scientist is able to produce explanations for social science phenomena.

This study adopts Scheff's (1967) conceptualization of understanding, as have others (Farace, et al., 1978; McLeod & Chaffee, 1973; Wackman, 1973). Scheff distinguishes between "agreement" and "understanding" among people. The degree of agreement is a function of the similarity in the way an object is described by different people. Take the simplest case, in a two person system, agreement refers to the similarity in the way both persons view the object. Understanding refers to how well each person predicts the other's view of the object. The closer the prediction of the other's actual description, the greater the understanding. Two people may not agree about a particular issue, but they may have high understanding in the sense that they each know each other's view.

Understanding between superior and subordinate is the direct result of how they communicate with each other and, subsequently, how accurately they are able to predict each other's perceptions. If superiors and subordinates fail to understand each other's perceptions of important issues, organizational conflict may result. A subordinate might view a particular issue, key punching errors, as a serious problem for the organization while the superior may not see it as a problem. The two have failed to predict each other's perception of that particular issue accurately. When this occurs, the subordinate may view the superior's inaction to correct the key punching problem as either incompetence or unresponsiveness. In either case, failure to have shared understanding of organizational issues may have a negative impact on their working relationship. Johnson (1977) and Farace, et al. (1978) discuss the conflict which may occur if superiors and subordinates fail to have understanding of organizational rules. When there is low understanding of various rules, morale tends to be low and the relationship tends to be somewhat formal.

Scheff (1967) argues that the ability to predict the other's perceptions tends to enhance a relationship, even when people disagree about something. As long as they understand the nature of the disagreement, they can accept their differences and make allowances for each other's view. Scheff also found that when people share low levels of understanding, they experience interpersonal conflict even when they are in high agreement on an issue. The conflict results later, when people find out that others' perceptions are different (they failed to predict the others' perceptions).

Although there are other definitions of understanding, the Scheff definition is used in this research because of the ease of operationalization, and utility to the organization because of focus on predictability. To the extent superiors and subordinates are able to predict (understand) each others' perceptions of key issues, they should be able to reduce ambiguity as it effects the subordinates' perceptions of their roles.

Supervisory Communication Style

Implicit in research on style is the assumption that a person behaves relatively consistently. Supervisory communication style is the relatively consistent manner in which a superior communicates in interactions with subordinates. Behavioral criteria have been chosen in this investigation for identifying three supervisory styles: Traditional, problem-solving, and coorienting. These behaviors will form sets according to the orientation the superior has towards work.

Researchers have used criteria other than behaviors for discrimination among managerial or leadership styles (for a further review of the major style literature see Figure 1). For example, Blake and Mouton (1964) discuss various styles of management based on the superior's emphasis on either task or socio-emotional functions of leaders. Bales (1950) makes a similar distinction in his classification of leadership style. A task leader is concerned with the requirements of the job, while a socio-emotional leader is more concerned with maintaining good feelings among members of the group. These two approaches to style are defined by the behaviors required of leaders to carry out certain functions. The difference between

a functional approach and supervisory communication style is one of communication content. Blake, Mouton and Bales look at behavior as it affects task and socio-emotional requirements of work; this study is concerned with the characteristics of supervisory messages per se.

Norton (1978) developed a communicator style construct based on how communicators are perceived in terms of nine personality variables (dominant, dramatic, animated, open, contentious, relaxed, friendly, attentive, and impression-leaving) and one dependent variable (communicator image). The difference between a personality approach and a behavioral approach is the assumption one makes about the ability of people to change their styles. A personality approach says that people communicate a certain way because of innate characteristics. A behavioral approach defines style by the behaviors one engages in. These behaviors can be modified, eliminated or created with training. Personality traits, on the other hand, are inherent in the person and very difficult to change.

For this study, behavioral criteria were adopted for two reasons. First, as stated earlier, behaviors rather than personality traits are trainable. This orientation probably has the greatest utility for organizations. Organizations do not want to know what cannot be changed; but rather, what can be changed. Second, behaviors are observable; they require less inference, hence there is greater utility for the organization because interpretation of research results provides clearer directions for change.

Traditional Style. A traditional supervisor is concerned with organizational outcomes and communicates with subordinates in such a way

that those concerns are reflected. In contrast to "results-oriented"[2] superiors, traditional supervisors do not communicate goals and objectives to subordinates. Rather, they communicate with them only after decisions about what to do are made. A traditional supervisor will use somewhat coercive and authoritarian behaviors. Messages are directed downward, thus, creating paternalistic relationships with subordinates.

In an interpersonal context, Schutz (1966) identifies a style of behavior he calls "autocratic behavioral posture." Autocrats tend to dominate the decision-making process, making decisions not only for themselves but for everyone else as well. They do not trust others to make decisions and carry out orders. Autocrats tend not to be very effective in delegating work and feel that only they can do it correctly. The autocrat tends to dominate in relationships and to control all aspects. Traditional superiors tend to fit Schutz's description of the autocrat in that they have a high need to control.

Several scholars (Sweney, 1979, 1981; Sweney, Fiechtner, & Samores, 1975) have developed a profile of the authoritarian managerial role. The "authoritation" is described as autocratic, paternalistic, coercive, and subjective. Communication is such that the superior speaks more and listens less than other types of superiors. The authoritarian tends to say "no" while seeking "yes" answers from subordinates, is quick to place blame, and tends to look for problems. Authoritarians' messages tend to be coercive, subjective, and directed downward: "Because I am the boss, I know the best way to handle this problem...do it my way or else."

The traditional superior fits McGregor's (1960) profile of the "Theory X" manager. A Theory X superior assumes subordinates are lazy, dependent, and in need of direction so communication tends to be downward and authoritative. Likert's (1967) conceptualization of a traditional manager (one who adheres to a "System I" philosophy) describes a superior who seeks control of the relationship between superior and subordinate. Subordinates are permitted no participation in decision-making.

Maier (1958), in the context of the performance appraisal interview, has developed a scheme of behaviors for several interviewer styles. He calls the traditional interviewer style the "tell and sell" style. In this style, the objective of the superior is to evaluate past performance and to persuade the subordinate to improve future performance. Messages tend to be judgmental and directed downward. A traditional manager is likely to list a subordinate's mistakes for a particular period of time and insist they should be corrected in the next appraisal period.

The conceptualization of the descriptions of behaviors used by Schutz (1966), Sweney, (1979; 1981), McGregor (1960), Likert (1967), and Maier (1958) in their studies of supervisory styles describes the traditional superior as using autocratic, coercive, judgmental, and paternalistic messages, which are directed downward. The orientation of the superior is toward task completion. The outcome and not the process used to achieve the outcome is the primary concern. The behaviors employed by the superior reflect the outcome orientation.

Many researchers refer to a traditional style of management in a negative way (Likert, 1967; Maier, 1958; and McGregor, 1958). They

assume the best style of management is a more participative, humanistic approach, regardless of the organization. Others argue that different sets of organizational conditions require different managerial styles. Lawrence and Lorsch (1967) argue that the principles of classical (traditional) management may be appropriate to meet the demands of stable, homogeneous work groups. Woodward (1958) adds that a traditional style of management may be the best one for highly automated types of industries. These researchers see paternalistic, bureaucratic, coercive behaviors as necessary for effective management in certain types of industries. For the purpose of this investigation, no a priori assumptions are made about any one style, nor does this study approach the traditional style in a prejudicial way. Organizational constraints may influence the effectiveness of any of the various styles.

Problem-Solving Style. A problem-solving superior is concerned with the process involved in the work. This type of superior communicates with subordinates concerning their needs regarding problems they might be working on. A superior classified as a problem-solver, in contrast to a traditional superior, uses two-way communicative behavior, and attempts to find out what subordinates need in order to do their jobs. This superior not only asks, but listens to subordinates' suggestions concerning needed changes. Talking time between the superior and subordinate tends to be more equal when the supervisor uses a "problem-solving" style.

A problem-solving superior can be described, in McGregor's (1960) terminology, as a "Theory Y" manager. In sharp contrast to a "Theory X" manager, the Theory Y superior assumes workers are creative,

capable of self-direction, and get satisfaction out of working towards organizational goals. The communication in this process-oriented superior-subordinate relationship tends to be reciprocal and less prescriptive than in a Theory X superior-subordinate relationship.

In Likert's (1967) "System IV" philosophy, the relationship between the superior and the subordinate is a problem-solving one. The subordinate is provided with immediate and frequent feedback on work performance, is encouraged to take part in decision-making, and has a voice in the nature of the job. In an organization with a participative philosophy, all human resource procedures reflect that philosophy. Goal-setting is often conducted by the superior and subordinates in a group setting. Job evaluations are conducted with the involvement of subordinates in an attempt to determine the needs of the subordinates.

Maier (1958) provides the link between a problem-solving supervisory communication style and the participative management literature. The "problem-solving" style of handling the performance appraisal interview, according to Maier, is a more successful style than the "tell and sell" because the subordinate is less defensive and there is more trust between the superior and subordinate. The objective of the problem-solving style in performance appraisal is to encourage and aid in the growth and development of the subordinate. The subordinate is encouraged to participate in setting performance goals. Communication is both upward and downward. The role of the superior is a helping one rather than a judgmental one.

The problem-solving superior tends to use participative management techniques by engaging in two-way communication with subordinates

and spending a lot of time listening. This orientation toward the job indicates a concern for the process, or the "how to," of getting the job done. Ultimately, the superior is concerned with task completion but feels that facilitating the process and involving the subordinate in problem-solving is necessary.

Coorienting Style. A supervisor who is identified in this study as a coorienter is one who uses clarifying behaviors in interactions with subordinates. Like the problem-solver, communication is two-way, but with focus on shared meaning. A coorienter will repeat instructions, use a lot of examples, and ask subordinates if they understand. Coorienting superiors check and verify their own orientations toward a work-related message with the subordinate's orientation to that same message.

Coorienting consists of the comparison by two people of their orientations. Newcomb (1961) distinguishes between three types of orientations: "attraction," "attitudes," and "perceived orientation of others." The orientation one person has toward another is referred to as "attraction." People are attracted to each other according to sign (either positive or negative) and intensity (strong or weak). "Attitude" refers to orientations of people toward some object, for example, how a job should be done. These attitudes are also assigned degrees of sign and intensity. The third category is referred to as "perceived orientation of others"--one person's attitude toward an object such as job instruction, as perceived by a second person. "Perceived orientation of others" is also described in terms of sign and intensity. Individuals in a relationship operate in such a way as to decrease the amount of actual discrepancy

between their orientations. They may try to minimize the difference between both of their perceptions of a particular job instruction through their communication with each other. Newcomb (1961) says that as these relationship endure, the amount of discrepancy between orientations decreases. The reduction of discrepancy is brought about through a desire to make sense of one's relationship with one's superior/subordinate and to reduce the uncertainty associated with the job.

Laing, Phillipson, and Lee (1966) also discuss people's perceptions of each other. Each person has a direct perspective and a meta-perspective. The direct perspective consists of a person's view of her/himself and of the other person. The meta-perspective is the person's view of how others view her/him. People tend to behave in ways conforming to their meta-perspectives. "I may not actually be able to see myself as others see me, but I am constantly supposing them to be seeing me in particular ways, and I am constantly acting in the light of the actual or supposed attitudes, opinions, needs, and so on the other has in respect of me (Laing, et al., 1966, p. 4)."

The process of comparing and interpreting perceptions is called "coorienting." A coorienting superior is likely to employ a variety of clarifying behaviors including repeating and summarizing job instructions frequently; using examples when trying to explain how to do a particular task; asking the subordinate to explain her/his perception of what the superior's instruction was; or even scribbling drawings to help illustrate exactly what he/she wants the subordinate to do.

Hypotheses and Research Questions

The purpose of this study is to investigate the relationship between supervisory communication style and ambiguity in superior-subordinate relationships. In order to do this, two hypotheses and three research questions were formulated.

Hypotheses one and two state that a supervisor's reported communication style will predict how ambiguously his or her subordinates report their own role and communication ambiguity:

H_1: Subordinate's means for role ambiguity will be significantly different among those working for traditional, problem-solving, and coorienting superiors.

H_2: Subordinate's means for perceived ambiguity of supervisor communication will be significantly different among those working for traditional, problem-solving, and coorienting superiors.

Testing the relationship between supervisory communication style and subordinate reported ambiguity will generate some information about the direct relationship between the two variables. An explanation of the relationship will be made by examining the impact of understanding as an intervening variable:

RQ_1: What is the relationship between a supervisor's self-reported style and the level of understanding of work-related issues shared by superiors and subordinates?

Higher levels of understanding may be associated with low levels of ambiguity because subordinates will have more accurate information for

the formulation of their perceptions:

RQ$_2$: Is the level of understanding significantly related to the level of role ambiguity reported by subordinates of work-related issues?

RQ$_3$: Is the level of understanding of work-related issues significantly related to the level of communication ambiguity subordinates perceive in their supervisor's messages?

Rationale

The general relationship between supervisory communication style and role or communication ambiguity and understanding have been discussed in previous sections of this chapter. The rationale for some specific relationships among these variables is considered here.

No directional hypotheses have been posed because (1) no previous research has been done to provide an empirical reason for asserting that there is any relationalship; (2) organizational contigencies may shape the form of the relationship. This study takes the first step. It is appropriate however, in looking at any relationship, to examine what factors may shape the form of that relationship.

Hypotheses one and two deal with the principal relationship in this investigation: the relationship between supervisory communication style and subordinate role ambiguity. If there is a statistically significant relationship, the following are among the possible outcomes. It is also appropriate to look at conditions under which each possible outcome might occur.

One possible outcome is that the traditional supervisory communication style is associated with the lowest levels of reported subordinate ambiguity. Woodward (1958) argued that organizations function differently and have different managerial requirements based on their level of technological complexity. The demands of a highly automated mass production (assembly line) industry appear to be met more effectively by traditional styles of management. According to Woodward, written rather than oral communication is better suited to this type of organization. One reason she found the traditional style to be more effective was the wider span of control in automated industries. Faced with communicating to more subordinates, the supervisor may find it easier to communicate in writing or in large, formal meetings. But for this type of communication to be effective, there must be a large consensus of both the meaning of job-related messages and the processes involved in doing the work. Relatively routine work may be associated with a good deal of consensus. Hence, one may find high levels of understanding and low levels of ambiguity more frequently among those who work for traditional managers, especially when the work is routine.

Woodward (1958) also found that in the process (or batch) type of organization, the needs of the worker were different and thus, a different style of supervision is required. Work in the process industries (i.e. chemical companies) is of a more scientific nature and is quite varied. Workers make more demands on their foremen for scientific information. This type of industry generally has a narrower span of control. Superiors have time to discuss procedures with workers. This interaction provides a greater opportunity for superiors and subordinates to communicate

about the meaning various work-related issues have for them, and to communicate about the processes involved in the work. This does not necessarily mean, however, the superior will seek feedback from subordinates in an effort to engage in problem-solving. It merely means the opportunity to do so exists.

Other organizational constraints, such as the size of the organization, the amount of differentiation among units, and the length of time people have worked together can also influence what style might be the most effective in reducing ambiguity. The results of hypotheses one and two need to be examined in light of the kind of organization studied. Generalizations concerning the effectiveness of one particular supervisory communication style should be made cautiously. They may be true for the type of organization in which the data were gathered, but not for all organizations. The same is true for generalizations about understanding. A particular style may be effective in enhancing understanding between superiors and subordinates in one organization which might not be so in another organization.

The first research question, which examines the relationship between style and understanding, may have the same possible outcomes as hypotheses one and two. The same constraints which applied to the relationship between style and ambiguity should apply to the relationship between style and understanding.

The second and third research questions concern the relationship between understanding and ambiguity. The rationale for these questions rests in a common feature of the conceptualization of both variables. First, ambiguity has been associated with a person's ability to predict

the correct interpretation of a message; and second, understanding is the ability of two people to predict each other's perceptions.

Broen (1960) argues messages are perceived by subordinates to have a variety of possible interpretations. Each interpretation has a certain level of probability associated with it in terms of the likelihood the subordinate will correctly predict it as the correct interpretation. If the subordinate perceives that all of the possible interpretations have equal probability of being correct, then the subordinate will experience a great deal of ambiguity. Rizzo, House and Lirtzman (1970) also argue that when subordinates are unable to predict what their superior's response to their behavior will be, they experience high levels of role ambiguity.

Understanding, similarly, has been conceptualized with a focus on predictability. Scheff's (1967) definition of understanding is a function of the accuracy that two people have in predicting how each other perceive objects. The better able they are to predict each other's perceptions, the better the relationship.

These relationships between ambiguity and understanding center around the subordinate's ability to predict. Presumably, if the subordinate has the ability to predict perceptions of others accurately (understanding), then the subordinate will also be able to predict the interpretation of the other's message. High understanding in a relationship may mean the subordinates will be more likely to eliminate incorrect interpretations of messages and will be able to eliminate the more unlikely interpretations because of knowledge of the superior.

The supervisory communication style found to have the lowest level of ambiguity may have the highest level of understanding between superiors and subordinates. In order to reduce ambiguity and to have high understanding, one must have the ability to make accurate interpretations of what the superior's messages mean. The way superiors communicate with their subordinates contributes to the predictability of the messages and ultimately, the subordinate's perception of role.

Conclusion

Knowledge of the relationship between supervisory communication style and ambiguity and understanding should contribute in a systematic way to organizational communication theory. In addition, it should contribute to practical knowledge in organizational management practices. This investigation provides an initial exploration of these three variables. The intent is to determine whether, in one organization, a systematic relationship among these three concepts may be found. If such a relationship is found in one organization, the groundwork will be established to examine the organizational contingencies that affect the shape and importance of the relationship.

The following chapter describes the methodology employed, including a description of the subjects, a discussion of the development of the instruments used to operationalize the variables, and a discussion of the statistical design. Chapter three presents the results of the data analysis. Finally, Chapter Four includes a discussion of the implications of results, directions for future research, and a more detailed consideration of how the limitations of the study bear on its conclusions.

CHAPTER II

METHODOLOGY

This chapter is divided into three parts: (1) an outline of the procedures to be used in the study, a discussion of the setting and the subjects; and a description of the data gathering procedures; (2) the operationalization of the variables and a detailed account of the development of the instruments; and (3) a description of the statistical design to be used to test the hypotheses.

Procedures

Subjects

Subjects for this study were personnel in a small, family-run bank. Of the sixty employees of the bank, fifteen were superiors and forty-five were subordinates. The subordinate employees were young, many hired just out of high school, many part-time college students. Turnover was reported by an officer as being 70 percent at the lower levels of the bank. At the management level, turnover was practically nil. One person had left in five years.

Of the forty-five subordinates, twenty-one were male and twenty-four were female. Twenty-one subordinates had been with the bank for less than one year and another seventeen, between one and five years.

Only seven subordinates had been with the bank for more than twenty-five years. Twenty-three subordinates were less than twenty-five years old, thirteen were between the ages of twenty-six to thirty-five. Only eight subordinates were over thirty-five. Three of the subordinates had not completed high school, twelve just had high school diplomas, twenty-four had some college (many indicated to me that they were in college), and six had completed college or other higher school. Thirty-one subordinates had worked with their superior twelve months or less, six for two years, and eight for more than two years.

Of the fifteen superiors, seven were male and eight were female (the highest ranking officers were male). Only one had been employed at the bank for less than one year, eight had been there between one and five years, and six for more than five years. Only one superior was under twenty-five years old, five were between twenty-six and thirty-five, six were between thirty-six and forty-five, and three were older than forty-five. One superior had completed only a high school education, nine had some college, and five had completed college or other higher school.

All sixty employees in the bank were surveyed in order to provide the best description of the superior-subordinate communication. The data gathered during the research project were treated in strict confidentiality. The president was provided with summary data about the state of ambiguity and managerial communication style in the agency, but was given no information on the individuals involved in the study.

Data Gathering

Data for this investigation were gathered at the bank during a regular work day and regular work hours. The questionnaire procedure took approximately thirty minutes. I was present throughout the entire data gathering process, spent time with each of the subjects while they completed the questionnaire, and personally collected the questionnaires and locked them in my car.

Before completing the questionnaire, the subjects were assured that their individual responses would be kept completely confidential. This was critical because superiors were required to put their names on their questionnaire (so that superior-subordinate scores could be matched for data analysis). Some researchers have expressed concern that revealing subject identity on a questionnaire may lead the respondent to make "socially desirable" choices in an attempt to please the investigator (Rosenberg, 1969; and Aronson & Carlsmith, 1968). Social desirability has been found to contribute to systematic measurement error which threatens measurement validity (Webb, Campbell, Schwartz, & Sechrest, 1966). Social desirability was a potential problem in this study. The supervisors were asked to place their names on the instruments. If they feared that their superiors would see them they may have been motivated to answer in ways that they knew would please that superior. To alleviate this problem, the subjects were carefully assured that their superiors would never see their questionnaires and that individuals could not be identified from summary data. This procedure should have removed any motivation to respond in a socially desirable fashion. Given the need to

match, superior and subordinate questionnaires, this was a necessary risk (see Figure 2 for the oral instructions that each subordinate received before completing the questionnaire).

Superiors and subordinates each completed their own form of the questionnaire booklet. The superiors were asked to complete a version (see Appendix B) consisting of three sets of scales and a page of demographic questions:

1. Assessment of Social Relationships - items 1 - 42 provided items used to construct the understanding measure.
2. Assessment of Key (technical) Variances - items 43 - 74 provided items used to construct the understanding measure.
3. Supervisory Communication Style (superior's version) - items 75 - 84.
4. Demographic Data - items 85 - 89.

The assessments of social relationships and key variances items provided a single measure of understanding when used with the subordinates understanding scales (scoring will be discussed in the operationalization section on understanding). The understanding scale was used to explore the three research questions. The supervisory communication style scale was used to test hypotheses one and two and to examine research question one.

Subordinates were asked to complete five sets of scales and a page of demographic questions (Appendix A):

1. Assessment of Social Relationships - items 1 - 42 provided items used to construct the understanding measure.

2. Assessment of Key (technical) Variances - items 43 - 74 provided items used to construct the understanding measures.
3. Supervisor Communication Style (subordinate's version) items - 75 - 84. This provided the subordinate's view of his superiors style. As explained below, it was used only in post hoc analysis.
4. Role Ambiguity - items 85 - 90.
5. Communication Ambiguity - items 91 - 100.
6. Demographic Data - items 101 - 106.

The assessments of social relationships and key variances were used to construct a single measure of understanding when used with the superiors understanding scales (scoring will be discussed in the operationalization section on understanding). The understanding scales were used to explore the three research questions. The subordinate's version of supervisor communication style was used to examine the relationship between style and understanding in research question three. The role ambiguity scale was used to test hypothesis one and research question two while the communication ambiguity items were used for hypotheses two and research question three.

Operationalization of Variables

One instrument had to be developed for this study, two were already in existence and two were adapted from existing instruments. The supervisory communication style questionnaire was specifically developed for this study. The role ambiguity scale and the communication

ambiguity scale had been previously developed. The understanding scales (assessment of social relationships and assessment of key variances) were adapted from existing questionnaires.

This section describes how the supervisory communication style instrument was developed and provides a description of all the instruments used in the study.

Supervisory Communication Style

The Supervisor Communication Style Questionnaire was developed to measure one independent, nominal variable with three values: traditional supervisor communication style, problem-solving supervisor communication style, and coorienting supervisor communication style. The instrument was constructed using three kinds of supervisory communication-behaviors (traditional, problem-solving, and coorienting) and five message categories (job instructions, job rationale, procedures and practices, feedback, and indoctrination of goals). Katz and Kahn (1978) have developed a classification scheme of superior-subordinate messages according to their functions in the organization:

1. job instructions - specific task directions
2. job rationale - information regarding the particular task and its relation to other organizational tasks
3. procedures and practices - information regarding organizational rules and regulations
4. feedback - information designed to inform the subordinate about her/his job performance

5. indoctrination of goals - information meant to provide the subordinate with a sense of mission and her/his part of it.

For each message category, stimulus items were constructed which described a specific situation. Three alternative behavioral responses were constructed, representing the three styles. The subjects were asked to read the stimulus items and rank order the responses according to how likely they would be to make that response rather than the other two in the situation. An example of an item on the Supervisory Communication Style Questionnaire (taken from the superior's version) is:

When giving job instructions to my subordinates:

____ I tell them exactly how I want the job done.

____ I ask them what I can do to help with the completion of the task.

____ I make sure they understand what I want done.

The first of the three choices is a traditional response. A superior who ranks this one first is primarily concerned with the product. The second response indicates a problem-solving orientation, one in which the superior shows a concern for the process involved in task completion. The third choice indicates a concern for meaning, a characteristic of a coorienting superior.

This instrument was pre-tested using two groups of subjects. Thirty county supervisors completed the superior's version. An equal distribution was predicted among the three styles. This was not found to

be the case as there were no traditional supervisors, seven problem-solvers, and twenty-one coorienters. Two of the county supervisors filled the questionnaire out incorrectly and they could not be scored.

A second set of subjects, sixteen Air Force information officers, completed both the superior and subordinate versions of the Supervisor Communication Style Questionnaire. The distribution on the superior's version was similar to the county supervisors'. There was one traditional style, seven problem-solvers, and eight coorienters. The distribution on the subordinate's version (the officers were asked to classify their superiors) was practically equal with six traditional supervisors, five problem-solvers and five coorienters. One possible explanation for this skewed distribution in the self-report version is that the problem-solving and coorienting responses were seen by the subjects as more socially desirable than the traditional ones. An item-analysis was conducted to determine which items discriminated among the three styles. Each item was tested by determining the number of times subjects selected the traditional, problem-solving, or coorienting responses. Those items which had an equal or highly similar number of chosen responses were selected for inclusion in the final version of the style questionnaire.

The scale underwent additional pre-testing by graduate students in the Department of Communication and in the College of Business Administration at the University of Oklahoma (see Appendix C, Graduate Student Validity Test of Supervisory Communication Style). The ten graduate students chosen for this procedure were doctoral students and also

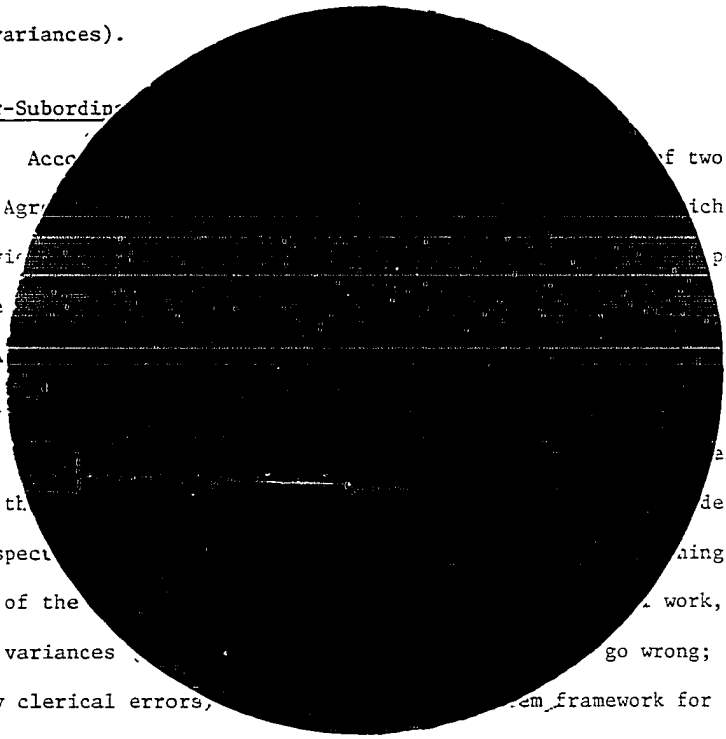
teaching assistants. The students, who had expertise in identifying and classifying numerous types of communicative messages and behaviors, were expected to provide an outside, expert estimation of whether the questionnaire responses were representative of behaviors expected of traditional, problem-solving, and coorienting supervisors.

The graduate students were given a description of each of the three styles of behaviors (traditional, problem-solving, and coorientation) and a set of three cards for each style item. They were then asked to identify the statement on each card as being a traditional, problem-solving, or coorienting response. The criterion that was used to determine acceptable items was that eighty percent of the graduate students must correctly assign the items. The eighty percent figure was arbitrarily chosen because it appeared to be a reasonable figure.

Supervisors at the bank were asked to rank order the possible responses according to the one they would be most likely to use (1), second most likely (2), and least likely (3). The scoring on the supervisory communication style questionnaire was accomplished by summing each supervisory responses for each style. The supervisor was classified into the style receiving the lowest score (based on rankings). In the event there was a tie on the sum of two or three styles, the style receiving the most number "1" ranks was used to assign the subject a style category.

I elected to use the superior's own self-report rather than subordinate perceptions of their supervisors to avoid any tautological problems involved in comparing subordinate's perceptions of their

superior's style with the subordinate's perceptions of role and communication ambiguity. The subordinate's perceptions scores were used in post hoc analysis. The comparison provides some information about the social desirability in this type instrument. In addition, subordinate's perception of style scores were correlated with the measures of superior-subordinate understanding (Assessment of Social Relationships, Assessment of Key variances).



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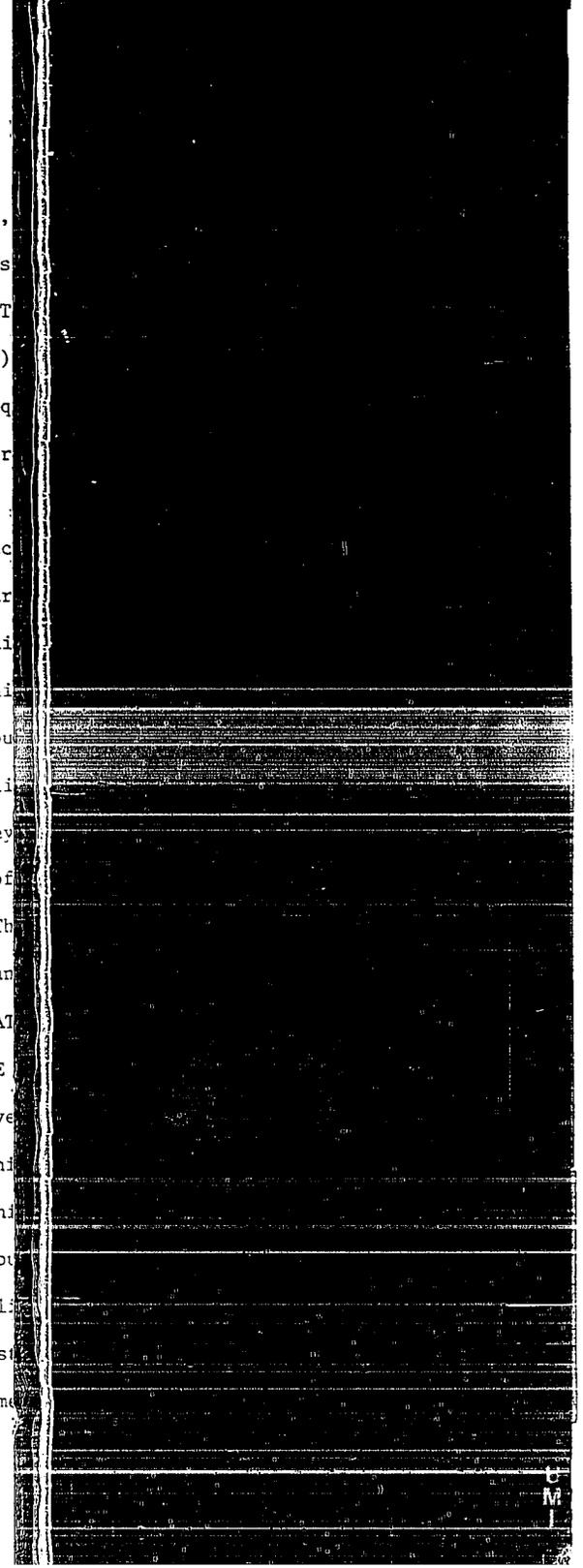
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Superior-Subordinate Understanding

According to Scheff (1967), consensus is a measure of two variables: Agreement and understanding. Agreement is the degree which two people view an object similarly. Understanding is the degree two people are able to predict the other's view of the object. Understanding, in this study, is a measure of how well supervisors and subordinates predicted each others' perceptions of key organizational issues.

People in organizations talk about the things that are relevant to the social and technical aspects of work. Taylor (1976) defines these aspects as the mission of the organization, things concerning the process of the work, relationships that affect the process of work, and the key variances (things of a technical nature that can go wrong; i.e. too many clerical errors). A socio-technical system framework for measuring understanding was chosen because I reasoned that issues people communicate about in an organization should reflect closely their mutual understandings of what is expected to do the work.

The two scales that will be used to measure understanding are a scale designed to assess the understanding of social relationships in

the organization, and a scale measuring understanding of key variances. The two sets of scales use terms relating to socio-technical topics in organizations. The social relationship items that were used are from Browning's (1979) Organizational Communication Survey. A subject is asked to respond to a question in terms of how he/she would respond and also how his/her supervisor would respond. There are twenty-one items. For example:

How receptive are those above you receptive
to your ideas and suggestions?

1. This is what I would say: 1 2 3 4 5
2. This is what my supervisor
would say: 1 2 3 4 5

(1 = to a very little extent; 5 = to a very great extent).

The key variance items were adapted from Taylor's 1976 action research study of the quality of work life and productivity in one organization. There are fourteen items based on things that can go wrong in an organization. A key variance item looks like:

TO WHAT EXTENT DO THE FOLLOWING THINGS
IMPEDE YOUR WORK:
Turnover of personnel?

1. This is what I would say: 1 2 3 4 5
2. This is what my supervisor
would say: 1 2 3 4 5

(1 = to a very little extent; 5 = to a very great extent).

Understanding (social understanding and understanding of key variances) was measured by adding the difference between superior's

prediction of what her/his subordinate would say and what the subordinate actually said, to the difference between the subordinate's prediction of what her/his superior and what the superior actually said. The computation was done by: (SpP-SbA) + (SbP-SpA) = u, where SpP = the superiors prediction; SbA = the subordinate's actual response; SbP = the subordinate's prediction; and SpA = the superior's actual response. This computation provided separate scores for social understanding and understanding of "key variances." The scores for the two understanding scales were summed to obtain the overall measure of understanding that was used to investigate the three research questions. A low score indicates that superior and subordinate share a high degree of understanding on work related topics.

Role and Communication Ambiguity

The role ambiguity questions used here were developed by Rizzo, et al. (1970). The original scale contained the six ambiguity items plus eight role conflict items. The 1970 article identified the items as being either conflict or ambiguity items. Only the role ambiguity items were used in this study. The six Likert-type scales were summed to produce one score for role ambiguity. Rizzo, et al. (1970) tested the conflict and ambiguity scales separately on two different sets of subjects. They reported reliability coefficients on each scale. Reliability for role ambiguity for one set of subjects was .78, $p < .01$, and .81, $p < .01$ for the other set of subjects. Using a factor analysis, they found role ambiguity and role conflict consistently emerging as two distinct variables.

An eleven item Likert-type instrument was developed by Bacon and Krayer (1980) to produce one measure of communication ambiguity in job-related messages. The instrument was designed to measure the ambiguity that a subordinate perceives in those instructions from superiors about how to complete a task. While ambiguity in messages has been shown to be a contributor to role ambiguity (Bacon & Krayer, 1980), it is distinct from role ambiguity in that role ambiguity may be the result of expectations that are culturally, socially, or economically based. Communication ambiguity refers to ambiguity which is present in the message itself.

While ambiguity in job-related messages is believed to be only one dimension of an ambiguity construct (c.f. Norton, 1975), several descriptors were used to develop the instrument. Several of the descriptors were borrowed from Norton's content analysis and were used to derive questions to measure ambiguity in job-related messages. The items were derived from the following categories:

1. Word clarity. A clear word presents little question as to the specific meaning of the word for most people. Example of items: "When my supervisor tells me how to do a job, he/she frequently uses words that have several meanings." Items 91, 95, 99 fall into this category.
2. Comprehensibility. These are items that deal with the difficulty level in a specific word or instruction. For example: "When my supervisors tells me how to do a job, he/she uses words that are over my head." Items falling into this category are 94, 96, and 98.

3. Load. Items 92, 92, 97 and 100 deal with how much information is supplied to the subordinate. These items tap subjects perceptions of whether there is too much or too little information in the message. For example: "When my supervisor tells me how to do a job, he/she gives me too much information at once."

A longer, twenty-item version of this instrument was used in two previous research projects (Bacon & Krayer, 1980; and Bacon, 1980) and both found it to be a reliable measure of ambiguity in job-related messages. Cronbach's alpha reliabilities were computed for both studies and were .89 and .88 respectively. The shortened version of the communication ambiguity instrument was expected to be equally reliable because the inter-item correlation matrix had high enough correlations between all of the items that the reliabilities should be robust with a smaller number of items.

Statistical Methods

This section is divided into two parts. The first is a description of the statistical tools used to test the hypotheses and research questions. The second describes the data checks designed to test for distribution, reliability, and homogeneity of variance problems.

Statistical Design

The primary statistical tools used in this study were one-way analysis of variance and Pearson's product moment correlation. This

section will discuss the method used for each hypothesis and research question.

Hypothesis one, that the mean of reported subordinate role ambiguity will be significantly different among those working for traditional, problem-solving, and coorienting supervisors, was tested using a one-way analysis of variance. Subordinates were put into three groups according to what kind of supervisor they worked for (traditional, problem-solving, coorienting). Supervisors were classified by their reports of their own style. Subordinates' means for role ambiguity were then compared for the three groups. All comparisons were done using Scheffe's test to determine the direction of the difference between each group.

Hypothesis two, that the mean for subordinates' reports of their superiors' communication ambiguity will be significantly different among those working for traditional, problem-solving and coorienting superiors, was tested the same way as hypothesis one.

Research question one, dealing with the relationship between supervisory communication style and understanding was also investigated using a one-way analysis of variance and Scheffe's selected comparisons. This question was investigated twice, once using the scores from the superior's version of the Supervisor Style instrument, and a second time using the subordinates' description of their superiors' style. In both tests, the means for understanding (the dependent variable) were compared across the three communication styles. The subordinates' perceptions of superiors style can legitimately be used to test this research

question because, unlike hypotheses one and two the dependent variable here (understanding) is measured by subtracting the subordinates and superiors scores from each other. In this instance, two sets of perceptions of the same person are not being compared, hence producing no concern for avoiding a tautology.

Research question two, dealing with the relationships between understanding and role ambiguity was investigated using a Pearson r to see if there was a correlation between scores on the understanding and the role ambiguity scores.

Research question three, dealing with understanding and communication ambiguity, was investigated in exactly the same way as research question three.

Data Checks

Pretesting indicated that there may be some distribution problems with the superior's version of the Supervisor Communication Style instrument. Tests of skewness and kurtosis were used to see if there were any distribution problems in this study. In addition, Bartlett's Box F test was used to see if the assumption of homogeneity of variance was met. Reliability coefficients were obtained as measures of internal consistency for the two ambiguity scales and the understanding scales using Cronbach's alpha formula.

CHAPTER III

RESULTS

This chapter provides a summary of the results of the statistical analysis of the data. The first part describes the reliability and validity results as well as the tests for skewness, kurtosis, and homogeneity of variance. The second part presents the results of the tests of hypotheses and research questions.

Data Checks

Several checks were made on the data to determine soundness. Reliability checks were made on the ambiguity and understanding questionnaires. Because the supervisory style instrument was not interval level the Cronbach's Alpha test of reliability was inappropriate. In addition, there were too few subjects for a split-half test. A validity test was made on the supervisory communication style instrument. In addition, checks were made to determine if there were any distribution problems for the three styles and to determine if the assumption of homogeneity of variance was violated.

Reliability and Validity

Cronbach's Alpha test for reliability was chosen for the two ambiguity scales and the understanding scale. Cronbach's test was chosen

because it is a good test for internal consistency. All of the instruments were found to be moderately to highly reliable (see Table 9 for a summary of all of the α coefficients).

Role ambiguity was found to be moderately reliable ($\alpha = .80$, $p < .05$). This coefficient compares favorably with past research. The communication ambiguity scale was found to be moderately high in reliability ($\alpha = .85$, $p < .05$). This also compares favorably with past research.

There are four reliability coefficients for the understanding questionnaires: two for the supervisors' questions ("This is what I would say" and "This is what my subordinates would say"); and two corresponding coefficients for the subordinates scales. The coefficients were moderate to moderately high and all significant ($\alpha = .82$ to $.85$, $p < .05$).

Ten graduate students were used to test the validity of the supervisory communication style instrument. Table 11 provides a summary by item on supervisory communication style. Only three items, numbers 75, 80, and 81 met the 80% criteria I adopted for this study. Those not meeting the criteria were not deleted because three items would not have been sufficient to discriminate among the three styles. Only two items, numbers 76 and 78, fared poorly. Overall, the percentage of correctly classified items was 71.25. This appears to be a moderate percentage for a validity coefficient and, thus, would seem to be within an acceptable range.

Distribution Checks

The distribution of superiors in each style was fairly equal. Results from the superiors' form indicated there were six traditional,

five problem-solving and four coorienting superiors. Tests for skewness and kurtosis revealed no distribution problems (Table 12). Results from the subordinates' questionnaires indicated fifteen subordinates saw their supervisors as traditional, fourteen saw them as problem-solvers, and fifteen saw them as coorientors. Only five superiors saw themselves (in terms of style) the same way their subordinates did (Table 14), however. There was one missing case because one subordinate failed to complete the style measure. Tests of skewness and kurtosis revealed no distribution problems (Table 12).

A Bartlett-Box F statistic was used to see if the assumption of homogeneity was violated for the three styles of supervisory communication. There was a test each for the superiors and subordinates responses to role and communication ambiguity and understanding. None of the tests were found to be significant so homogeneity of variance can legitimately be assumed (see Bartlett-Box F results on ANOVA Tables 1-6).

Discussion of the Results

The two hypotheses tested in this study dealing with the relationship between supervisory communication style and ambiguity were not confirmed. The first research question, which examines the relationship between style and understanding, was unanswered. For the second and third research questions I investigated the relationship between understanding and role and communication ambiguity. I found significant correlations between understanding and role and communication ambiguity.

Supervisory Communication Style and Ambiguity

The relationship between supervisory style and role ambiguity

was examined in hypothesis one. Although no significant difference was found in means between any of the groups, either by one-way analysis of variance ($F = .61$, $p > .05$, Table 1 from superiors' version; $F = .93$, $p > .05$, Table 2 from subordinates' version) or Scheffe's selected comparison, the mean for role ambiguity of the subordinates working for the problem-solving superiors (classified by both the supervisor and subordinate versions of style instrument) was lower than the mean of those working for superiors with other styles (Tables 7 and 8). These results suggest a possible connection between a problem-solving superior style and subordinates' role ambiguity.

Perhaps problem-solving supervisors show concern for subordinates by helping them do their work. The open nature of communication may provide more opportunity for ambiguity reduction. If subordinates do not know whether they are supposed to handle customer complaints or to refer customers to another department, they may experience role ambiguity. They may be more willing to ask the problem-solving superior, who has established open lines of communication, what they should do in this instance. The traditional supervisor would expect subordinates to know what to do already. The coorienting supervisor would ask subordinates what they think should be done. Some of the comments subordinates wrote about superiors classified as problem-solving support this explanation, for example: "He treats me like an equal;" "I can ask him for help whenever I need it."

A problem-solving style may also be more effective in reducing role ambiguity in this instance because it is more appropriate to the type of organization from which data were gathered. The inexperienced and temporary work force at the bank may have a great need for the helping

behaviors of a problem-solver.

Hypothesis two dealt with a relationship between supervisory communication style and communication ambiguity. Again, no significant differences were found in either the ANOVA or Scheffe's analysis ($F = .58$, $p > .05$, superiors' version, Table 3; $F = .59$, $p > .05$, subordinates' version, Table 4). In other words, I found no evidence one supervisory style was "better" (related to lower communication ambiguity) than the other. However, the mean for subordinates working for superiors classified as traditional on both the superiors' and the subordinates' versions of the questionnaire were lower (see Tables 7 and 8). Again, this results suggests a possible relationship. If future research supports this trend, it may be because the traditional style is more suited to the type of organization represented by the bank. While the lower levels of the bank (including most subordinates) are marked by high turnover, the upper and middle management levels have experienced very little turnover. Most of the upper and middle management personnel have been with the bank since it was founded sixteen years ago. A traditional leadership style might have been adopted early in the organization's history; the traditional style of communication may be expected by subordinates and therefore reported as most clear.

Another explanation of why traditional, autocratic superiors may be seen as lower in communication ambiguity is that traditional supervisors are more likely to tell subordinates exactly what they want done, how they want it done, and when they want it done. Perhaps superiors who say "what do you think?" or "let's talk it over" abdicate more power than the young, inexperienced subordinates in this bank want. A great number

of subordinates are part-time employees, in their first jobs right out of high school. They may be looking toward the older superior for a paternalistic type of guidance.

Research question one dealt with the relationship between supervisory communication style and understanding. No significant differences were found in means for understanding between the three styles using superiors' scores, nor were there any significant differences in means for understanding between styles for the subordinates' version of style ($F = .29$, $p > .05$, Table 5, superiors' version; $F = .46$, $p > .05$, Table 6, subordinates' version). However, the understanding for the traditional superiors was considerably higher than for the problem-solving and coorienting superiors (even though they were not different enough to obtain significance; see Tables 7 and 8). This trend, if supported in future research, would indicate the traditional style superior may accomplish a greater understanding with subordinates than the problem-solver or the coorienter. Similarly, as with the communication ambiguity variable, traditional style superiors may leave less to the imagination of subordinates in terms of what they want done. Subordinates are better able to predict their supervisor's perceptions concerning organizational issues.

Research question two dealt with the relationship between role ambiguity and understanding. The Pearson correlation was high ($r = .76$, $p < .05$, see Table 10). This result was the most puzzling due to the outcome of research question three which resulted in a significant negative correlation between communication ambiguity and understanding ($r = -.76$. $p < .05$, see Table 10). Past research (Bacon and Krayer, 1980) found

role ambiguity and communication ambiguity to be highly correlated. The relationship was again tested with this data and a significant negative correlation was found between role ambiguity and communication ambiguity ($r = -.56$, $p < .05$).

A possible explanation for the positive correlation between role ambiguity and understanding and the negative one for communication ambiguity and understanding is in the length of time the subordinates have been with the bank. New people, just joining the bank may perceive that they have been hired for a specific job, and their roles are highly unambiguous. Entry level jobs generally have fairly routine tasks associated with them, and thus, tend not to be perceived ambiguously. At the same time, since the new subordinates have not had a chance to learn about social relationships and the technical aspects of the job, they may not share a very high level of understanding with their superiors. Finally, because they have not communicated with their superiors for a very long time, the level of communication ambiguity might be high.

People who have been with the bank for a long period of time, on the other hand, might experience just the opposite. Workers with more seniority tend to have jobs with greater responsibility and therefore, have more ambiguously defined roles. Second, because they have worked in the organization for a greater length of time, they have come to understand the social and technical system and share a greater understanding with superiors. Finally, because they have worked with their superiors for a long time, they have learned to accurately predict the meaning of job-related messages and thus, they experience low levels of communication ambiguity.

This relationship was tested by correlating the length of time subordinates had been with the bank with role ambiguity, communication ambiguity, and understanding. With the exception of the correlation for role ambiguity (it was not significant), the correlational analysis supported the relationship between length of time, role and communication ambiguity, and understanding (see Table 13). New subordinates did experience lower levels of understanding than subordinates who had been there longer. They also reported higher levels of communication ambiguity than employees who had been with the bank longer.

The result of research question three, that there is a relationship between communication ambiguity and understanding, was not surprising ($r = -.78$, $p < .05$; Table 10). Subordinates who are able to make sense of superiors' communication by reducing the number of possible interpretations of messages (Broen's definition) are likely to be able to predict the perceptions of supervisors of social and technical issues relevant to the organization. This result may have great implications for managers and supervisors. Training superiors to communicate less ambiguously (by providing complete instructions to subordinates, by being consistent, and by using language which is not over the heads of subordinates) may enhance the understanding they have with subordinates.

As a post hoc procedure, verbal responses to the open-ended question (item 84) were analyzed in order to provide some information about the validity of the supervisory communication style instrument. Using the criteria adopted for the definitions of the three styles, each verbal response was identified as traditional, problem-solving, or coorienting. In the event that a subject did not complete item 84, there was no

classification. Responses that had features of two styles were classified as having two styles. A response that suggested a clear task orientation, coerciveness, or downward communication was classified as traditional. A response that made references to shared meaning, understanding the other, or use of examples was classified as coorienting. Verbal responses which contained information not fitting any of the categories were unclassified (see Tables 15 and 16 for the classification of style by the open-ended question).

Of the subordinates, only 26.7 percent of the quantitative classifications (from items 75 to 83 on the style instrument) were the same as the classification made by using the verbal responses to the openended question (see Table 17). However, 50.7 percent of those who rated their superiors as problem-solvers on the style scale, also verbally described them as problem-solvers. This compares to 26.6 percent for traditional and 6.7 percent for coorienting superiors. Six out of fifteen superiors were not classified and two more were classified with two styles so it was difficult to talk about trends for that group (Table 18).

The problem-solving style was easier to identify than the traditional and coorienting styles. The descriptions of the problem-solving superiors were a lot more clear-cut than they were for the traditional and coorienting styles. References to open, friendly, equal, two-way communication were relatively easy to interpret (for example, "always considers my feelings and opinions; and talks to me like a friend"). Both superior and subordinate responses identified a disproportionate number of problem-solvers. Few subordinates described their superiors as coercive, paternalistic in the manner suggestion by one subject: "He wants to be

too much of a dictator rather than a supervisor." Even fewer described their superiors as coorientors. One who did said: "My supervisor asks my opinion and interpretations of assignments we are to complete..." The implications of the results of the analysis of the open-ended data will be discussed in the next chapter.

Although the hypotheses were not confirmed statistically, there was some support in analysis of trends of the means. The results suggest that a problem-solving style may be the most appropriate style for reducing role ambiguity while the traditional style may be the best one for reducing communication ambiguity. The reason for the difference will be discussed in the next chapter.

Analysis of variance used for research question one indicates that traditional superiors may share greater understanding with subordinates than the other styles (again the difference in means was not statistically significant). The results of second and third research questions indicates that there is a significant positive relationship between role ambiguity and understanding while there is a significant negative relationship between communication ambiguity and understanding. The reason for the different direction of the two correlations may be associated with the length of time a person has worked for a company.

Chapter four will provide a discussion of the implications of the research results and for theory and application in organizations. In addition, a discussion of limitations and refinements for future research will be provided.

CHAPTER IV

DISCUSSION AND CONCLUSION

This chapter provides a summary and implications of results; discusses implications for theory and application; suggests limitations of the project; and offers directions for refinements of future research in this area.

Summary and Implications of Results

The implications of this research derive from the reasoning that underlies it. Recall that role ambiguity appeared to be a useful concept to communication, but that it has not often been the subject of research by people in our field. Its relevance has not been apparent. In this study, I have investigated the relationship of role ambiguity to some variables more directly concerned with communication in order to determine whether they are related. My intent was to investigate the relevance of role ambiguity to communication and in the process to develop three new communication concepts.

The first variable was communication ambiguity. I predicted a positive relationship between communication ambiguity, a measure of how ambiguiously a subordinate sees his superiors communication, and a subordinate's perception of the ambiguity in his or her own role. The

results were exactly opposite from what I had expected. In general, low levels of role ambiguity were associated with high communication ambiguity. Those people reporting that their supervisors were clear communicators reported higher levels of role ambiguity; those who thought their supervisors to be unclear were more clear about their own roles. This negative correlation appears to be confounded by another variable. In this organization, those who had been employed a long time and who, in general, had more responsibilities reported higher levels of role ambiguity and lower communication ambiguity. Those new on the job reported low levels of role ambiguity (their jobs were pretty clear cut), but they found their (new) supervisors rather hard to figure out. Apparently organizational variables simply cannot be ignored in looking at the relationship of communication and role ambiguity.

On the other hand, the relationship between communication ambiguity and understanding was exactly as expected. This finding has important implications for applications; these are discussed in the next section. Supervisors who are perceived as unambiguous communicators by their subordinates do indeed share with subordinate a better understanding of the technical and social dimensions of their work than supervisors perceived as ambiguous communicators. This result represents an important finding for communication researchers in that it ties paper and pencil reports of communication (the communication ambiguity measure) to an important outcome of communication in organizations--understanding of the technical and social work processes.

The negative correlation between role ambiguity and communication ambiguity and the positive correlation between understanding and

communication ambiguity become especially promising when viewed with the findings of the communication style questionnaire. The statistics relating style to ambiguity and understanding did not prove mathematically significant. Some of the problems that might have plagued this part of the study are discussed in the last section. Nonetheless, a meaningful pattern is found in these relationships.

Those bank supervisors classified as having a problem-solving style more often had subordinates reporting lower levels of role ambiguity than supervisors classified as having either of the other two styles. The traditional style, on the other hand, appeared to be associated with lower levels of perceived communication ambiguity.

Recall the reasoning behind the classification of style. The traditional and problem-solving categories are based on different orientations toward work and relationships with co-workers. The superior classified as "traditional" chose behavioral options such as prescriptive messages and downward communication, indicating a focus on task completion. Those classified as "problem-solving" chose options involving equal, two-way communication, indicating their concern for relationships. Reducing role ambiguity may require the use of different kinds of communication skills than reducing communication ambiguity. A problem-solver tends to behave in ways that enhance the relationship between superior and subordinate. Subordinates report role ambiguity when they are vague about where they stand with their superiors. A problem-solver attends to relational aspects of the job.

On the other hand, the traditional superior is more concerned with getting the job done than with relationship. Messages are more

specific about the job. Therefore, it seems reasonable that the traditional supervisor was more often perceived as being low in communication ambiguity while the problem-solver was associated with lower levels of role ambiguity for subordinates.

The three research questions dealt with the concept of understanding. Analysis of the data for research question one indicates that the traditional style is associated with higher levels of understanding than the problem solving or coorienting styles. Some aspect of the way traditional superiors communicate with subordinates appeared to produce (or was produced by) higher levels of understanding between subordinates. Traditional superiors, as indicated by the results of hypothesis two, are perceived by subordinates as communicating less ambiguously. The results of research question three indicate that, indeed, superiors who were perceived the lowest in terms of communication ambiguity--the traditional supervisors--shared the highest levels of understanding with their subordinates.

Research question two, dealing with the relationship between role ambiguity and understanding found that superiors who were associated with high levels of role ambiguity shared the lowest levels of understanding with subordinates. In general, these were the "problem-solver" superiors. Contrary to expectations, in this organization, the ability to predict the perceptions of one's superior was not essential to role clarity. The ability to reduce role ambiguity appears to have little to do with reducing communication ambiguity. In fact, communication ambiguity and role ambiguity were found to be negatively correlated in this study.

The results of statistical analysis produced some interesting relationships which appear to be systematic. The traditional supervisor appears to be the most effective at reducing communication ambiguity and increasing understanding. This relationship is further supported by the fact that communication ambiguity and understanding were negatively correlated. This was not true for the problem-solving style. Problem-solvers appear to be effective at reducing role ambiguity but not communication ambiguity, and they tend not to share high levels of understanding with subordinates.

These results suggest some interesting implications, not only for what we know about how people communicate in organizations, but for how we might put this knowledge into practice. The next section will discuss the implications of these findings in regard to their contribution to organizational communication theory and application.

Implications for Theory and Application

The results of this investigation indicate some clear directions for research in organizational communication. I see these directions as making a considerable contribution to both organizational communication theory and practice. Specifically, these results point to four areas of future research. First, contributions to building a theory of organizational communication have been made and must be continued. Second, there is a need to investigate understanding and communication ambiguity in organizational relationships other than that of superior and subordinate. Third, investigation of the relationship between supervisory communication style, communication ambiguity and understanding, with respect to

organizational outcomes, is needed. Finally, we need to assess the implications this research has for training and application in organizations.

Communication researchers, to date, have done little research on the impact of messages on organizations (Norton, 1975). The message is the fundamental unit of analysis for the study of communication. It is studied in a variety of research areas within the field of communication. We look at the messages in language development, interpersonal communication, and other areas, all of which contain well defined "concepts" which identify them as legitimate areas of research.

The study of communication in organizations has been said to be "atheoretic" lacking a coherent a set of concepts, and thus "aparadigmatic" (Porter & Roberts, 1976). This dissertation contributes to the discipline in offering three concepts: Supervisory communication style, superior-subordinate understanding, and communication ambiguity. They advance the study of organizational communication because they are message centered.

Supervisory communication style has not previously been conceptualized or operationalized by using the communicative messages to define the behavioral style of supervisors. Supervisory communication style is a measure of what superiors <u>say</u>, not just what they <u>do</u>. Understanding is also unique in that it is based on what people say and what they predict others will say. Perceived communication ambiguity is a third message centered variable which identifies specific communication generally assumed to be beneficial, but which has only once before been investigated in terms of organizational outcomes.

The next step in theory development after identifying relevant concepts, is examining the relationship among concepts. This study has

begun to do that. Supervisory communication style may be systematically related to communication ambiguity (traditional superiors are associated with low communication ambiguity) and understanding (traditional superiors are associated with high understanding). Communication ambiguity and understanding also were found to be systematically related. The three variables all appear to be interdependently related to each other.

Identification of additional organizational communication concepts is the next logical research step. These must then be examined along with other known organizational communication concepts in order to understand the nature of the relationships among them. Once relevant concepts and relationships are identified, much progress will have been made toward a theory of organizational communication. One direction for future research as the further refinement of these three communication variables.

A second direction for future research is the use of these concepts for investigating other organizational relationships. For example, peer relationships are an important source of organizational information (Blau & Scott, 1962). The relationship between style of supervisory communication, communication ambiguity, and understanding may not be the same in peer relationships as in superior-subordinate relationships. These differences need to be investigated so that we have information about peer and other organizational relationships, such as salesman-client and regulating agency representative - organization lawyer.

A third direction for future research concerns the impact supervisory communication style, communication ambiguity, and understanding on organizational outcomes. The organizational behavior literature abounds with research on the costs of dissatisfaction, turnover, absenteeism,

tardiness, and number of grievances (c.f. Figure 1). In addition, the popular press is exploding with concern for our productivity crisis. Certainly, many variables other than communication-related concepts are important to organizational outcomes. However, we know little about how communication variables affect these outcomes. Supervisory communication style, communication ambiguity, and understanding may prove to be useful in understanding causes of productivity and job satisfaction. In previous investigations, for example, I have found evidence that communication ambiguity was related to job dissatisfaction (Bacon, 1980). Assuming that is true and it is also true that understanding and communication ambiguity are negatively correlated as indicated by the results of this study, one has a priori evidence for a negative relationship between understanding and job dissatisfaction. Investigations of hypotheses such as this one are needed.

A final implication of this research is the one it has for training managers. The results provide a rationale for training supervisors and managers to communicate less ambiguously. A major finding was that communication ambiguity is negatively related to understanding. Indeed, the communication ambiguity instrument outlines specific behaviors that constitute ambiguous communication. Training might be done by helping clients choose words that have one meaning over ones that may have several meanings; by getting them to provide their subordinates with sufficient (but not too much) information; and by selecting words that can be understood by their subordinates. Presumably, if we train superiors to communicate using unambiguous messages then they will share greater understanding with their subordinates.

Increasing understanding should be beneficial to individuals and organizations. According to Scheff (1967) understanding may lead to greater satisfaction with the working relationship. If both superior and subordinate agree a problem is critical, the subordinate is likely to support the action by the superior. A superior who does not take a problem seriously when a subordinate does, may be perceived as incompetent or uncaring. An example of this was provided on one of the open-ended questions on a subordinate's questionnaire: "her position is the last position he is concerned about...he can't even find me a relief for luch when my regular relief is on vacation. To tell you the truth, I don't like the way things are run in this bank as far as my job goes." The score for understanding indicated they share a comsiderably lower level of understanding than other superior - subordinate dyads. This situation is unfortunate, not only for the relationship between the superior and the subordinate but for how the subordinate feels about the bank and her job in general. What she perceives as insensitivity (and it may merely be a lack of awareness) may eventually lead to her leaving the organization.

If the results regarding supervisory communication style are repeated in future research, we may want to train people in small, fairly homogeneous organizations, like the bank in this study, to use traditional behaviors in communicating with subordinates. More refinements and research are needed for this claim to be made confidently. Such refinements will be discussed in the next section of this chapter. I have suggested in this section some ways that a theory of organizational communication might be further developed from the concepts studied in this investigation. These directions for research concern the relationship among supervisory

communication style, communication ambiguity, and understanding and the impact of these variables on organizational outcomes and training practices. Before further research is conducted using these variables, some limitation of this research and suggestions for refinements need to be discussed. The next section describes these limitation and provides suggestions for refinements.

Limitations and Refinements

This section discusses two explanations for the failure to reject two null hypotheses and then outline refinements for future research.

Lack of Significant Results

The lack of statistical significance for hypotheses one and two may result either from inadequate statistical power or inadequate measures. This section discusses what was done to determine if power requirements were met and what was done to assess the adequacy of the measures, particularly the supervisory communication style measure.

Non-significant findings for hypotheses one and two may have resulted from an insufficient number of subjects. With too few subjects in each cell, statistical power is too low to determine if differences in means are statistically significant. Some means appeared to differ but the test statistic did not indicate the differences were beyond chance. To eliminate low power as an explanation for failure to reject null hypotheses (Type II error), I computed a power test for the supervisory communication style questionnaire. The sample size for each cell, based on the superiors' version of style, provided approximately .38 power for a 1.5 standard deviation in means. The sample size for each cell, based on the subordinates'

version of style, provided approximately .94 power. Thus, the power requirements may have been met for the subordinates' version but not for the superiors' version. The supervisors version was used to test the hypotheses.

A small sample size was chosen for this investigation because significant results from a samll n are much more meaningful than similar results derived from a very large sample. Because this research has potential implications for organizational training programs, it made sense to use a small sample. When you use a small n you obtain statistical significance only by explaining a large amount of variance. I did not want to get a "significant" result by explaining .01% of variance; the results would not be socially significant. However, the study needs to be repeated with more supervisors to investigate the validity of the style trends found here.

A second reason for lack of statistical significance may be problems with the instruments themselves. The understanding and ambiguity questionnaires had both been used in past research and found to be reliable measures. Some additional investigation into their validity may be indicated, but I found no evidence from the statistical analysis in this study that there were any problems with those instruments. The results of the correlational analysis provided no evidence of any problems. I did find evidence that the instrument may not be a valid one. Although I attempted to validate the instrument by having graduate student "experts" classify all of the responses, my validation methods may not have been sufficient. The validity coefficient (.76) seemed high enough to warrant the use of the scale in the study, but several outcomes indicate the questionnaire may not be a valid measure of style.

The most serious evidence against the style questionnaire is that of fifteen superiors, only five perceived themselves in the same way as their subordinates (see Table 14). While it is true that people tend to perceive themselves differently than others perceive them (Lashbrook & Lashbrook, 1977), this difference brings into question which classification of style (the superiors' self-report or the subordinates' report of their supervisors style) validly places the superior into a style. The traditional and problem-solving superiors were classified the same way more often than coorienting superiors. Three problem-solvers and two traditional superiors were classified the same way on both versions of the questionnaire (Table 14).

The second reason to question the style measures was found by comparing subordinates' questionnaire vs. open-ended classifications of their supervisors' style. The two classifications of style were different for eighteen of the forty-five subordinates whose open-ended responses could be classified (see Table 20). Half (nine) of the subordinates classified their superiors as coorienters on the questionnaire and either problem-solvers (six) or traditional (three) on the open-ended question. Only three subordinates who classified superiors as problem-solvers on the questionnaires gave them different classifications on the open-ended question (one traditional and two coorienting).

A third area of disagreement among the measures of style was between the classification from the superiors' self-report and the subordinates' open-ended classification of their superior's style (see Table 21). There were five superiors out of fifteen who classified themselves in the same style as their subordinates' open-ended responses. Again, as with the

comparison of the two versions of the style questionnaire, problem-solvers and traditionals were classified the same way more often than coorienters. Four problem solving and one traidtional superior were classified the same way using the superiors self-report and the subordinates' open-ended classifications. No coorienters were classifed the same way.

The contradition in classification casts doubt on the validity of the style measure. The classifications of problem-solvers and traditionals appear to be more reliable than classification of coorienters. Analysis of results suggest two potential problems in the construction of the style questionnaire. First instead of being a single variable, style may actually be three separate, continuous variables. Second, the questionnaire may not be sufficiently broad in scope.

The style instrument may tap three continuous variables (traditional, problem-solving, coorienting) because the three categories may not be mutually exclusive. That is, superiors may use some of each behavior in interactions with subordinates. This may be the reason why eighteen of the subordinates' questionnaire classifications contradicted their open-ended classifications of their supervisors style; why four people were classified as having two styles simultaneously (Table 17).

The possibility that the style construct was actually three variables was considered in designing the study. An interval level instrument was rejected because I wanted to identify specific sets of behaviors that were unique to a particular style. Further research is needed to acertain how the three types of behaviors interact with each other. A supervisor is likely to have a composite style based on separate measures of traditional, problem-solving, and coorienting behaviors. An improved format for a

style classification might be a score for each of the three variables on a three way grid similar to the way the Manager Grid is conceived (McGregor, 1960).

The second problem in conceptualizing style may lie in scope of the measurement. Supervisory communication style appears to be a more complex variable than originally anticipated. I conceptualized style as the result of messages superiors use when verbally communicating job-related information to subordinates. The realm of a superior extends beyond verbal, work-related messages. Superiors and subordinates also communicate about non-work issues including social issues, where to go to lunch, and other such topics. In addition to the variety of topics superiors and subordinates are likely to communicate about, superiors also communicate non-verbally. The verbal message, in a particular exchange between a superior and subordinate, may be a problem-solving one but the superior's non-verbal behavior may be perceived as traditional. In another instance, the behavior a superior exhibits regarding work-related topics may actually consist of downward, prescriptive messages but the same superior may be very open when it comes to social or other extra-work issues. When a subordinate, in this situation, responds to an overall question about supervisory communication style, this traditional superior may be classified as a problem-solver. This trend was suggested in the subordinates' open-ended responses.

These conceptualization problems have several implications for the validity of the style classifications. First, the open-ended question was designed to provide a check for validity of the style questionnaire. The fact that the classifications, based on the open-ended

responses, contradicted the questionnaire classifications of style cast doubt upon the style instrument as a valid measure of supervisory communication style. Analysis of open-ended data further suggests that I may be trying to measure a more complex variable than originally conceived. Style may consist of three variables and may also include behaviors other than verbal messages about work-related issues. This has a great impact on how style should be studied in the future and suggests that while the questionnaire may be a valid measure of part of the construct it may not measure all of the behaviors or all of the variables associated with the construct. The instrument may be a valid measure of some aspects of style. For example, the problem-solving and the traditional style were classified the same, in the various comparisons, consistently more often than the coorienting style. The style instrument may be a predictor (however limited) of the traditional and problem-solving style but not of the coorienting style.

Refinements

Several refinements for future research indicated by this discussion are: (1) using interval scales to measure the three kinds of style separately; (2) using an instrument which taps non-work and non-verbal aspects of style; (3) gathering data in a variety of organizations in order to be able to generalize research results; and (4) increasing the statistical power by including more supervisors in the sample.

The most important refinement to be considered is the supervisory communication style instrument itself. Results of the open-ended data suggest that the styles may be overlapping. That is, a superior may

use traditional, problem-solving and coorienting behaviors. By providing each superior with a measure of each, we should have a clearer picture of overall style. Using an instrument with interval level measures of traditional, problem-solving, and coorienting behaviors, superiors could be placed on a three way grid representing their communication styles. These items can be based on the items in the supervisory communication style instrument developed for this study.

A second area of refinement lies in measuring more of the aspects of the supervisory communication style construct. This could be done using a variety of research methods. Cook and Campbell (1976) refer to this approach as "multi-trait, multi-method" research. They argue that a multiple approach allows investigators to examine a construct from a variety of perspectives. Among the variables that need investigating are the verbal behaviors of superiors (work and non-work related topics) and their non-verbal behavior. Several methods could be used to measure the different behaviors. For example, the supervisory communication style questionnaire could be used to measure work-related messages; another style questionnaire could be developed to measure social or other non-work messages. In addition, more specific open-ended questions might be developed to obtain more specific types of information than in the present study. One type of question which would get at verbal communication behavior might be: "When your supervisory tells you that you've made an error in your work, what is he/she likely to say?" This type of question specifically addresses a relevant work behavior but allows subjects to respond in his own manner.

Non-verbal behavior (as well as verbal behavior) can be directly observed by watching subjects at work. Observational data provide first order information that do not depend on constraints affecting subjects' perceptions. Objective classification schemes can be developed based on what is known about superiors' verbal and non-verbal behavior across a variety of organizational contexts. Several methods of observational research are available. Investigators can video-tape the superior going through day-to-day work routines. Superiors could be wired for audio-taping and objective data could be gathered by listening to the tapes. Or researchers could watch and take notes while people are at work. These methods are subject of a couple of potential problems. First, getting access to subjects in a field setting for direct observation may present difficulties. Second, all of the observational methods described are subject to a "Hawthorne effect" because of the awareness of the subjects that they are being observed. Direct observations should be compared to questionnaire responses using methods such as those suggested by Cook and Campbell (1976) in order to assess "tradeoffs" in the strengths of the different approaches. Also, observational methods may be used in conjunction with other methods and the "Hawthorne effect" caused by obtrusive observation can be controlled for.

The third refinement would involve gathering data in a variety of organizations in order to be able to generalize research results further. If Woodward's (1958) thesis is true, that different kinds of organizations require different management styles, they might also require different kinds of supervisory communication styles. The organization studied in this dissertation represents a very small segment of organizations in the

population -- banks. As a small, family-run bank, it may not even represent banks in general. In order to contribute further to a theory of organizational communication we need generalized knowledge of supervisory communication style, understanding, and ambiguity in organizations. This study provides us with some information about the bank where the data was gathered. The results indicate trends that we might expect to occur in other organizations. But, until data has been gathered in a representative sample of organizations, we have a limited picture of these variables in organizations.

A final refinement needed is to control for type II error. Statistical power was a problem in the test of hypotheses one and two when the superiors' version of the style instrument was used to classify supervisory style. The superiors' version was the one used to test the hypotheses. The power analysis indicated that cells need to have at least ten people in each to meet the power requirements. In the future, the superior sample size should be at least thirty.

Conclusion

The purpose of this research was to test the hypothesis that levels of supervisory communication style (traditional, problem-solving, and coorienting) would be significantly different on role and communication ambiguity. In addition, three research questions investigating a third dependent variable, understanding, were posed in order to provide additional information about the research hypothesis.

Subjects were tested in a small family-run bank in a large midwestern city. Fifteen superiors and forty-five subordinates were tested.

The results indicated that problem-solving superiors were perceived by their subordinates as being more effective in reducing role ambiguity than superiors having other styles, and that problem-solving superiors shared a low degree of understanding with their subordinates. Conversely, traditional superiors were perceived by their subordinates as being lower in communication ambiguity than the other styles and also shared higher understanding with their subordinates than the other styles. This relationship is explained by the fact that traditional superiors share higher understanding with subordinates than superiors having the other styles and understanding is negatively correlated with communication ambiguity.

The results of the study have implications for both theory development and application in training programs. These implications and suggestions for future research were discussed.

FOOTNOTES

[1]Role ambiguity is a narrow definition of ambiguity and is being used for this study. It has been found to have serious negative consequences for the organization. It should be noted, however, that not all ambiguity is necessarily bad. For example, Weick (1969) argued that some ambiguity is necessary to organizations. In order to accomodate organizational change, an organization needs to remain somewhat flexible. Some ambiguity is necessary to maintain a certain level of flexibility.

[2]Refers to Drucker's notion of a "results-oriented" manager.

REFERENCE NOTES

Bacon, C.C. Communication related contributors of job satisfaction: An analysis of ambiguity in job related messages. Paper presented to the Eastern Speech Communication Association Convention, Ocean City, Maryland, April, 1980.

Bacon, C.C. and Krayer, K.J. The relationship between role ambiguity: An exploratory study. Paper presented to the Western Speech Communication Association Convention, Portland, Oregon, February 19, 1980.

Browning, L. Organizational communication survey. Unpublished surveys, University of Texas, Austin, 1979.

Johnson, B.M. and Taylor, J.C. The process of reinvention in office automation. Unpublished manuscript, University of Oklahoma, Norman, 1981.

Lashbrook, V.J. and Lashbrook, W.B. The statistical adequacy of social style. Unpublished manuscript, Wilson Learning Corporation, Eden Prairie, Minnesota, 1977.

Sweney, A.B. Communication patterns in superordinate-subordinate re-relationship. Paper presented to the Kansas Academy of Science, Wichita, Kansas, 1979.

Taylor, J.C. Employee participation in socio-technical work system design: A white collar example. Paper presented to the Academy of Management Meeting, Kansas City, 1976.

REFERENCES

Aronson, E. and Carlsmith, J.M. Experimentation in social psychology. In Lindzey, G. and Aronson, E. (Eds.), The handbook of social psychology (2nd. ed.). Reading, Mass.: Addison-Wesley, 1968, 1-79.

Bales, R.F. Interaction process analysis: A method for the study of small groups. Cambridge, Mass.: Addison-Wesley, 1950.

Bernard, C.I. Functions of the executive. Cambridge, Mass.: Harvard University Press, 1938.

Blake, R.R. and Mouton, J.S. The managerial grid. Houston, Texas: Gulf Publishing Company, 1964.

Blau, P.M. and Scott, R.W. Formal organizations. San Francisco: Chandler, 1962.

Brief, A. and Aldag, R. Correlates of role indices. Journal of Applied Psychology, 1976, 61, 468-472.

Broen, W.E., Jr. Ambiguity and discriminating power in personality inventories. Journal of Consulting Psychology, 1960, 24, 174-179.

Budner, S. Intolerance of ambiguity as a personality variable. Journal of Personality, 1962, 30, 29-50

Cook, T.D. and Campbell, D.T. The design and conduct of quazi-experiments and true experiments in field settings. In Dunnette, M.D. (Ed.) Handbook of industrial and organizational psychology. Chicago: Rand McNally, 1976.

Dacey, R. The role of ambiguity in manipulating voter behaviors. Theory and Decision. Dordrecht, Holland: D. Reidel Publishing Co., 1978.

Ehrlich, D. "Intolerance of ambiguity," Walk's A Scale: Historical comment. Psychological Reports, 1965, 17, 591-594.

Farace, R.V., Monge, R.R., and Russell, H.M. Communicating and organizing. Reading, Mass.: Addison-Wesley, 1977.

Fiedler, F.E. The effect of leadership and cultural heterogeneity on group performance: A test of the contingency model. Journal of Experimental Social Psychology, 2, 1966, 237-264.

Fiedler, F.E., and Chelmers, M.M. Leadership and effective management. Glenview, Illinois: Scott, Foresman, and Company, 1974.

Fleishman, E.H., Harris, E.F., and Burtt, H.E. Leadership and supervision in industry. Educational Research Monograph No. 33. Personnel Research Boards, Ohio State University, 1955.

Fleishman, E.H., and Harris, E.F. Patterns of leadership related to employee grievances and turnover. Personnel Psychology, 15, 1962, 43-56.

Frenkel-Brunswik, E. A study of prejudice in children. Human Relations. 1949, 1, 295-306.

Goldstein, D. Comprehension of linguistic ambiguity and development of classification. Perception and Motor Skills, 1976, 43, 1051-1058.

Goss, B. The effect of sentence context on associations to ambiguous, vague, and clear nouns. Speech Monographs, 1972, 39, 286-289.

Greer, F.L. Leader indulgence and group performance. Psychological Monographs, 75, (12), 1961, 1-33.

Johnson, B.M. Communication: The process of organizing. Boston, Mass.: Allyn and Bacon, 1977.

Johnson, B.M. Communication for office personnel. Chicago: Scott, Foresman, 1982.

Johnson, T.W. and Stinson, J.E. Role ambiguity, role conflict and satisfaction: Moderating effects of individual differences. Journal of Applied Psychology, 1975, 60, 329-333.

Kahn, R., Wolfe, D., Quinn, R., Snoek, J. and Rosenthal, R. Organizational stress: Studies in role conflict and ambiguity. New York: Wiley, 1964.

Katz, D., Maccoby, N., Gurin, G. and Floor, L. Productivity, supervision and morale in an officer situation. Ann Arbor: The University of Michigan Press, 1950.

Katz, D. and Kahn, R.L. The social psychology of organizations (2nd ed.). New York: John Wiley and Sons, 1978.

Keller, R.J. Role conflict and ambiguity: Correlates with job satisfaction and values. Personnel Psychology, 1975, 28, 57-64.

Kuhn, T.S. The structure of scientific revolutions (2nd ed.). Chicago Press, 1970.

Laing, R.D., Phillipson, H. and Lee, A.R. Interpersonal perception: A theory and a method of research. New York: Springer, 1966.

Lawrence, P.R. and Lorsch, J.W. Organization and environment. Boston: Harvard University, 1967.

Lewin, K., Lippitt, R. and White, R.K. Patterns of aggresive behavior in experimentally created "social climate." Journal of Psychology, 1937, 10, 271-299.

Likert, R. The human organization: Its management and value. New York: McGraw-Hill, 1967.

Lippitt, R. and White, R.K. The "social climate" of childrens groups. In Barker, R.G., Kormin, and Wright, H.F. (Eds.) Child behavior and development, 1943, 485-508.

Lyons, T. Role Clarity, need for clarity, satisfaction, tension, and withdrawal. Organizational Behavior and Human Performance. 1971, 6, 99-110.

McGregor, D. The human side of enterprise. New York: McGraw-Hill, 1960.

MacKay, D.G. To end ambiguous sentences. Perception and Psychophysics, 1966, 1, 426-436.

McLeod, J.M. and Chaffee, S.H. Interpersonal approaches to communication research. American Behavioral Scientist, 1973, 16, 469-499.

Maier, N.R.F. The appraisal interview. New York: Wiley, 1958.

Miles, R.H. A comparison of the relative impacts of role perceptions of ambiguity and conflict by role. Academy of Management Journal, 1975, 18, 25-35.

Nealey, S.M. and Blood, M.R. Leadership performance of nursing supervisors at two organizational levels. Journal of Applied Psychology, 52, 1968, 414-421.

Newcomb, T. The acquaintance process. New York: Holt, Rinehart and Winston, 1961.

Norton, R.W. Measurement of ambiguity tolerance. Journal of Personality Assessment, 1975, 39, 607-619.

Norton, R.W. Foundation of a communicator style construct. Human Communication Research, 1978, 4, (2), 99-112.

Pfeffer, J., Salancik, G.R. and Leblebici, H. The effects of uncertainty on the use of social influence in organizational decision making. Administrative Science Quarterly, 1976, 21, 227-244.

Porter, L.W. and Roberts, K.H. Communication in organizations. In Dunnette, M.D. (Ed.), Handbook of industrial and organizational psychology. Chicago: Rand McNally, 1976.

Rizzo, J.R., House, R.H. and Lirtzman, S.I. Role conflict and role ambiguity in complex organizations. Administrative Science Quarterly, 1970, 15, 150-163.

Rosenberg, M.J. The condition and consequences of evaluation apprehension. In R. Rosenthal and R.L. Rosnow (Eds.), Artifacts in e-havioral esearch. New York: Academic Press, 1969, 279-349.

Rydell, S.T. and Rosen, E. Measurement and some correlates of need-cognition. Psychological Reports, 1966, 19, 139-165. (Monogr. Suppl. 1-V19).

Scheff, T. Toward a sociological model of consensus. American Sociological Review, 1967, 32, 32-46.

Schutz, W. The interpersonal underworld. Palo Alto: Science and Behavior Books, 1966.

Sweney, A.B., Fiechtner, L.A., and Samores, R.J. An integrative factor analysis of leadership measures and theories, Journal of Psychology, 1975, 90, 75-85.

Sweney, A.B. Leadership: Management of power and obligation. Lexington, Mass.: 1981.

von Wright, G.H. Explanation and understanding. Ithaca, New York: Cornell University Press, 1971.

Wackman, D.B. Interpersonal communication an coorientation. American Behavioral Scientist, 1973, 16, 537-550.

Webb, E.J., Campbell, D.T., Schwartz, R.D. and Sechrest, L. Unobtrusive measures: Non-reactive research in the social sciences. Chicago: Rand McNally, 1966.

Weick, K.E. The social psychology of organizing. Addison-Wesley, 1969.

Wispe', L.G. and Thayer, P.W. Role ambiguity and anxiety in an organizational group. The Journal of Social Psychology, 1957, 46, 41-48.

Woodward, J. Management and technology. HMSO, 1958, 4-21.

Zimbardo, P.G. Verbal ambiguity and judgmental distortion. Psychological Report, 1960, 6, 57-58.

Figure 1:

Review of Major Research Literature on Leadership/Management Style
(in chronological order)

Figure 1

Review of Major Research Literature on Leadership/Management Style (in chronological order)

Authors Dates	Independent Variables	Dependent Variables	Research Results
Lewin, Lippit and White, 1939	Leadership style (Autocratic, Democratic, Laissez-Faire)	satisfaction	Highest satisfaction was related to the democratic leadership style.
Lippitt and White, 1943	Leadership style (Autocratic, Democratic, Laissez-Faire)	time spent in productive work	Autocratic leaders' groups were more productive.
Katz, Maccoby, Gurin, and Floor, 1950	Effective work groups	Supervisory behavior	Supervisors of effective work groups were less autocratic than supervisor of low-productive groups.
Fleishman, Harris, & Burtt 1955	Leader consideration and leader structuring	leadership effectiveness	The most effective leaders were both considerate and structuring.
Greer, 1961	Effective work groups	Problem-solving ability in leaders	Leaders of the more effective work groups had greater problem-solving ability.
Fleishman and Harris, 1962	Supervision consideration	Turnover, grievance rates	As supervision consideration increases, turnover and number of grievances turned in decreases.
Fiedler, 1966	Leadership training	Performance on tasks	Trained leaders performed better on most tasks than non-trained leaders.
Nealy and Blood, 1968	Leader consideration and leader structure	Performance	1st level supervisors who were structured leaders had higher performance ratings. Unit supervisors who were considerate and structure had higher performance ratings.
Fiedler and Chelmers 1974	High LPC (least preferred co-workers) leaders vs low LPC leader	Performance	High LPC leaders performed well in situations in which their power and influence was moderate.

Figure 2:

Oral Instructions to Subjects on Completing the Questionnaire

Hello - My name is Connie Bacon and I am with the Department of Communication at the University of Oklahoma. I am conducting a study of how superiors and subordinates communicated with each other in this bank. The results are completely confidential, bank officials will not see individual questionnaires or scores. I am the only one who will see your questionnaire. When you complete it you are to give it only to me. (To subordinates only) Do not put your name on the questionnaire..

TABLE 1.

Role Ambiguity by Supervisory Communication Style as Perceived by Superiors

Source	ss	df	ms	F	P
Between	58.60	2	23.60	.61	> .05
Within	546.36	12	39.40		
Total	604.96	14			

Bartlett-Box F = 2.42, p > .05

TABLE 2.

Role Ambiguity by Supervisory Communication Style as Perceived by Subordinates

Source	ss	df	ms	F	P
Between	77.80	2	35.90	.93	> .05
Within	1584.62	41	38.65		
Total	1656.43	48			

Bartlett-Box F = 2.74, p > .05

TABLE 3

Communication Ambiguity by Supervisory Communication Style as Perceived by Superiors

Source	ss	df	ms	F	P
Between	43.40	2	21.70	.58	> .05
Within	449.95	12	37.50		
Total	493.34	14			

Bartlett-Box F = 2.38, p > .05

TABLE 4.

Communication Ambiguity by Supervisory Communication Style as Perceived by Subordinates

Source	ss	df	ms	F	P
Between	257.83	2	128.92	.59	> .05
Within	8,894.79	41	216.95		
Total	9,152.62	43			

Bartlett-Box F = .109, p > .05

TABLE 5.

Understanding by Style as Perceived by Superiors

Source	ss	df	ms	F	P
Between	2,237.65	2	1118.83	.29	> .05
Within	46,223.27	12	3851.94		
Total	48,460.92	14			

Bartlett-Box F = 1.30, p > .05

TABLE 6.

Understanding by Style as Perceived by Subordinates

Source	ss	df	ms	F	P
Between	890.97	2	445.46	.46	> .05
Within	39,918.58	41	973.62		
Total	40,809.50	43			

Bartlett-Box F = .29, p > .05

TABLE 7.

Dependent Measures by Level of Style
Summary of Means from Superior Questionnaires

Supervisor Communication Style	n	$\bar{x}$ (Role Ambiguity)	$\bar{x}$ (Comm. Ambiguity)	$\bar{x}$ (understanding)
Traditional	6	15.20	107	196.40
Problem-Solving	5	13.67	108.6	224.33
Coorienting	4	15.97	111.25	217.75

TABLE 8.

Dependent Measures by Level of Style
Summary of Means from Subordinates Questionnaires

Supervisor Communication Style	n	$\bar{x}$ (Role Ambiguity)	$\bar{x}$ (Comm. Ambiguity)	$\bar{x}$ (understanding)
Traditional	15	15.33	61.27	164.21
Problem-Solving	15	13.79	64.93	173.90
Coorienting	15	16.93	67.07	164.67

TABLE 9.

Alpha Reliabilities for Dependent and Independent Measures

Measure	n	$\bar{X}$	SD	α	P
Role Ambiguity	45	15.31	6.16	.80	< .05
Communication Ambiguity	45	74.98	23.14	.85	< .05
Understanding					
1. Superior "I would say"	15	112.8	18.8	.82	< .05
2. Superior "my subordinate would say	15	222.93	18.51	.82	< .05
3. Subordinate "I would say"	45	141.41	26.48	.85	< .05
4. Subordinate "my superior would say"	45	212.50	21.39	.85	< .05

TABLE 10.

Pearson Product Moment Correlations for Understanding with Role Ambiguity and Communication Ambiguity

	Role Ambiguity	Communication Ambiguity
Understanding	.76 *	-.78 *
Social	.77 *	-.81 *
Technical	.72 *	-.71 *

* $p < .05$

TABLE 11

Validity Coefficient by Item on Supervisory Communication Style Questionnaire (Based on Percentage Correct)

Item #	Traditional	Problem-Solving	Coorienting	$\bar{X}$
75	100	70	70	80
76	70	40	30	46.67
77	80	80	70	76.76
78	50	40	20	36.67
79	90	70	70	76.67
80	90	70	70	76.67
81	100	90	90	93.33
82	80	80	90	83.33

$\bar{X}_{\bar{X}}$ = 71.25

TABLE 12

Distribution of Supervisory Communication Style

Form	Skewness	Kurtosis
Superior	-.97 *	1.33 *
Subordinate	-.29 *	.49 *

* not significant at .05 level

TABLE 13

Pearson Product Moment Correlations for Dependent Measures by Length of Time Employed

	r	p
Role ambiguity	.05	.05
Communication ambiguity	-.27	.05
Understanding	-.41	.05

TABLE 14

Comparison of Self and Subordinate Perceptions of Supervisory Communication Style

Supervisor Number	As Perceived by Self	As Perceived by Subordinates
1	Traditional	Problem-Solver
2	* Problem-Solver	Problem-Solver
3	Traditional	Problem-Solver
4	* Traditional	Traditional
5	Traditional	Problem-Solver
6	* Problem-Solver	Problem-Solver
7	Traditional	Coorienter
8	Coorienter	Traditional
9	Coorienter	Problem-Solver
10	Problem-Solver	Coorienter
11	Traditional	Coorienter
12	* Traditional	Traditional
13	Coorienter	Traditional
14	* Problem-Solver	Problem-Solver
15	Coorienter	Problem-Solver

*perceived the same

TABLE 15

Open-ended Responses on Subordinates Questionnaires

Subject Number	Style Classification from Questionnaire	Response from Open-ended Question	Style Classification from Open-ended Response
001	Problem-Solving	"Is explicit on what is to be done and the procedure he wishes followed. Is rewarding when due, and is understanding and gives constructive criticisms when due."	Traditional
002	Traditional	"...and I can talk very honestly and open. I don't feel we have any communication problems. We can both make suggestions and come up with the best answer."	Problem-Solving
003	Problem-Solving	"My superior is very open and exact about what needs to be done. He speaks to me just like he does to anyone else. He's thorough in his instructions. He is always polite and a very nice man to work for."	Problem-Solving
004	Traditional	(Left blank)	No Classification
005	Coorienting	"...is easy to communicate with. He has such a good rapport with most of us that we call him with errors if we feel like we need help. There's no worry of being talked down to. He provides quick efficient solutions."	Problem-Solving
006	Problem-Solving	"Very informed and on the level. Very easy to get along with."	Problem-Solving
007	Coorienting	"We communicate well. He treats me like a	Problem-Solving

TABLE 15 (contd.)

Open-ended Responses on Subordinates Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
		friend and not so much my boss. He always checks to see if we are happy or if there are any problems. He's always available for help."	
008	Problem-Solving	"Supervisor gives very clear and concise instructions. Asks if you can do the work and thanks you for doing it. She does as much work as anyone else and does not expect things to be done that she would not do herself."	Coorientation
009	Traditional	"He doesn't act like he's higher up than I am. He just explains things and why. We communicate very well."	Problem-Solving
010	Problem-Solving	"I don't really know my supervisor as a boss - just another person who I sometimes ask for help."	Problem-Solving
011	Traditional	"She's very friendly yet business-like. Always willing to listen to my point of view."	Problem-Solving
012	Coorienting	"In most instances, previous conversations have provided me with a background of what is involved in the job; therefore, a minimum of instruction is needed. Communications	Problem-Solving Coorienting

TABLE 15 (contd.)

Open-ended Responses on Subordinates Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Communication from Open-ended Response
		are open on an almost continuous basis. Overall, I am treated with respect and feel like our working relationship is very compatible."	
013	Coorienting	"When he communicates, he speaks as though he was talking to a two-year old. In an overloaded situation of work he gets very frustrated and irrational. He wants to be too much of dictator rather than supervisor. He won't let go of his authority enough to let you build up self-assurance of your capability. In front of inter-bank personnel, it gives him satisfaction to 'belittle' his employees! Also, in front of customers, if there has been some kind of error, he is very quick to get edgy and make the problem very evident to the customer (in other words, to let the customer know any mistake made is by 'her)."	Traditional
014	Coorienting	"I consider...a most intelligent person who knows his job and does it right and according to the procedures and codes. He wants everything done right the first time and wants it done immediately, but understands the workload I have if something does not get done immediately."	Traditional

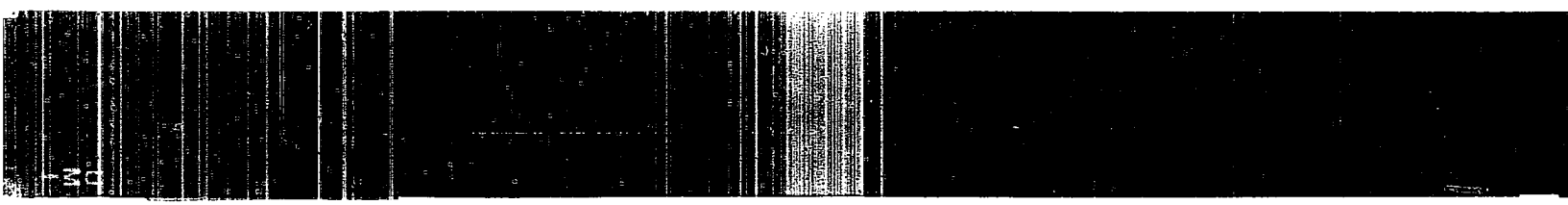
TABLE 15 (contd.)

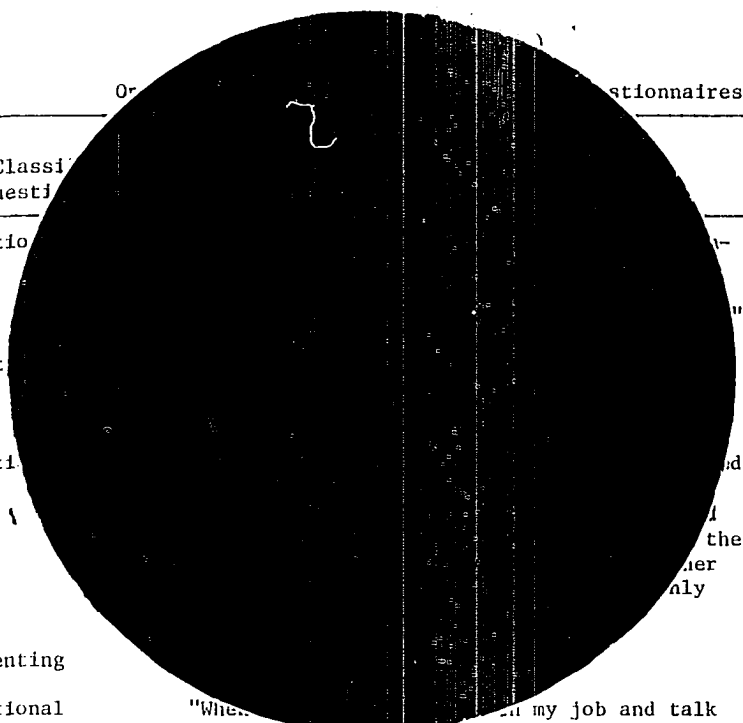
Open-ended Responses on Subordinates Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
015	Traditional	"My supervisor is very effective in his communication of what needs to be done, but at the same time he gives me the opportunity to use my own judgement in carrying out my job."	Traditional
016	Traditional	"Very complete and clear. If I don't understand she is more than happy to clarify matters."	Coorienting
017	Traditional	"...is a very exact person. She is organized in doing things. She does well in giving instructions and making sure you understand them. She follows through and makes sure the job is done correctly. I've never seen her get mad and lose her temper with me - only the machinery now and then."	Coorienting
018	Coorienting	(Left blank)	No Classification
019	Traditional	"When I have a problem with my job and talk to him about it he doesn't take me seriously. He just really couldn't care less. I hate to say it but it's true. The...is the last position that he is concerned about. I don't mind telling you that he can't even find me a relief for lunch when my regular relief is on vacation. To tell you the truth I don't like the way things are run in this bank as far as my job goes. Thank you!"	Traditional

customer know any mistake made is by 'her)."

to the procedures and codes. He wants everything done right the first time and wants it done immediately, but understands the workload I have if something does not get done immediately."





Subject Number	Style Classi from Questi		Style Classification from Open-ended Response
015	Traditio		Traditional
016	Tradit		Coorienting
017	Traditi		Coorienting
018	Coorienting		No Classification
019	Traditional	"Whe... my job and talk to him about it ... doesn't take me seriously. He just really couldn't care less. I hate to say it but it's true. The...is the last position that he is concerned about. I don't mind telling you that he can't even find me a relief for lunch when my regular relief is on vacation. To tell you the truth I don't like the way things are run in this bank as far as my job goes. Thank you!"	Traditional

TABLE 15 (contd.)

Open-ended Responses on Subordinates Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
020	Traditional	"He most generally goes through my supervisor or Dept. Head. But when we do speak he is very kind to me. I am sometimes afraid he is not showing his true feelings."	Traditional
021	Coorienting	"Very well, she tried to find out if she doesn't know and is very helpful and enjoyable to work with."	Problem-Solving
022	Problem-Solving	"...is very good with his basic communications. He does what he is told to do by his superiors whether he agrees or not."	No Classification (not enough information)
023	Problem-Solving	"He is thorough, straightforward, courteous and expects me to be attentive when he communicates with me. I try to reciprocate. There is a great deal of mutual respect involved."	Traditional Problem-Solving
024	Coorienting	(Left blank)	No Classification
025	Problem-Solving	"He is very polite and helpful at all times."	Problem-Solving
026	Traditional	(Left blank)	No Classification
027	Problem-Solving	"It is hard for me to say since...has been my supervisor for a short time. The short time I will say I am well pleased with our	Problem-Solving

TABLE 15 (contd.)

Open-ended Responses on Subordinates Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-Ended Response
		communication. He seems easy to get along with and very pleasant."	
028	Coorienting	"...is a very nice person and has an open mind."	Problem-Solving
029	Traditional	"When I talk to my supervisor he treats me like a person not just an employee. He tries especially hard to get us what we want. Yet he keeps in line with the rules and policies of the bank. He treats each one of us the same."	Problem-Solving
030	Coorienting	"He is very personable and tries to be very informal when talking and discussing various subjects. Sometimes he doesn't get his point across right away because of over-explaining. Very easy to talk to when he has time. He's task oriented and we are not used to that."	Traditional
031	Coorienting	(Left blank)	No Classification
032	Traditional	(Left blank)	No Classification
033	Problem-Solving	"I feel they say what we want to hear. If it should risk getting mad, they don't say it. But this happens with only some people, though."	No Classification (not enough information)

TABLE 15 (contd.)

Open-ended Responses on Subordinate Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
034	Problem-Solving	"I have a very open relationship with my supervisor. Channels of communication are never closed. She has always approached me as an equally important employee in this organization."	Problem-Solving
035	Traditional	"I can communicate with her very well as long as I agree on everything she says; she has her way and that's it. I can feel very relaxed if I have a personal problem and need to talk to her."	Traditional
036	Coorienting	"My supervisor is very helpful in giving instructions. He explains how the job is to be done, why it is to be done, and he also gives information that is helpful for gaining additional knowledge to succeed in the banking business. My supervisor and other officials of the bank often give too many instructions at one time. This is because of their long experience in the banking business. They don't mind a lot of questions over the task or the overall job."	Traditional
037	Problem-Solving	(Left blank)	No Classification
038	Traditional	(Left blank)	No Classification

TABLE 15 (contd.)

Open-ended Responses on Subordinate Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
039	Traditional	(Left blank)	No Classification
040	Coorienting	"Is very polite and thorough in explaining everything, will go out of his way to make working conditions run as smoothly as possible. Is doing the best job of all the (supervisors) that I have been under, excellent supervisor."	Problem-Solving
041	Problem-Solving	"My supervisor communicates exceptionally well with all of us. He listens to what we have to say, and he tries his best to do everything he can for things to run smooth and help us to cooperate with each other."	Problem-Solving
042	Coorienting	"My supervisor usually asks my opinions and interpretations of assignments we are to complete. I make more of the decisions on our procedures than she does but only after agreeing they are acceptable to her. She tends to be very general or vague so I help her define the details."	Coorienting
043	Traditional	"Talks to me as a friend and working partner."	Problem-Solving
044	Problem-Solving	"She explains everything the best she can in as much detail as possible. She takes time to help you understand it the first time. She	Coorienting

TABLE 15 (contd.)

Open-ended Responses on Subordinate Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
		doesn't expect you to remember things for days. The best way is to ask questions over and over.	
045	Coorienting	"...always considers my feelings and opinions. We see the work at hand as challenging and our efforts more like a team..makes suggestions and monitors my efforts.	Problem-Solving

TABLE 16.

Open-ended Responses on Superiors' Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Calssification from Open-ended Response
101	Problem-Solving	"I try to keep it a personal one-on-one but also still convey that I am the boss."	Traditional Problem-Solving
102	Problem-Solving	"I haven't been a supervisor very long so when I communicate with them I tell them as a friend and co-worker because I've been in their shoes in the past. I try to express myself as a friend, but also someone to give them guidelines and keep them in the right direction."	Problem-Solving
103	Traditional	(Left blank)	No Classification
104	Traditional	(Left blank)	No Classification
105	Traditional	(Left blank)	No Classification
106	Problem-Solving	"I am usually short and to the point because I have other problems or activities to do, unless it is a problem that we both need to talk through."	Traditional Problem-Solving
107	Traditional	"I explain the task to be done - what time frame it must be completed in - specific instructions for each individual task and finally ask if the subordinate understands the instructions before beginning. During the performance of the task I frequently ask if there are any questions or problems. I always complement for a task well performed."	Traditional

TABLE 16 (contd.)

Open-ended Responses on Superiors' Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
108	Coorienting	"I attempt to outline my understanding of the job and reach mutual agreement as the individual's contribution to the overall goals, and specific procedures, monitoring of job descriptions and performance appraisal performed annually and reviewed quarterly."	Coorienting
109	Coorienting	(Left blank)	No Classification
110	Problem-Solving	"Since I am supervisor over bookkeeping which is the entry level of the bank most of my communication is in the form of training."	No Classification (not enough information)
111	Traditional	"Our lines of communication are very open. ___is very knowledgeable in various departments of the bank, that it makes my job of communication a lot easier.	Problem-Solving
112	Traditional	"I try to be as positive as possible when communicating with subordinates. Since I am very new to this position, it is somewhat difficult to discuss this question. However, I feel it is important to give each worker a positive attitude toward the job and the total organization, as well as toward the supervisor. This can be accomplished by being honest and	Problem-Solving

TABLE 16 (contd.)

Open-ended Responses on Superiors' Questionnaires

Subject Number	Style Classification from Questionnaire	Response to Open-ended Question	Style Classification from Open-ended Response
		open with workers, and making them aware of job responsibilities from the beginning."	
113	Coorienting	(Left blank)	No Classification
114	Problem-Solving	"I try to make it a point not to assume they know too much or too little. In addition, I do not talk down to them or give criticism in a negative or insulting way. I try to convey to them that we are all in the operation of the department together and working for the good of the bank - rather than they are working for me individually. And that they as well as I will benefit from a job well done."	Problem-Solving
115	Coorienting	"I try to explain what we need to do, why and how (if necessary) and the reason for urgency (if any) and the end benefit to our organization."	Traditional

TABLE 17

Comparison of Style Classification from Questionnaire (Item 75-83) with Verbal Responses to Open-ended Question (Item 84) (Subordinates Version)

	% classified the same	% not classified (left blank)	% not classified (not enough information)	% with two classifications **
Traditional	26.6 (4)	33.3 (5)	0	6.7 (1)
Problem-Solving	50.7 (7)	6.7 (1)	13.3 (2)	6.7 (1)
Coorienting	6.7 (1)	20.0 (3)	0	13.3 (2)
Total	26.7 (12)*	20.0 (9)*	4.4 (2)*	8.9 (4)*

*This figure is a percentage of the total n rather than the column total.

**Of the four people with two classifications, three people had one open-ended classification which was the same as their questionnaire: 1 co-orienting, 1 problem-solving, and 1 traditional.

TABLE 18

Comparison of Style Classification from Questionnaire (Items 75-83) with Verbal Responses to Open-ended Question (Item 84) (Superiors Version)

	% classified the same	% not classified (left blank)	% not classified (not enough information)	% with two classifications
Traditional	16.7 (1)	50.0 (3)	0	0
Problem-Solving	40.0 (2)	0	25.0 (1)	50.0 (2)
Coorienting	25.0 (1)	50.0 (2)	0	0
Total	26.7 (4)*	33.3 (5)*	6.7 (1)*	13.3 (2)*

*This figure is a percentage of the total n rather than the column total.

TABLE 19

Distribution of Supervisory Communication Styles from Open-ended Question

	Traditional	Problem-Solving	Coorienting
*Subordinates Questionnaire	8	16	5
**Superiors Questionnaire	2	4	1

*Only 29 of 45 could be classified. (16 were not classified or had two classifications.)

**Only 7 of 15 could be classified in a single category. (8 were not classified or had two classifications.)

TABLE 20

Comparison of Style Classification for the Subordinates' Questionnaire and Open-ended response which were not classified the same

Subordinate Number	Style Classification By Questionnaire	Style Classification By Open-ended Question
2	Problem-solver	Traditional
5	Coorienter	Problem-solver
7	Coorienter	Problem-solver
8	Problem-solver	Coorienter
9	Traditional	Problem-solver
11	Traditional	Problem-solver
13	Coorienter	Problem-solver
14	Coorienter	Traditional
16	Traditional	Coorienter
17	Traditional	Coorienter
21	Coorienter	Problem-solver
28	Coorienter	Problem-solver
30	Coorienter	Traditional
40	Coorienter	Problem-solver
43	Traditional	Problem-solver
44	Problem-solver	Coorienter
45	Coorienter	Problem-solver

TABLE 21

Comparison of Style Based on Superiors' Self-Report with Subordinates' Open-ended Responses

Supervisor Number	As Perceived by Self	As Perceived by Subordinates' on Open-ended Responses
1	*Problem-solver	Problem-solver
2	*Problem-solver	Problem-solver
3	Traditional	Problem-solver/Traditional
4	Traditional	Problem-solver/Traditional
5	Traditional	Problem-solver
6	*Problem-solver	Problem-solver
7	*Traditional	Traditional
8	Coorienter	Traditional
9	Coorienter	Coorienter/Traditional
10	Problem-solver	Coorienter
11	Traditional	Coorienter
12	Traditional	Coorienter
13	Coorienter	Traditional
14	*Problem-solver	Problem-solver
15	Coorienter	Coorienter/Problem-solver/ Traditional

*perceived the same

APPENDIX A

ORGANIZATIONAL COMMUNICATION SURVEY

Subordinates' Version

ORGANIZATIONAL COMMUNICATION SURVEY

Department of Communication

The University of Oklahoma

This questionnaire is part of a study designed in conjunction with your organization to learn more about how people work together. The aim is to use the information to make your work situation more satisfying and productive.

If this study is to be helpful, it is important that you answer each question as thoughtfully and frankly as possible. This is not a test and there are no right or wrong answers.

The completed questionnaires are to be processed by automated equipment which will summarize the answers in statistical form so that individuals cannot be identified. To ensure COMPLETE CONFIDENTIALITY please do not write your name anywhere on the questionnaire. In order to analyze the data, however, it is important for you to identify your immediate supervisor in the space provided.

THE FOLLOWING QUESTIONS HAVE TWO PARTS: RESPOND TO THE FIRST PART ACCORDING TO HOW YOU FEEL; RESPOND TO THE SECOND PART ACCORDING TO HOW YOU THINK YOUR SUPERVISOR WOULD RESPOND:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
To what extent is it important to be well-informed before you begin to talk to someone in this organization?					
1. This is what I would say:	1	2	3	4	5
2. This is what my supervisor would say:	1	2	3	4	5
To what extent does this office have a real interest in the welfare and happiness of those who work here?					
3. This is what I would say:	1	2	3	4	5
4. This is what my supervisor would say:	1	2	3	4	5
To what extent do leaders in this organization practice an "open door" policy?					
5. This is what I would say:	1	2	3	4	5
6. This is what my supervisor would say:	1	2	3	4	5
To what extent are work activities sensibly organized in this organization?					
7. This is what I would say:	1	2	3	4	5
8. This is what my supervisor would say:	1	2	3	4	5
To what extent does this organization function as a team?					
9. This is what I would say:	1	2	3	4	5
10. This is what my supervisor would say:	1	2	3	4	5
How receptive are those above you to your ideas and suggestions?					
11. This is what I would say	1	2	3	4	5

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
12. This is what my supervisor would say:	1	2	3	4	5
How adequate for your needs is the amount of information you get about what is going on in other departments or shifts?					
13. This is what I would say:	1	2	3	4	5
14. This is what my supervisor would say:	1	2	3	4	5
To what extent is it acceptable to cut across formal channels of communication when contacting people?					
15. This is what I would say:	1	2	3	4	5
16. This is what my supervisor would say:	1	2	3	4	5
To what extent are operations in this organization determined by informal, unwritten rules?					
17. This is what I would say:	1	2	3	4	5
18. This is what my supervisor would say:	1	2	3	4	5
To what extent does this organization's functioning depend upon formal rules?					
19. This is what I would say:	1	2	3	4	5
20. This is what my supervisor would say:	1	2	3	4	5
To what extent are formal work programs or projects seen as an opportunity to demonstrate competence or ability?					
21. This is what I would say:	1	2	3	4	5

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
22. This is what my supervisor would say:	1	2	3	4	5
To what extent is face-to-face contact (rather than memo or telephone) the primary means of communication in this organization?					
23. This is what I would say:	1	2	3	4	5
24. This is what my supervisor would say:	1	2	3	4	5
To what extent does this organization set procedures in anticipation of future events?					
25. This is what I would say:	1	2	3	4	5
26. This is what my supervisor would say:	1	2	3	4	5
To what extent is talking with people face-to-face an enjoyable part of working in this organization?					
27. This is what I would say:	1	2	3	4	5
28. This is what my supervisor would say:	1	2	3	4	5
To what extent are friendships used for obtaining information quickly in this organization?					
29. This is what I would say:	1	2	3	4	5
30. This is what my supervisor would say:	1	2	3	4	5
To what extent are friendships used in becoming aware of problems in this organization?					

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
31. This is what I would say:	1	2	3	4	5
32. This is what my supervisor would say:	1	2	3	4	5
To what extent is it important to learn this organization's network of power relationships in order to accomplish one's work efficiently?					
33. This is what I would say:	1	2	3	4	5
34. This is what my supervisor would say:	1	2	3	4	5
To what extent is there "uppityness" or distance in the interpersonal styles of leaders in this organization?					
35. This is what I would say:	1	2	3	4	5
36. This is what my supervisor would say:	1	2	3	4	5
To what extent is it important to develop a set of "contacts" to use in any situation which might arise in this organization?					
37. This is what I would say:	1	2	3	4	5
38. This is what my supervisor would say:	1	2	3	4	5
To what extent do different departments plan their work activities with one another?					
39. This is what I would say:	1	2	3	4	5
40. This is what my supervisor would say:	1	2	3	4	5

To what extent is the equipment distribution based on favoritism?	To a very little exent	To a little extent	To some extent	To a great extent	To a very great extent
41. This is what I would say:	1	2	3	4	5
42. This is what my supervisor would say:	1	2	3	4	5

TO WHAT EXTENT DO THE FOLLOWING THINGS IMPEDE YOUR WORK:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
Turnover of personnel?					
43. This is what I would say:	1	2	3	4	5
44. This is what my supervisor would say:	1	2	3	4	5
Volume of mail?					
45. This is what I would say:	1	2	3	4	5
46. This is what my supervisor would say:	1	2	3	4	5
Volume of rush work requests?					
47. This is what I would say:	1	2	3	4	5
48. This is what my supervisor would say:	1	2	3	4	5
Volume of special projects?					
49. This is what I would say:	1	2	3	4	5
50. This is what my supervisor would say:	1	2	3	4	5
Missing files?					
51. This is what I would say:	1	2	3	4	5
52. This is what my supervisor would say:	1	2	3	4	5
Missing cards?					
53. This is what I would say:	1	2	3	4	5
54. This is what my supervisor would say:	1	2	3	4	5
Printouts missing?					
55. This is what I would say:	1	2	3	4	5
56. This is what my supervisor would say:	1	2	3	4	5

TO WHAT EXTENT DO THE FOLLOWING THINGS IMPEDE YOUR WORK:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
Cards or files in storage?					
57. This is what I would say:	1	2	3	4	5
58. This is what my supervisor would say:	1	2	3	4	5
Availability of forms?					
59. This is what I would say:	1	2	3	4	5
60. This is what my supervisor would say:	1	2	3	4	5
Technical or clerical errors?					
61. This is what I would say:	1	2	3	4	5
62. This is what my supervisor would say:	1	2	3	4	5
Forms submitted on a timely basis?					
63. This is what I would say:	1	2	3	4	5
64. This is what my supervisor would say:	1	2	3	4	5
Volume of typing?					
65. This is what I would say:	1	2	3	4	5
66. This is what my supervisor would say:	1	2	3	4	5
Volume of encoding and keystroking?					
67. This is what I would say:	1	2	3	4	5
68. This is what my supervisor would say:	1	2	3	4	5
Encoding and keystroking errors?					
69. This is what I would say:	1	2	3	4	5
70. This is what my supervisor would say:	1	2	3	4	5

TO WHAT EXTENT DO THE FOLLOWING THINGS IMPEDE YOUR WORK:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
Equipment breakdowns?					
71. This is what I would say:	1	2	3	4	5
72. This is what my supervisor would say:	1	2	3	4	5
Service and/or parts delay for office machinery?					
73. This is what I would say:	1	2	3	4	5
74. This is what my supervisor would say:	1	2	3	4	5

RANK ORDER EACH OF THE THREE RESPONSES TO THE FOLLOWING STATEMENTS ACCORDING TO HOW LIKELY YOUR SUPERVISOR IS TO USE IT (1 = most likely, 2 = next most likely, 3 = least likely).

75. When given job instructions by my supervisor:

____ he/she tells me exactly how the job is to be done.

____ he/she ask if he/she can help with the task.

____ asks me about my understanding of what is to be done.

76. When my supervisor observes my performance:

____ he/she provides immediate feedback.

____ he/she provides feedback for specific work behaviors.

____ he/she gives feedback during a regularly scheduled performance appraisals.

77. When I don't do the job the right way:

____ my supervisor tells me to do it right the next time.

____ my supervisor tries to help me do it the right way.

____ my supervisor asks me to repeat her/his original instructions.

78. My supervisor's feedback to me tends to refer to:

____ specific job operations I perform.

____ my general performance.

____ how I'm dealing with organizational problems I am working on.

79. My supervisor feels that workers should be rewarded for outstanding performance:

____ when it contributes to the work of the team.

____ at the proper time and place.

____ in such a way that they will know what behavior is being rewarded.

80. When my supervisor gives me job instructions:

____ he/she uses many examples or demonstrations.

____ he/she asks for my suggestions about how to do the job.

____ he/she makes sure they are given right the first time.

81. When I ask my supervisor why I have to do a job he/she is likely to respond by saying:

____ "Tell me what you think the reason is."

____ "It is part of the job description."

____ "Let's talk it over."

82. When acquainting new employees with the goals of the unit:

____ my supervisor discusses the importance of the unit's goals.

____ my supervisor compares perceptions with them of how our work promotes the unit's goals.

____ my supervisor explains the organizational chart to them.

83. The following is a list of the communication activities of supervisors. Rank order them according to how frequently your supervisor uses each with you (with "1" being the most frequent).

____ provides job instructions

____ explains the reasons for the job

____ discusses procedures and practices

____ provides feedback on performance

____ explains the organization's goals

84. Please write a paragraph describing how your supervisor behaves when he/she communicates with you. You may want to use the communication activities, listed in question 95, as a guideline for your answer. Use the back of this page if you require additional space.

PLEASE CIRCLE THE NUMBER TO THE RIGHT OF EACH STATEMENT WHICH BEST REPRESENTS THE DEGREE TO WHICH YOU AGREE WITH IT.	Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree
85. I feel certain about how much authority I have.	1	2	3	4	5	6	7
86. I have clear, planned goals and objectives.	1	2	3	4	5	6	7
87. I work with two or more groups who operate quite differently.	1	2	3	4	5	6	7
88. I know what my responsibilities are.	1	2	3	4	5	6	7
89. I know exactly what is expected of me.	1	2	3	4	5	6	7
90. Explanations are clear of what has to be done.	1	2	3	4	5	6	7
WHEN MY SUPERVISOR TELLS ME HOW TO DO A JOB, HE/SHE:							
91. frequently uses words that have several meanings.	1	2	3	4	5	6	7
92. gives me instructions which are complete.	1	2	3	4	5	6	7
93. gives me too much information at once.	1	2	3	4	5	6	7
94. gives contradictory instructions.	1	2	3	4	5	6	7
95. is vague.	1	2	3	4	5	6	7
96. uses words that are over my head.	1	2	3	4	5	6	7
97. makes frequent contact with me.	1	2	3	4	5	6	7
98. is inconsistent.	1	2	3	4	5	6	7
99. is clear about what he/she wants done.	1	2	3	4	5	6	7

	Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Agree	Disagree	Strongly Agree
100. explains thoroughly.	1	2	3	4	5	6	7

THE FOLLOWING IS INFORMATION THAT WILL ASSIST US IN ANALYZING THIS DATA. THIS IS COMPLETELY CONFIDENTIAL INFORMATION:

101. Your supervisor's name _____

102. Sex (circle one)

A. Male

B. Female

103. When did you first come to work here?

A. Less than 1 year ago

B. Between 1 and 5 years ago

C. Between 5 and 10 years ago

D. Between 10 and 15 years ago

E. More than 15 years ago

104. Into what age bracket do you fall?

A. 25 years or under

B. 26 to 35

C. 36 to 45

D. 46 to 55

E. 56 or older

105. How much school have you had? (circle the highest level completed)

A. Completed grade school

B. Some high school

C. Completed high school

D. Some college or other school after high school

E. Completed college or other higher school

106. How long have you worked with your supervisor? _____

APPENDIX B

ORGANIZATIONAL COMMUNICATION SURVEY

Superiors' Version

ORGANIZATIONAL COMMUNICATION SURVEY

Department of Communication

The University of Oklahoma

This questionnaire is part of a study designed in conjunction with your organization to learn more about how people work together. The aim is to use the information to make your work situation more satisfying and productive.

If this study is to be helpful, it is important that you answer each question as thoughtfully and frankly as possible. This is not a test and there are no right or wrong answers.

The completed questionnaires are to be processed by automated equipment which will summarize the answers in statistical form so that individuals cannot be identified. To ensure COMPLETE CONFIDENTIALITY the individual questionnaires will remain in the possession of the University of Oklahoma investigator.

THE FOLLOWING QUESTIONS HAVE TWO PARTS: RESPOND TO THE FIRST PART ACCORDING TO HOW YOU FEEL; RESPOND TO THE SECOND PART ACCORDING TO HOW YOU THINK YOUR SUPERVISOR WOULD RESPOND:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
To what extent is it important to be well-informed before you begin to talk to someone in this organization?					
1. This is what I would say:	1	2	3	4	5
2. This is what my subordinate would say:	1	2	3	4	5
To what extent does this office have a real interest in the welfare and happiness of those who work here?					
3. This is what I would say:	1	2	3	4	5
4. This is what my subordinate would say:	1	2	3	4	5
To what extent do leaders in this organization practice an "open door" policy?					
5. This is what I would say:	1	2	3	4	5
6. This is what my subordinate would say:	1	2	3	4	5
To what extent are work activities sensibly organized in this organization?					
7. This is what I would say:	1	2	3	4	5
8. This is what my subordinate would say:	1	2	3	4	5
To what extent does this organization function as a team?					
9. This is what I would say:	1	2	3	4	5
10. This is what my subordinate would say:	1	2	3	4	5
How receptive are those above you to your ideas and suggestions?					
11. This is what I would say	1	2	3	4	5

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
12. This is what my subordinate would say:	1	2	3	4	5
How adequate for your needs is the amount of information you get about what is going on in other departments or shifts?					
13. This is what I would say:	1	2	3	4	5
14. This is what my subordinate would say:	1	2	3	4	5
To what extent is it acceptable to cut across formal channels of communication when contacting people?					
15. This is what I would say:	1	2	3	4	5
16. This is what my subordinate would say:	1	2	3	4	5
To what extent are operations in this organization determined by informal, unwritten rules?					
17. This is what I would say:	1	2	3	4	5
18. This is what my subordinate would say:	1	2	3	4	5
To what extent does this organization's functioning depend upon formal rules?					
19. This is what I would say:	1	2	3	4	5
20. This is what my subordinate would say:	1	2	3	4	5
To what extent are formal work programs or projects seen as an opportunity to demonstrate competence or ability?					
21. This is what I would say:	1	2	3	4	5

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
22. This is what my subordinate would say:	1	2	3	4	5
To what extent is face-to-face contact (rather than memo or telephone) the primary means of communication in this organization?					
23. This is what I would say:	1	2	3	4	5
24. This is what my subordinate would say:	1	2	3	4	5
To what extent does this organization set procedures in anticipation of future events?					
25. This is what I would say:	1	2	3	4	5
26. This is what my subordinate would say:	1	2	3	4	5
To what extent is talking with people face-to-face an enjoyable part of working in this organization?					
27. This is what I would say:	1	2	3	4	5
28. This is what my subordinate would say:	1	2	3	4	5
To what extent are friendships used for obtaining information quickly in this organization?					
29. This is what I would say:	1	2	3	4	5
30. This is what my subordinate would say:	1	2	3	4	5
To what extent are friendships used in becoming aware of problems in this organization?					

	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
31. This is what I would say:	1	2	3	4	5
32. This is what my subordinate would say:	1	2	3	4	5
To what extent is it important to learn this organization's network of power relationships in order to accomplish one's work efficiently?					
33. This is what I would say:	1	2	3	4	5
34. This is what my subordinate would say:	1	2	3	4	5
To what extent is there "uppityness" or distance in the interpersonal styles of leaders in this organization?					
35. This is what I would say:	1	2	3	4	5
36. This is what my subordinate would say:	1	2	3	4	5
To what extent is it important to develop a set of "contacts" to use in any situation which might arise in this organization?					
37. This is what I would say:	1	2	3	4	5
38. This is what my subordinate would say:	1	2	3	4	5
To what extent do different departments plan their work activities with one another?					
39. This is what I would say:	1	2	3	4	5
40. This is what my subordinate would say:	1	2	3	4	5

To what extent is the equipment distribution based on favoritism?	To a very little exent	To a little extent	To some extent	To a great extent	To a very great extent
41. This is what I would say:	1	2	3	4	5
42. This is what my subordinate would say:	1	2	3	4	5

TO WHAT EXTENT DO THE FOLLOWING THINGS IMPEDE YOUR WORK:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
Turnover of personnel?					
43. This is what I would say:	1	2	3	4	5
44. This is what my subordinate would say:	1	2	3	4	5
Volume of mail?					
45. This is what I would say:	1	2	3	4	5
46. This is what my subordinate would say:	1	2	3	4	5
Volume of rush work request?					
47. This is what I would say:	1	2	3	4	5
48. This is what my subordinate would say:	1	2	3	4	5
Volume of special projects?					
49. This is what I would say:	1	2	3	4	5
50. This is what my subordinate would say:	1	2	3	4	5
Missing files?					
51. This is what I would say:	1	2	3	4	5
52. This is what my subordinate would say:	1	2	3	4	5
Missing cards?					
53. This is what I would say:	1	2	3	4	5
54. This is what my subordinate would say:	1	2	3	4	5
Printouts missing?					
55. This is what I would say:	1	2	3	4	5
56. This is what my subordinate would say:	1	2	3	4	5

TO WHAT EXTENT DO THE FOLLOWING THINGS IMPEDE YOUR WORK:	To a very little extent	To a little extent	To some extent	To a great extent	To a very great extent
Cards or files in storage?					
57. This is what I would say:	1	2	3	4	5
58. This is what my subordinate would say:	1	2	3	4	5
Availability of forms?					
59. This is what I would say:	1	2	3	4	5
60. This is what my subordinate would say:	1	2	3	4	5
Technical or clerical errors?					
61. This is what I would say:	1	2	3	4	5
62. This is what my subordinate would say:	1	2	3	4	5
Forms submitted on a timely basis?					
63. This is what I would say:	1	2	3	4	5
64. This is what my subordinate would say:	1	2	3	4	5
Volume of typing?					
65. This is what I would say:	1	2	3	4	5
66. This is what my subordinate would say:	1	2	3	4	5
Volume of encoding and keystroking?					
67. This is what I would say:	1	2	3	4	5
68. This is what my subordinate would say:	1	2	3	4	5
Encoding and keystroking errors?					
69. This is what I would say:	1	2	3	4	5
70. This is what my subordinate would say:	1	2	3	4	5

TO WHAT EXTENT DO THE FOLLOWING THINGS IMPEDE YOUR WORK:	To a very little extent	To a little extent	To some exent	To a great extent	To a very great extent
Equipment breakdown?					
71. This is what I would say:	1	2	3	4	5
72. This is what my subordinate would say:	1	2	3	4	5
Service and/or parts delay for office machinery?					
73. This is what I would say:	1	2	3	4	5
74. This is what my subordinate would say:	1	2	3	4	5

RANK ORDER EACH OF THE THREE RESPONSES TO THE FOLLOWING STATEMENTS ACCORDING TO HOW LIKELY YOU ARE TO USE IT (1 = most likely, 2 = next most likely, 3 = least likely).

75. When giving job instructions to my subordinates:

____ I tell them exactly how the job is to be done.

____ I ask if I can help with the task.

____ I ask them about their understanding of what is to be done.

76. When I observe my subordinates' performance:

____ I provide immediate feedback.

____ I provide feedback for specific work behaviors.

____ I give feedback during a regularly scheduled performance appraisal.

77. When my subordinates don't do the job the right way:

____ I tell them to do it right the next time.

____ I try to help them do it the right way.

____ I ask them to repeat my original instructions to me.

78. My feedback to my subordinates tends to refer to:

____ specific job operations they perform.

____ their general performance.

____ how they are dealing with organizational problems they are working on.

79. I feel that workers should be rewarded for outstanding performance:

____ when it contributes to the work of the team.

____ at the proper time and place.

____ in such a way that they know what behavior is being rewarded.

80. When I give job instructions to subordinates:

____ I use many examples or demonstrations.

____ I ask for their suggestions about how to do the job.

____ I make sure they are given right the first time.

81. When a subordinate asks me why he/she has to do a job, I'm likely to respond by saying:

____ "Tell me what you think the reason is."

____ "It's part of the job description."

____ "Let's talk it over."

82. When acquainting new employees with the goals of the unit:

____ we discuss the importance of the unit's goals.

____ I compare perceptions with them of how our work promotes the unit's goals.

____ I explain the organizational chart to them.

83. The following is a list of the communication activities of supervisors. Rank order them according to how frequently you use each with your subordinates (with "1" being the most frequent):

____ provides job instructions

____ explains the reasons for the job

____ discusses procedures and practices

____ explains the organization's goals

____ provides feedback on performance

84. Please write a paragraph describing how you behave when you communicate with your subordinates. You may want to use the communication activities, listed in question 79, as a guideline for your answer. Use the back of this page if you require additional space.

THE FOLLOWING IS INFORMATION THAT WILL ASSIST US IN ANALYZING THIS DATA. THIS IS COMPLETELY CONFIDENTIAL INFORMATION:

85. Your name _____

86. Sex (circle one)

    A. Male

    B. Female

87. When did you first come to work here?

    A. Less than 1 year ago

    B. Between 1 and 5 years ago

    C. Between 5 and 10 years ago

    D. Between 10 and 15 years ago

    E. More than 15 years ago

88. Into what age bracket do you fall?

    A. 25 years or under

    B. 26 to 35

    C. 36 to 45

    D. 46 to 55

    E. 56 or older

89. How much school have you had? (circle the highest level completed)

    A. Completed grade school

    B. Some high school

    C. Completed high school

    D. Some college or other school after high school

    E. Completed college or other higher school

APPENDIX C

SUPERVISOR COMMUNICATION STYLE

VALIDATION TEST

(Instructions)

Instructions: Very carefully read each of the questions on the set of cards. Then identify each question as:

1. Tradition communication style - characterized by downward prescriptive types of messages. There is a clear task orientation.

2. Problem-solving - characterized by two-way communication directed toward mutually solving problems. The orientation is on the process involved in completing the task.

3. Coorienting style - communication marked by repetition, restatement, role-taking in order to understand the other's perception and to get her/him to understand yours.

Identify the questions of each card by sorting them into the three categories: Traditional, problem-solving, and coorientation.

APPENDIX D

HUMAN SUBJECTS APPROVAL

The
University of Oklahoma at Norman

Office of Research Administration

May 18, 1981

Ms. Constance C. Bacon
Department of Communication
University of Oklahoma

Dear Ms. Bacon:

At its May 15, 1981 meeting, the Institutional Review Board-Norman Campus reviewed your proposal, "The Effectiveness of Coorientation on the Reduction of Ambiguity in Superior-Subordinate Communication: A Field Study." The Board found that this research would not constitute a risk to participants beyond those of normal, everyday life except in the area of privacy which is adequately protected by the confidentiality procedures. Therefore, the Board has approved the use of human subjects in this project.

Under this finding, you will not be required to document the consent of the prospective participants, although you may do so if you wish. If you have questions, please contact me.

Sincerely yours,

Mark Elder
Administrative Officer
Institutional Review Board-Norman Campus

ME:nra

cc Dr. Eddie C. Smith, Chair, IRB-NC
Dr. Bonnie Johnson, HPER
IRB-NC Files

1000 Asp Avenue, Room 314, Norman, Oklahoma 73019 (405) 325-4757