AN INVESTIGATION OF THE RELATIONSHIP BETWEEN THE SATISFACTION WITH

SCHOOL COMMUNICATION SYSTEM AND TEACHERS' WORK MOTIVATION,

by

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Doctoral Dissertation submitted to the Graduate Faculty of the

Virginia Polytechnic Institute and State University

in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

in

Educational Administration

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December 4, 1981

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DEDICATION

This research is dedicated to my husband,   , who gave

encouragement when needed and to my deceased son,   , who would

have been proud of my accomplishments.

ACKNOWLEDGEMENTS

Sincere appreciation is expressed to the many individuals without whose cooperation, support, and assistance the study could not have been possible.

Very special thanks is given to the members of my doctoral committee: Dr. Glen I. Earthman, Chairman, for always giving unselfishly of his time and extending personal interest as well as academic assistance; Dr. Dennis E. Hinkle, Research Consultant, who guided the statistical analysis of the research; Dr. Houston P. Conley, for his support and advice; Dr. Anne Cheney, for her keen editorial advice; Dr. David J. Parks, for his contribution to the theoretical background; Dr. Robert R. Richards, for his excellent suggestions and support from the inception of my graduate studies.

To my husband,   , a special thanks is given for his understanding, sacrifice, interest and untiring support. To my sister,   , a special appreciation is given for her continued belief and confidence in me. Finally, I will always hold fond memories of my graduate student cohorts whose strong shoulders were always available for support and encouragement.

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CHAPTER I

AN OVERVIEW OF THE STUDY

Introduction

"An organization comes into being when there are persons (1) able
to communicate with each other (2) who are willing to contribute action
(3) to accomplish a common purpose" (Barnard, 1938:82). Consequently,
the three basic elements that constitute an organization, according to
Barnard (1938:69), are communication, willingness to serve, and a common
purpose. Thus, it can be seen that communication and willingness to
serve or motivation to work are major components of organizations. How
these concepts are related, however, has not been studied, according to
a review of the literature.

Barnard (1938:69) saw communication as a cohesive element which
serves to combine a common purpose or goal with willingness to exert
effort to the organization. Vroom (1964:195) proposes that the level of
effort exerted by workers on their jobs is directly related to both
their preferences among performance outcomes and their expectancies
concerning the consequences of each level of effort on the attainment of
these outcomes. Earlier, Barnard (1938:84) recognized the presence of
levels of willingness to exert effort in its variations of intensity,
and in its relationship to the accomplishment of organizational goals.
He further explains that:

(W)illingness to cooperate, positive or negative, is the
expression of the net satisfactions or dissatisfactions
experienced or anticipated by each individual in
comparison with those experienced or anticipated through
alternative opportunities. (p. 85)

Downs and Hagen (1977:64) suggested that the communication system in an

organization is a multi-dimensional construct which includes the

participants' satisfaction with seven factors of communication. These

factors, according to Downs and Hagen (1977:66-67), are organizational

perspective, personal feedback, organizational integration,

communication with superiors, communication climate, horizontal

communication and media quality. Downs and Hazen (1977:72) propose that

the effectiveness of an organization's communication system may be

analyzed by monitoring the satisfaction of employees with the

communication system.

Consequently, there is reason to believe that there is a

relationship between communication and work motivation. Communication

has been found to be a vital element in organizational behavior in that

it serves as the major vehicle for transmitting knowledge of goals

(Futrell, 1975). Knowledge of goals facilitates the willingness of

workers to exert effort toward the accomplishment of the goals of the

organization. Motivation to work has been found to relate to job

performance (Porter & Lawler, 1968), managerial behavior (House, 1970),

and to several other management processes and organizational behaviors.

It seems reasonable to assume, therefore, that there is a relationship

between satisfaction with communication and work motivation.

Statement of the Problem

The brief overview of communication and motivation highlights the probability that a relationship exists between communication and work motivation. Accordingly, the present study is designed to determine if there is such a relationship. The problem for the study is:

There is a relationship between satisfaction with the school communication system and teachers' work motivation.

The subhypotheses are:

1. There is a relationship between teachers' work motivation and school perspective.

2. There is a relationship between teachers' work motivation and personal feedback.

3. There is a relationship between teachers' work motivation and school organizational integration.

4. There is a relationship between teachers' work motivation and communication with principal.

5. There is a relationship between teachers' work motivation and communication climate.

6. There is a relationship between teachers' work motivation and horizontal communication.

7. There is a relationship between teachers' work motivation and media quality.

8. There is a relationship between teachers' work motivation and years of experience.

9. There is a relationship between teachers' work motivation and size of school enrollment.

10. There is a relationship between teachers' work motivation and teachers' job satisfaction.

11. There is a relationship between teachers' work motivation and teachers' level of satisfaction for the last six months.

Definition of Terms

Several terms are defined to assist with the understanding of their usage throughout the study. They are:

Communication system. An officially established and approved communication channel, supplemented to some degree by informal channels, which gathers, disseminates, evaluates, and distributes information within an organization.

Motivation to work. "a disposition, a determination, a readiness or willingness to use human and material resources in activities that are likely to facilitate or enhance effective performance on one's job" (Piou, 1979:4).

Instrumentality. The perceived degree of relationship one sees between his level of performance and attaining personal goals.

Valence. The positive or negative importance one attaches to the events that occur on the job as leading to desired personal goals.

Expectancy. The perceived degree of relationship one sees between his level of effort and his level of performance.

Communication Satisfaction. A multidimensional construct composed
of seven factors: school organizational perspective, personal feedback,
school organizational integration, communication with principal,
communication climate, horizontal climate, and media quality (See
Chapter III for a more detailed description.)

Significance of the Study

If the present study substantiates the hypothesis that there is a
relationship between the school communication system and teachers' work
motivation, the study will add to the body of knowledge in
administrative theory. Additionally, it will decrease the paucity of
information on work motivation in educational settings. The study will
contribute to empirical evidence regarding the relationship between work
motivation and communication systems.

Organization of the Study

An introduction to the study and a brief overview of communication
and work motivation are presented in Chapter I. In addition, the
problem statement, definitions of terms, and significance of the study
are included.

Chapter II is devoted to a review of related literature. The
chapter is divided into two major sections; one on research on
communication and the other on research on motivation. A summary
concludes the chapter.

A detailed discussion of the methodology used in the study is presented in Chapter III. Chapter IV contains an analysis of the results of the study. The final chapter, Chapter V, is devoted to a summary of the study, a discussion of the findings, conclusions, and recommendations for future research.

CHAPTER II

REVIEW OF RELATED LITERATURE

The concepts of "communication" and "work motivation" have been the theme of much of the research that has been conducted in management theory and organizational behavior. Both of these concepts have been investigated to ascertain their relationship to such management processes as job satisfaction, job productivity and performance, organizational structure and leadership behavior. However, only one study was found that related some facet of communication to work motivation. The majority of the studies concerning either communication or work motivation has been conducted in business, industrial, and governmental settings. Only a few researchers have used educational settings for their studies. The review of related literature is divided into two major sections, communication and work motivation.

Communication

"Communication can be realistically viewed as the most fundamental of all management activities, and as the core process of organizational behavior" (Ireland et al., 1978:3). Other theorists, Barnard (1938:91) and Simon (1957:154), agree with Ireland on the fundamental importance of communication to management activities and organizational behavior. The review of literature on communication will include research on communication as it has related to such management processes as the flow

of communication, productivity and performance, job satisfaction and communication apprehension.

The methods of communicating information have been investigated in an effort to explain how information is communicated and to determine which of the methods used are deemed most appropriate and effective. Dahl (1954) conducted three experimental studies with college students, business workers, and industrial workers, respectively. The purpose of the studies was to identify which one of five methods of communication, namely: oral only, written only, oral and written, bulletin boards, and the grapevine, was most effective within the organizations. Of the five methods, Dahl (1954) found the oral and written methods of communication combined to be the most effective method.

Later, Level (1973) partially replicated the Dahl study and found partial support for the study. He found that even though the oral and written methods of communication combined were more effective most of the time, some situations demanded that another procedure be used. The results of the research study showed that the oral method was most effective for managers to use when reprimanding subordinates and when handling disputes, and the written method only worked best for transmitting general information to workers in organizations.

In addition, the flow of information in organizations has been studied in terms of directionality. The basic directions in which information may flow in an organization are upward, downward, and horizontal. In the early history of management theory most organizations only considered the downward flow of information. Fayol

(1916), an early theorist, was one of the first writers to suggest that horizontal communication be utilized in organizations. Previously, managers on the same level of the hierarchical ladder were required to send messages to the top of the ladder from whence it was passed down to the other managers at that level. Once instituted, the process of horizontal communication would speed up the communication process.

In 1961, Landberger looked at the direction of communication flow. He found that 31 percent of all communication in organization was by this time taking place between managers on the same step of the organizational ladder. He favored horizontal communication for its speed in disseminating information within the organization. Landberger (1961) found support for Fayol's (1916) theory.

Read (1962) investigated the upward flow of information, a procedure which had received little support by organizations in early management history. The research looked at interpersonal trust, influence and mobility as they affected upward communication. Read (1962:5) predicted that the greater the influence the upwardly mobile subordinate perceived the superior to have, the greater would be the subordinate's tendency to withhold problem-related information from such a superior or even to restrict it entirely. He contended that the predicted negative relationship between mobility and communication would be conditioned or modified by the subordinate's trust in his superior's motives and intentions and by the subordinate's perception of his superior's degree of influence.

The study was conducted in three major industrial organizations with a sample of 52 management supervisors and 52 respective subordinates. He measured trust, mobility, and influence using the interview method of data collection. The results, obtained by Pearson product-moment correlation, generally supported the major prediction that, in industrial hierarchies, mobility aspirations among subordinate executives is negatively related to accuracy of upward communication.

Read's (1962) study lends emphasis to the crucial importance of attitudinal factors in communication. The flow of upward communication may be distorted due to the attitudes of the subordinates responsible for transmitting the information.

Athanassiades (1973) also examined the distortion of upward communication; however, he chose to test its relationship to autonomy, authority structures, and subordinate ascendency. The sample was chosen with differences in structure in mind. A police department was selected because it was considered as having an authority structure and a school within a university because of its closeness to an autonomous structure. The researcher found, using Gordon's Personal Profile Inventory and Maslow's Security-Insecurity Inventory as instruments, that the authority structure was more favorable for the distortion of the upward flow of information while the autonomous structure produced less distortion. From the study it can be surmised that the less formal the structure the more accurate the information will be that is transmitted upward in the organization.

The leadership behavior also affects the upward flow of information, according to Level and Johnson (1977). They also used Gordon's Personal Profile Inventory and in addition, they used the Leadership Opinion Questionnaire. The task was to have the subjects read two items of information, one especially designed to lead to distortion and the second, in contrast, designed to avoid distortion. The researchers found that certain personalities tend to distort information according to their perceptions of themselves. They also found that supervisors who were rated high in consideration would tend to receive more accurate information than those rated low in consideration.

The style of communication influences the effectiveness of the communication system and the worker's satisfaction. Haney (1964) examined the relationship between the flow of the information and satisfaction. He organized eighteen groups, each with a leader called a communicator. The communicator described a task to the group with his back to them. No verbal interaction with the group was allowed. The group then responded to a questionnaire. A second description of the task was given which allowed for verbal interaction and the subjects responded to a second questionnaire. An analysis of the responses showed that with interaction the participants were less frustrated; morale increased; they were accurate in performing the task; and they expressed more confidence. Therefore, there was support for the hypothesis that bilateral communication was more effective than lateral or one-way communication.

Not only may the flow of communication be studied within a single organization but it has been examined to determine if it exists between organizations. Czepiel's (1975) study focused on interorganizational communication and the diffusion of a major technological innovation. He sought to determine if there was an informal society within an industry. If there was, he sought to determine its composition, use, and effects.

The researcher interviewed thirty-one persons from eighteen firms that were adopting a continuous casting process in the steel industry. The highly structured interview obtained information on contacts in other firms, requests for information from other firms, and the nature of regular contacts with other firms. Sociograms that were constructed revealed the existence of social groups among firms. The findings also showed that there were direct formal contacts between decisionmakers in different firms. Lower status individuals more often contacted higher status individuals. The results of this study show that individuals in the same type of organization may be termed a society or community (Czepiel, 1975:18). It would be reasonable to assume that educators, as such, are a society or a community and that they, too, communicate with other educators in other environments.

Some studies have been conducted to investigate the relationship between communication and productivity. Among these studies are those by Migliore (1977) and Futrell (1975). Migliore (1977) conducted a long-range study in industry to ascertain the effectiveness of "knowledge of results" as a technique for improving employee productivity. Two experimental studies were conducted, each in three

stages. During the first stage, worker's productivity was monitored and ranked. "Knowledge of results" techniques were gradually introduced during Stage II, in the form of feedback and worker's productivity was posted. Full implementation of both "knowledge of results," monitoring of worker performance were in process during Stage III, and monthly group meetings for each level were being held. Personal contact with supervisors was increased, and organized group activities were conducted. Productivity increased, according to Migliore (1977).

Futrell (1975) also conducted a study to look at worker performance and communication. He conducted a field study in a marketing organization to study the salesmen's perceived goal clarity and job performance. Significant results were found using canonical analysis to examine the relationship of goal clarity and job performance, and Chi-square to determine whether the two sets of variables were independent of each other. Futrell (1975) reported a canonical correlation of .295 which showed nine percent of the variance of performance to be associated with the variation of goal clarity. He concluded from the study that

> ....(T)he salesman who perceives that he is clear on what
> is expected of him by his superiors, who perceives that
> he is clear on the relative importance of the goals
> expected by his superior, and who perceives that he
> receives feedback from his superior on how well he is
> performing his tasks, tends to have a relatively good
> attitude toward his job and tends to be willing to expend
> a relatively high amount of effort toward accomplishing
> his tasks.

According to these studies, the assumption is supported that communication tends to affect productivity, performance and feedback.

Communication can be examined in another manner. Timm (1978) investigated the communication system using it as a reward system. He set up a system of communication, using university students, which would be rewarding if it were supporting and positive, and non-rewarding if it were negative and harshly critical. The hypothesis for the study was that subjects who perceived the supervisor's communication style as negative would rate the supervisor lower on the rating scale used after each session. Timm (1978) concluded that his hypothesis was supported since there was a tendency for the supervisors who communicated negatively and harshly to be rated lower than those who were supportive and positive. Communicator's style showed some effect on the participants' ratings of their supervisors.

Goldman (1979) used a sample of 310 members of the Air Force to study leadership communication style, group response, and problem-solving effectiveness. Two instruments were utilized, the Group Leader Behavior Index and the Systems Analysis of Group Effects. Three styles of leader communication produced the following results: (1) the technical style was the most effective style of leadership in problem-solving groups; (2) the greater the group problem-solving effectiveness, the greater the leader's interaction with group members, (3) the greater the leader's fulfillment of his expected role, the more positive were group members' perceptions of their own roles and the use of specialized skills. Leadership communication style affected the group's problem-solving effectiveness. The other styles, formal and informal,

were not as effective for problem solving. The attractiveness of the

communicator's style also had an effect on the communication system.

Three independent studies were conducted by Norton and Pettigrew

(1977) to investigate the relationship between attraction and

communicator style. They defined communicator style in terms of nine

independent variables: dominant, open, dramatic, relaxed, contentious,

animated, friendly, attentive, and impression-leaving. The first study

was designed to measure the strength of the relationship between the

communicator style variables and attraction. The instruments used were

an attraction measure and a communicator style measure. Participants

responded first, to how the subject was and, second, to how he should be

ideally. Using Hostelling's T^2 statistic the researchers found that the

communicator style variables in the mean vector differed significantly

across the two conditions ($T^2 = 42.1$; $F(6, 90) = 6.7$; $p < .01$). The

mean vectors for the style variables also differed across the two

conditions ($Ts2s = 67.2$; $F(6, 90) = 10.6$; $p < .01$).

In the second study the communicator style variables were reduced

from nine to four for the purpose of assessing the predictive

relationship between the individual style variables and attraction. The

same questionnaire was used. Multiple regression analysis showed that

36 percent of the total variance was attributed to "friendly," 22

percent to "attention," and 16 percent to "relaxed."

The final study represented an extension of the second study. The

subjects evaluated the target persons without knowing their style, while

they had knowledge of the target person's style in Study II. Norton and

Pettigrew (1977) concluded from their research that the dominant/open style of communication was the most attractive of all categories; that certain communicator style variables appear to be strong co-variations of attraction variables, and that attentive, friendly, and relaxed are predictors of attraction. It can be inferred that the more attractive the communicator's style, the more effective the communication system.

The satisfaction of workers with their jobs may be influenced by their perceptions of the communication system as evidenced by the studies conducted by Area (1978), Falcione (1974), Downs and Hazen (1977), and Falcione (1977). The study conducted by Area (1978) investigated the level of communication and communication satisfaction. He related communication satisfaction to such concepts as production, maintenance, innovation, flexibility, directionality, and the types of message channels. Subjects preferred the informal channels to the formal channels. Another finding was that the higher the level of communication the more positive the subjects were toward productivity, maintenance, innovation, flexibility, and directionality. Area (1978) concluded that the higher the level of communication the more satisfied were the subjects.

Falcione (1974) studied the relationship between superordinate/subordinate communication and worker satisfaction. The subordinates tended to be more satisfied when their relationship with their superior included their participation in decisionmaking, and communication reciprocity.

Downs and Hazen (1977) conducted a factor analytic study of communication satisfaction which included both the concepts job

satisfaction and communication. They defined the term "communication satisfaction" as "a unidimensional, generalized feeling which an employee has toward his total communication environment" (Downs & Hazen, 1977:64).

The hypothesis for the study was to determine how individual components of communication satisfaction relate to job satisfaction. Downs and Hazen (1977:72) found that some of the dimensions of communication that interact positively with job satisfaction were personal feedback, relation with supervisor, and communication climate.

Falcione et al. (1977) sought to determine the role of a wide variety of variables, including communication behavior and communication propensity, on job satisfaction. They used the following instruments: Job Description Index, Personal Report of Communication Apprehension Test, McCroskey, Richmond, and Daly's homophily measure, a measure of supervision credibility and several other measures which they drew up from their previous writings. The instruments were administered to 211 employees of a large federal research establishment and to 189 elementary and secondary teachers. Among the results obtained was a correlation of .78 between communication quality and satisfaction with supervisor. Falcione et al. (1977:373) stated that "supervisor satisfaction appears to be most closely associated with perceived communication behavior."

The interaction of individuals in an organization, the supervisor's leadership style, and the formal and informal structures of an

organization contribute to organizational climate. Some researchers

suggest that organizational climate affects the communication system of

an organization. Ireland et al. (1978) proposed that three types of

organizational climate--power-motivated, affiliation-oriented, and

achievement-oriented influence the development of two types of

communication climate; i.e., the defensive and the supportive. They

suggested that power-motivated organizational climate would lead to a

defensive communication climate. A supportive climate would develop

under an achievement-oriented organizational climate. Either a

defensive or a supportive communication climate would develop under an

affiliation-oriented organizational climate. No empirical testing was

reported in the article as support for these propositions.

Helwig (1971) looked at organizational climate and the frequency of

principal-teacher communications. He suggested that in times of

conflict, principals and teachers would communicate more. He measured

the number of contacts using the Principal's data sheet and correlated

these scores with scores from the Occupational Climate Description

Questionnaire. Helwig's results showed Rs of .21, .28, and .31 which

revealed a low correlation, insignificant at the .05 level of acceptance

on one-tailed test.

Huddleston (1975) investigated occupational climate, principal's

leadership behavior and reciprocal communication. The reciprocal

communication was measured by how efficiently the principals and

teachers could verbally resolve a definite communication task with

visual sighting of the task prohibited. He did not find a positive and

nor a significant correlation between the principals' perceived

leadership behavior, as measured by the Leadership Opinion

Questionnaire, nor reciprocal communications between teachers and

principals; nor did he find a positive relationship between occupational

climate and the reciprocal communications between teachers and

principals.

Staton-Spicer and Bassett (1977) suggest that teachers have

concerns about communication. They conducted a study to identify these

concerns and to determine differences in the concerns of three groups:

prospective teachers, student teachers, and inservice teachers. The

components of communication that they looked at were concerns related to

self, task, and impact of communicating on others. Inservice teachers

expressed more concerns about how they communicated than did prospective

and student teachers. The communication concerns expressed by the

teachers in answer to the question "When you are thinking about your

teaching and communication, what are your concerns?" were content

analyzed. The responses fell under three categories: (1) concern about

self as a communicator; (2) concern about task of communicating; and (3)

concern about the impact of communicating on others. Hence, teachers

are concerned about their problems in communicating and its effect when

communicating with others.

Barnard (1938) suggested that the goals of an organization should

be known and accepted in order for organization to be effective.

Surles' (1975) study focused on this concern. Surles (1975)

investigated the relationship between the impact of agreement and

disagreement with organizational goals and the impact of agreement or

disagreement with organizational roles for the lower participants in one organization. He used stepwise regression analysis to determine the correlation between communication of goals and roles, and job indicators of job stress, economic strain, psychomatic strain, job satisfaction, job absence, and job performance. Among Surles' (1975) findings were: (1) job absences were somewhat related to understanding of treatment of administrative goals of the organization; (2) lower participants expressed job stress and strain when they misunderstood the treatment goals of the organization; and (3) lower participants who disagreed with organizational goals and roles experienced more job stress, economic strain, and psychosomatic strain. Surles' study supported his hypothesis that treatment goals and roles and custodial goals and roles have differing effects on members of an organization and that a lack of knowledge of and agreement with the goals of the organization may lead to problems in the organization.

Other problems in the organization may stem from the employment of individuals who are apprehensive toward communicating with others. The amount of communication needed varies in different occupations. Some occupations require vast amounts of communication while others require little communication. In choosing an occupation an individual should consider the amount of his communication apprehension, or the apprehension he has about interpersonal communication. Daly and McCraskey (1975) hypothesized that communication apprehension affects both the perceived desirability of a number of occupations and the actual job choice made by subjects.

The subjects were 196 undergraduate students. The instruments used to collect the data were the Personal Report of Communication Apprehension, an author-constructed measure which allowed subjects to rate 31 occupations, and a short-answer item on chosen occupation and its communication requirement.

Occupations were classified into high and low categories and high and low communication apprehensions were identified. Analysis of variance was used to check the validity of the high- and low-communication requirements classification of the occupations and to determine whether communication apprehension level produced a main effect or interacted with occupation level to affect perceived communication requirements of occupations.

Results indicated that neither communication apprehension nor the interaction of occupation and communication apprehension had a significant impact on perceived communication requirements, nor did communication apprehension produce a main effect. Thus, Daly and McCraskey (1975:310) found support for the hypotheses that (1) low communication apprehensives perceive occupations requiring more communication as more desirable than occupations requiring less communication, and (2) high apprehensives select occupations they perceive as requiring less communication than those selected by low apprehensives.

Within all organizations, individuals are communicating at an informal level in what is called the informal system or grapevine. The informal communication system complements the formal communication

system. Barnard (1938:224) sees the informal system as essential to communication in formal organizations and further suggests that executives maintain the informal executive organization as an essential means of communication. The functions of the informal communication system, according to Barnard (1938:225), are to communicate intangible facts, opinions, suggestions, suspicions, to reduce formal decisions and promote desirable influences. Thus, the informal communication system can be viewed as a vital part of an organization.

The informal communication system has been investigated to ascertain its value, influence, mode of operation, and interaction patterns. Newstron et al. (1974) studied the influence and value of the informal communication system within the organization. They utilized the semantic differential technique to quantitatively measure 341 managers and white collar employees' perceptions of the grapevine in their organization. The participants represented 164 organizations from government, military, health services, education, business, and industry. The tabulations of the distribution of responses revealed that: (1) 53 percent of the respondents viewed the grapevine as a negative factor in the organization; (2) the value of the grapevine was viewed as positive by 27 percent; (3) the value of the grapevine was viewed as neutral by 20 percent; and (4) 38 percent viewed its strength as neutral. The grapevine, overall, was viewed negatively by the managers and white collar employees; however, it is ever present in all organizations.

Davis (1953) analyzed the mode by which the informal communication system transmitted information throughout the organization. He looked at a manufacturing company of 67 people to learn from each communication recipient how he first received a given piece of information. Among the grapevine characteristics the four most significant were: (1) speed of transmission; (2) degree of selectivity; (3) locale of operation; and (4) relation to formal organization. Davis (1953) found four different ways of visualizing the informal communication chain: the single strand, the gossip chain, the probability chain, and the cluster chain. The cluster chain was found to be the predominant chain in the company.

Davis (1953:47) stated that ". . . the predominant flow of information for events of general interest was between the four large areas of production, sales, finance, and office rather than within them." He recommended that managers increase the number of liaison individuals; recognize that some persons are isolated from communication chains; and that further research be conducted on the transmission of information through the grapevine.

A partial replication of Davis (1953) study was conducted by Sutter and Porter (1968). The major concern of their investigation was to test whether communications role behavior is a function of certain personality characteristics of individuals. Sutter and Porter (1968) used a regional tax office of a state government for their sample. Davis' (1953) "ECCO Analysis" method was utilized to study the flow of information through the grapevine. The ECCO is an instrument which was devised to study and record the communication patterns within

organizations. Bass' Orientation Inventory was administered to all respondents after the final collection of the grapevine data. The results showed that the predominant flow of information took place within, rather than between, functional groups; 71 percent of those employees who functioned as liaison individuals did so regardless of the degree of task relevance of the information going through the grapevine; and that the liaisons were relatively more interaction oriented, the dead-enders more task-oriented, and the isolates more self oriented (Sutter & Porter, 1968:227-228). Sutter and Porter's (1968) findings differed from Davis' (1953) findings in that the predominant flow of information took place within, rather than between, groups and in that most liaison individuals functioned as such regardless of the type of item passing through the grapevine. Sutter and Porter suggest that personality orientation affects the role behavior of an individual in the grapevine network.

Most of the studies on the informal communication system have been conducted as field studies of single-shift eight-hour-workday situations. Rudolph (1973) investigated the possibility of basic similarities existing between intra-shift and inter-shift communication patterns. He selected a specific toll unit of a major company of 124 employees, representing eight levels of the organization. Davis' ECCO Analysis was the instrument used to collect the data. Twelve different information episodes were employed to trace the flow of information within the organization. Some of Rudolph's (1973:20) findings were:

(1) Informal information flow was found to exist predominately

between work groups rather than within them.

(2) Informal information was found to be accurate 80 percent of

the time.

(3) There was a significant difference in the amount of informal

information flowing downward and horizontally from the amount

flowing upward.

(4) There was a significant difference in the amount of informal

information received.

(5) A curvilinear relationship was found to exist between levels

of the organization and the amount of informal information

received.

Among Rudolph's (1973) conclusions was the idea that different

organizational environments produce different communication behavior.

The development of theory in organizational communication has

usually focused on the formal channels of communication. Melcher and

Biller (1967) worked toward a theory on channel selection, focusing on

determining when the use of formal or informal channels or some

combination thereof contributes to the effectiveness of the

administration. They also sought to determine when verbal, written, or

some combination of these methods facilitate an administrator's

effectiveness when using the formal and informal networks.

Melcher and Biller (1967:41) noted an absence of theory in the area

of determining alternative channels and methods of using channels. The

theory, they propose, suggests that a manager is faced with alternative

methods and channels in his operation and must evaluate the usefulness

of the formal and informal channels of information and the written or

oral methods of transmitting information. His effectiveness is affected

by several factors:

(1) How quickly he familiarizes himself with the orientation of

his superiors, subordinates, and members in other

departments.

(2) The extent to which he integrates himself into the social

system, and

(3) His awareness of the functional aspects of the alternative

channels.

Awareness of these factors, and complete information on channels and

methods will facilitate the manager's best usage of the communication

system.

Summary. Evidence has been presented to support the belief that

communication is a viable component of organizations. Research has

shown that the communication system within organizations affects the

organizational behavior. The communication system has been related to

job productivity and performance, job satisfaction, occupational

preferences, leadership behavior and the flow of information. Each of

these management processes has been shown to have an effect on the

operation of organizations. Although the number of studies included

which were conducted in educational settings was small the research

reviewed in the section can be related to communication in educational organizations.

Work Motivation

The research that has been conducted to investigate work motivation and management processes in educational settings has been sparse. The majority of research in the area has been limited to business, industry, and government. However, basic similarities exist to the extent that research in business, industry, and government has been generally related to research in educational organizations. This section will include research on work motivation and management processes such as job productivity and performance, job satisfaction, and leadership behavior.

The most prevalent means of investigating work motivation has been the expectancy model of work motivation. The basic idea of the model is that an individual's behavior is a function of the degree to which the behavior is instrumental for the attainment of some outcomes, and the individual's evaluation of these outcomes (Tolman, 1932; Lewin, 1935). It was first introduced in an organizational context by Georgopoulos, Mahoney and Jones (1957) and Vroom (1964). Georgopoulos et. al. (1957) used the path goal approach which proposes that a worker will be a high producer if he sees high productivity as a path leading to the attainment of his personal goals. Conversely, if a worker sees low productivity as a path leading to his personal goals he will tend to be a low producer. Thus, the type of producer a worker chooses to be is

based on its instrumentality or path to his personal goals. The researchers chose three particular goals for the participants: getting along with others, more money in the long run, and promotion to a higher pay base.

The sample was a group of workers in a large appliance company. Two types of questionnaires were used; one to ascertain how instrumental high productivity is seen for attaining certain job-related goals; and the other to investigate how instrumental low productivity is seen for achieving the same goals. Productivity was measured by the workers' reports of their average productivity level.

The findings supported the hypothesis of the study. It was found that a worker who sees high (low) productivity as a path to the attainment of his goals will be a high (low) producer.

Vroom's (1964) model of expectancy theory built on that of Tolman (1932), Lewin (1935) and Georgopoulos, Mahoney and Jones (1957). Actually, Vroom (1964) proposed two models: a valence of outcome model and a job performance model. However, all models that resulted from variations and elaborations of the models have three basic elements: expectancy, valence, and instrumentality. Expectancy refers to the perceived degree of relationship between one's level of effort and his level of performance. Valence refers to the positive or negative importance one attaches to the events that occur on the job as leading to job outcomes. Instrumentality refers to the perceived degree of relationship one sees between his level of performance and attaining job outcomes.

Vroom's (1964) model implies that people choose among alternative work-related actions in a manner which optimizes their expected valence. That is, for each action people multiply their perceived valences of all possible outcomes, and finally choose the action with the highest summation.

One of the first research teams to use the expectancy model, as proposed by Vroom (1964), was Galbraith and Cummings (1967). The study was designed to operationalize and test two components of the model, namely, valence and instrumentality, thought to be useful in explaining productivity variations among operative workers. Galbraith and Cummings (1967) modified the Vroom model by distinguishing between first- and second-level outcomes. First-level outcomes are defined as those outcomes which have valence that the investigator is interested in predicting, such as performance on the job. Second-level outcomes are those outcomes actually expected by the individual to result from first-level outcomes.

The researchers compared the valence of specific extrinsic rewards on performance, (money, group acceptance, fringe benefits, promotions, and supervisory supportiveness). The subjects were 32 workers in a large heavy equipment manufacturing company. Their productivity was independent and ample opportunity existed for variance in the subject's performance. Productivity, valence, ability, instrumentality, and ego involvement were the concepts that were measured. The most significant set of variables were arrived at by means of regression analysis.

The results showed that the most significant variables were the interaction between valence and instrumentality for supportive behavior on the part of the supervisor and that high performance was instrumental to group rejection among the subjects. The results revealed a multiple correlation of 0.56, meaning that one-third of the variance was explained by the significant variables in the model.

The results also revealed that valence of group acceptance and of pay is significant when modified by second-level outcomes and that valence of pay and supervisory supportiveness, in joint interaction with ability and second-level outcomes were also significant. Thus, group acceptance, pay, and supervisory supportiveness affect the performance of employees in organizations and can be viewed as work motivators.

Lawler and Porter (1967), using the expectancy model, predicted that the more managers feel that significant rewards are tied to the amount of effort they direct toward their job performance, the more effort they will expend in performing their job effectively. The significant rewards tested were pay, promotion, prestige, security, autonomy, friendship, and opportunities to use skills and abilities.

Data were obtained by questionnaire from 154 managers in five organizations of various types. The result, obtained by correlation, was an r of .70 (p < .01) for the relationship between effort and performance. The performance-related items were effort, high productivity, and job performance.

The Lawler and Porter (1967) study shows that pay, promotion, prestige, security, autonomy, friendship, and opportunities to use

skills and abilities serve as motivators to increase job performance. However, when studied separately, pay has not always been found to affect performance.

Pritchard and DeLeo (1973), in a later study, looked at the relationship between job outcome and pay. The researchers also tested the multiplicative relationship between valence of job-outcomes and performance-outcome instrumentality. The multiplicative process is calculated by multiplying the valence of each outcome by its instrumentality and adding the products. The resulting score is then correlated with performance and/or effort.

The hypothesis for the study proposed that the greater the pay, the greater the valence of pay. The high-low instrumentality variable was operationalized as piece-rate payment and hourly payment, respectively. The valence variable was different amounts of pay, which the researchers manipulated.

College students were used as subjects and were obtained through advertising for part-time clerical help. The task assigned to the participants was to transform catalogue numbers by adding digits and then looking up the transformed numbers in a special sales catalogue.

The results did not support the predictions. Both the high and low instrumentality subjects exerted the exact amount of effort needed to earn the same amount of pay under both conditions. As can be seen from the study, pay does not always serve as a motivator for job performance.

Pay as a motivator to influence organizational performance was also examined by Schwab and Dyer (1973). The subjects for the study were 124 incentive-paid blue collar workers. Hourly averages over a 5-week period were used to measure levels of productivity. Measured perceptions of valence, instrumentality, and expectancy were obtained by questionnaire. Compensation was the sole second-level outcome. The hypotheses were only partially supported. Valence of compensation and expectancy were found to be related to performance but instrumentality was not related to performance.

In an effort to understand what factors motivate people to work on jobs in organizations, researchers have looked at still other concepts. Lawler (1968) tested the causal basis of the relationship between expectancy attitudes and job performance. The researchers were seeking to ascertain whether expectancy attitudes actually caused job performance.

Fifty-five managers from social service agencies took part in the study. Each participant responded to a short questionnaire and each participant was ranked by both his superiors and his peers. The process was repeated one year later.

The results of the study were generally supportive. The expectancy attitudes of the participants at the time of the first questionnaire predicted the performance of the participants one year later. Lawler (1968) concluded that expectancy attitudes cause performance.

Effort has also been found to relate to performance. Hackman and Porter (1968) investigated effort or how hard employees work on their

jobs and how effective their work is as a result. The researchers

obtained three kinds of information from the employees: (1) a list of

outcomes which they expect to obtain as a result of working hard on the

job; (2) an estimate of the level of certainty they have that the

outcomes will, in fact, be obtained as a result of working hard; and (3)

an estimate of the degree to which they like or dislike the outcomes.

The expectancy model used was "force equals expectancy times valence."

Eighty-two female telephone employees responded to questionnaires

seeking information on expectancy and valence. Work effectiveness was

measured by job involvement, effort, error rate, and sales data.

The expectancy theory predictor of how hard the subjects would work

on the job correlated with work effectiveness (r = .40). Only two of

the expectancy theory of work motivation components, expectancy and

valence, were used in the study.

Not many of the studies reviewed tested the entire expectancy

model, expectancy, valence, and instrumentality. Most studies test one

or two of the components. Pritchard and Sanders (1973) proposed to test

the entire model, expectancy, valence, and instrumentality, using the

effort formula: effort = E (V·I) or effort equals expectancy times the

sum of valence times instrumentality.

The sample was composed of 70 male and 76 female postal employees,

who were being trained to sort mail. The employees and supervisors

generated potential outcomes that could result from successful

completion of the program. Measures of valence were obtained using a

Likert-type instrument to rate the outcomes; instrumentality scores were

obtained by estimating the chances that completing the program would

lead to the job outcomes; and expectancy scores were obtained by

probability estimates of effort leading to job outcomes.

Analysis of the data revealed that the complete model is a fairly

good predictor of self-reported effort even though the proportion of

variance accounted for was small. Valence was the single best predictor

of effort.

Several of the researchers using the expectancy theory investigated

multiple variables either separately or combined and they also used more

than one of the expectancy models. An example of this procedure is the

study conducted by Mitchell and Albright (1972) in which they looked at

satisfaction, effort, performance, and retention using a job

satisfaction model and a job performance model.

Fifty-one naval aviation officers participated in the study. They

responded to two instruments, the Navy's CO/XO Rating Form and the

Officer Attitude Questionnaire. The CO/XO is used by commanding

officers and executive officers to evaluate the naval officer's effort

and performance. The Officer Attitude Questionnaire measured the key

variables of the expectancy model of work motivation, expectancy, and

instrumentality.

The analysis of the data revealed that satisfaction is more related

to intrinsic outcomes than to extrinsic outcomes. The correlation

between satisfaction with one's position and retention was 0.65 (p <

.01) while satisfaction with the Navy was correlated only 0.49 (p < .01)

with retention. The job satisfaction model produced stronger support

for predicting work motivation than did the job performance model.

There was disagreement between self-rated and superior-rated effort.

The correlation was .30 (p < .05). Mitchell and Albright (1972:19)

suggested that satisfaction and retention can be predicted very well

from job satisfaction model and that in order to increase retention the

Navy should seek to increase intrinsic outcomes.

Participation in decision-making is another variable that is

considered to be associated with increased production. Neider (1980)

looked at this association in her study of participation and expectancy

theory. The research hypothesized that:

> ...(P)roductivity increments will occur in work settings
> which allow employees to participate in decisions
> concerning how their work will be carried out and in
> which valent outcomes are associated with good
> performance. Employee effort levels will increase when
> employees are allowed to participate in decisions
> concerning how their work will be carried out and in
> which valent outcomes are associated with good
> performance. (Neider, 1980:426)

The researcher used four stores in a large chain to investigate the

hypotheses. The categories measured were importance rankings of issues,

incentive attractiveness, manipulation checks, employee effort and

productivity or average hourly sales levels. The four stores that

participated in the experiment were identified as follows: Store A

was the control; Store B used incentives; Store C used

participation only; and Store D combined incentive and participation.

The results of the study showed that production increased in Store

D where employees participated in discussions about how to perform their

jobs and where they were able to earn incentives if their production

increased. Six weeks later, Store A changed to the combined incentive-participation program and production there increased. The mean difference between the stores was found to be F (3, 90) - 3.55, p < .01. After the intervention stopped, both Stores A and D's production decelerated. Neider (1980) contends that participative decision making clarifies the effort performance linkage of the expectancy model of work motivation.

Decision making and its association with the expectancy theory has been investigated in an educational setting. Piou (1979) looked at decision making and feedback in elementary schools. He found a positive correlation between the amount of decision making and feedback and teachers' work motivation.

Not only has the expectancy theory been used to predict effort, performance and satisfaction, but it has also been used to predict leader behavior. Nebeker and Mitchell (1974) tested the ability of expectancy theory to explain and predict leader behavior in a "real life" setting. More specifically, the researchers hypothesized that a leader's predicted behavior is positively associated with his subordinate's descriptions of that behavior, his behavioral intentions, and his self-reported behavior.

Two studies were conducted to test the hypothesis developed by Nebeker and Mitchell (1974). In Study I three Navy aviation squadrons served as the subjects. Questionnaires were designed to obtain information concerning expected values, behaviors, outcomes, and instrumentality. The data showed a significantly positive but modest

relationship between expectancy theory predictions of leader behavior

predictor measures. The inclusion of both positive and negative

outcomes did not strengthen the model since they did not improve the

predictive power with respect to effort and performance. However, with

job satisfaction the correlations were higher when negative outcomes

were included than they were when only positive outcomes were included.

Job satisfaction as a predictor was found to be statistically

significant in 12 of the 26 cases.

Few researchers have tested the expectancy model in educational

settings. Among those were Mitchell and Nebeker's (1973) study which

was conducted to predict the effort and performance of college students.

The job effort model of the expectancy theory of work motivation

proposes that the amount of effort one exerts is based on three factors:

(1) the degree to which effort is seen as leading to good performance,

(2) the degree to which good performance is instrumental for the

attainment of some outcomes, and (3) the evaluation of these outcomes.

Mitchell and Nebeker (1973) used both the job effort model and the job

performance model to determine which model was the most effective as a

predictor. The job performance model proposes that performance can be

predicted by an effort times ability score.

The subjects were 60 male undergraduate students. Grade point

averages were used to measure performance; the ability score was ob-

tained from the pre-college battery of tests; and effort was measured by

the number of hours spent on academic activities for the last quarter.

A list of outcomes were solicited from the students. Valence was measured by having the students rate the outcomes according to the degree to which they perceived that obtaining or maintaining a high level of each outcome was important or pleasant to them. An estimation made on a 7-point scale of the degree to which one felt that the time one spent on academic activities would lead to good grades, was the measure of expectancy. Instrumentality was measured by an estimate of the degree to which obtaining good grades contributed to or detracted from the possibility of obtaining each outcome. The researchers also obtained measures of attitude toward performance, attitude toward effort, expectations of professors and peers, and amount of control over one's time.

The analysis was conducted by both the additive and the multiplicative methods. The study showed that students perceive good grades as instrumental for obtaining outcomes that are not their most valued outcomes.

The results of the job performance model showed no difference between the additive and the multiplicative procedures in predicting performance. Of the measures of performance, only ability showed a strong relationship ($r = .57$, $p < .01$). Mitchell and Nebeker (1973:67) found it interesting that "effort was unrelated to GPA." The study showed that ability was stronger in predicting high performance than was grade point average and time spent on academic activities.

DeFrain (1979) and Miskel, DeFrain and Wilcox (1980) conducted studies using such variables as central life interests, voluntarism, and

job satisfaction. DeFrain (1979) looked at college teachers' work

motivation, central life interests, and voluntarism as predictors of job

satisfaction and job performance. She found strong support for the

hypothesis that job satisfaction and job performance could be predicted

from these variables.

Miskel, DeFrain, and Wilcox (1980) tested the predictive powers of

expectancy motivation theory as a cognitive process model. The allied

concepts of central life interests, voluntarism, and personal and

environmental characteristics were investigated in relation to job

satisfaction and job performance. Strong support was found again for

the hypothesis.

Teacher motivation and its relationship to innovativeness and job

satisfaction was investigated by Zaremba (1979) using the expectancy

theory and social systems theory. The Herrick Motivation and Reward

Scale, the Kirton-Adaption-Innovation Inventory, and the Mendenhall Job

Satisfaction Questionnaire were used to collect data from the total

teaching faculties of eight senior high schools. The major findings

were that there was a significant relationship between the level of

teacher motivation and the level of teacher innovativeness, and the

level of job satisfaction. As the level of teacher motivation increased

so did the levels of innovativeness and job satisfaction.

The expectancy theory was utilized by Herrick (1974) to examine the

relationship of organizational structure to teacher motivation in

multiunit and non-multiunit elementary schools. The sample included

fifteen teachers from each of 34 multiunit schools and 38 non-multiunit

schools. The major findings of the study included the fact that

multiunit schools were less centralized, less stratified and had more highly motivated teachers than non-multiunit schools and that school size was a significant predictor of teacher motivation.

The relationship between teacher motivation and organizational climate was examined by Suggs (1978). She investigated the relationships between the teachers' self-perceived needs and teachers' motivation orientations; between the teachers' motivation orientations and the organizational climate of the building; and between the organizational climate and teachers' self-perceived need levels.

The instruments used to collect the data were: Shastrum's Personal Orientation Inventory, Stern's Organizational Climate Index, Choice-generator Scale, and a demographic questionnaire. The researcher found that the majority of the subjects sought intrinsic rewards from their work rather than extrinsic rewards; older teachers view climate as more supportive than younger teachers; and the subjects perceived their organizational climate as below normal for maintenance of high motivation. She also found that the type of motivation orientation of the teacher was not significantly related to teachers' self-perceived needs nor to the teacher's perceptions of the organizational climate.

The expectancy theory of work motivation has been used to examine the occupational preferences and choices of individuals in educational settings (Wanous, 1972; Mitchell & Knudsen, 1973). "Occupational preference refers to the attractiveness of an occupation to an individual while occupational choice refers to the occupation one desires to enter" (Wanous, 1972:152). Wanous (1972) hypothesized that

students would tend to rate their most preferred occupation higher than their less preferred occupation in terms of the Valence x Instrumentality measure. He also sought to determine how students would compare the instrumentality of starting salary for three occupations to data from three salary surveys. Questionnaires were used to obtain students' perceptions of valence and instrumentality.

The students ranked five jobs on the bases of job attractiveness and six factors in terms of the importance to themselves. The researchers concluded that the students perceived their own occupations as having the best Valence x Instrumentality, and that students' perceptions of starting salary and the survey data were positive. Since the expectancy theory is considered a rational model of how individuals develop preferences and make choices, Wanous (1972:154) considers valence and instrumentality concepts from the theory as useful in understanding occupational preference.

Mitchell and Knudsen (1973) investigated the occupational choices of students using the instrumentality theory and examined why certain students select business as an occupation. One hundred and six students, 53 psychology majors and 53 business majors, responded to a questionnaire which was designed to collect data on the following variables: attitude toward business, occupational choice, evaluation of outcomes, instrumentalities, expectations of others, and motivation to comply. Business students saw business as more instrumental for the attainment of their goals than did psychology students. Business students, as predicted, had more positively extrinsic outcomes than did

psychology students. Mitchell and Knudsen (1973:49) concluded that "business and psychology students differ in their attitudes and occupational choice not so much because of differences in values or goals but in the way they perceive they can attain those goals."

With the prolific research in using the expectancy model of work motivation have come studies which are designed to investigate the resulting problems with the model. Three basic problems have been high-lighted in the reviews of the literature by Behling and Starke (1973), Dahler and Mobley (1973), and House, Shapiro, and Wahba (1974). The problems are: (1) most studies fail to measure all of the motivation variables according to the Vroom model; (2) a priori selection of a limited number of outcomes; and (3) failure to account for individual ability as moderating the relationship between motivational force and performance. Sheridan, Slocum, and Min (1975) sought to examine these problems as they relate to worker's job performance.

The researchers collected data on expectancy, valence, instrumentality, ability and performance from 138 incentive workers in a steel fabricating plant. Relevant outcomes were solicited from 30 workers. The data was collected by means of questionnaires using Likert-type scales. Ability measures were obtained from the Army General Classification Test, and productivity measures from the comptroller's records for the previous two-week period.

The data analysis indicated that the average correlation between each worker's valence and instrumentality score over the 14 outcomes ranged from $-.22$ to $.66$, with the median correlation as $.34$ ($p < .01$).

Sixty-eight percent of the workers had a positive correlation between their valence scores and their instrumentality scores. In an earlier study, Mitchell and Nebeker (1973) found ability had a significant effect on performance. However, in this study Sheridan et al. (1975) found that ability produced no significant effect on the expectancy model. Generally, the data supported the basic expectancy model and motivational force correlated significantly with performance. The highly motivated workers performed at the higher level.

Nor was strong support for adding the ability measure to the expectancy model of work motivation found in Lawler and Suttle's (1973) study. They also used cross-lagged correlational analysis and the time factor to look at relationships between expectancy theory and job behavior. Specifically, they sought to determine the relationship of expectancy attitudes to effort and performance.

The sample consisted of 69 department managers in six retail stores. A six-part questionnaire was administered. The questionnaire contained items in expectancies, valences, and role perceptions. Measures were obtained on ability from the Thurstone Test of Mental Alertness, and performance, self-ranked performance, superior-ranked performance, and objective sales data. Six months later one-half of the group responded to the questionnaire again and one year later the other half responded to the questionnaire again.

The highest correlations, .39 and .29 were found between the measures of motivation and effort. None of the correlations were high but the predicted relationships were present even though there was weak

support. To some extent expectancies were found to cause effort, and role perceptions were the best predictors of performance rankings. There were significant correlations between job behavior and some of the expectancy-type attitude measures.

The expectancy model of work motivation has been used to examine the job expectancies of culturally advantaged and disadvantaged employee groups concerning whether effective job performance would lead to certain job rewards and the relative importance or valences of these rewards for the disadvntaged as compared to the advantaged group. Arvey and Mussio (1974) used a sample of 266 female clerical workers for civil service in a large city.

The culturally disadvantaged and culturally advantaged groups were isolated on the basis of the Environmental Participation Index, an instrument which lists household possessions before age 16 and activities participated in before age 18; and the number of years of schooling completed by one's father. A questionnaire was used to obtain measures of valence and expectancy. The two groups were compared using the t-test to calculate differences in means.

Significant differences were found between the disadvantaged and the advantaged. The disadvantaged group indicated that high salary, steady and secure employment, praise and getting along with coworkers were more important to them, whereas the top three outcomes for the advantaged group were use of abilities, accomplishment, and safe and secure employment. Fifty percent of the disadvantaged did not see effective performance as leading to advancement, whereas 38 percent of

the advantaged responded this way. The data also revealed that the culturally disadvantaged had lower expectations on most of the expectancy measures.

The findings of the study replicated the findings of Slocum and Strawsen (1971) that social needs or lower order needs are the most important feature of jobs for the disadvantaged. It also pinpoints the applicability of the expectancy model of work motivation to differentiating between the motivators for different cultural groups.

Several studies have been conducted which examine motivation in manners other than through the expectancy theory (Patton, 1974; Krivonas, 1978). Patton (1974) used the Educational Work Components Study, which merges Hertzberg's two-factor theory and Blum's security factors. He did not find support for Argyris' model of motivation which describes work behavior as operating along a continuum from infancy to adulthood; neither did he find a relationship between organizational structure and work motivation.

Krivinos (1978) looked at the relationship between intrinsic-extrinsic motivation and communication climate. Intrinsic motivation refers to motivation that is gratified in the process of the activity, such as work itself; while extrinsic motivation refers to motivation that is gratified from the results of the work. Communication climate was composed of supportiveness, participative decision making, trust, confidence and credibility; openness and candor; and emphasis on high performance goals.

The major hypothesis for the study was that intrinsically motivated subordinates will perceive the communication climate to be more ideal than will extrinsically motivated subordinates. The sample for the study was 27 subjects from one large manufacturing company and 38 from another large manufacturing company. An Intrinsic-Extrinsic Motivation Scale and the Communication Climate Questionnaire were administered to the subjects. The results showed that the hypothesis was partially supported since only one of the six means, accuracy of downward communication, showed significance. The intrinsically motivated subordinates did perceive more accuracy in downward communication than extrinsically motivated subordinates. Consequently, Krivonas (1978) considered the major hypothesis supported.

Some researchers (Kopelman and Thompson, 1976) have suggested that other types of modifications will strengthen the expectancy model and that higher correlation scores will result. They propose that boundary conditions be added when investigating expectancy work motivation. The researchers added five boundary conditions: (1) time, (2) initial level of criterion, (3) level of rewards, (4) task-specific ability, and (5) organizational control system responsiveness.

Kopelman and Thompson (1976) view time as a viable boundary condition in that it takes time for motivational forces to work. Initial level of the criterion refers to the fact that all workers do not enter the job market at the same level of performance. Level of reward has reference to which of the broad types of needs will motivate worker behavior. Task difficulty and ability should be considered as a

combined concept. The degree of relationship between organizationally mediated rewards and individual job performance was considered as control system responsiveness. The expectancy model of work motivation and job performance were examined with the addition of these boundary conditions by the researchers.

The study was conducted with 399 design and development engineers in three large companies. The follow-up study included 210 of the original group. Performance was measured by supervisory rankings, salary, organizational level, hours worked, and self-rating of effort. The researchers used correlational and longitudinal correlations to analyze the data. Cross-lagged panel analysis was conducted over a four-year period.

Among the findings were that expectancy theory predictions were materially affected by a number of the boundary conditions. The correlation score increased from .24 the first year to .45 the second year, supporting the assumption that time affects scores. After partialing out initial criterion levels, initial static predictions of salary and organizational levels the correlation score increased from −.15 and −.04, respectively, to .48 and .28, respectively.

The researchers found that the level of rewards affected the concurrent validity of composite and component expectancy theory predictors. The other variables increased when the boundary conditions were considered. Kopelman and Thompson's (1976) study added to the expectancy model of work motivation in that they found that time does affect the scores obtained in the study of the model.

In an effort to strengthen the expectancy model in another manner, Reinharth and Wahba (1976) proposed to add negative as well as positive valences to the model. They looked at job effort, job performance, and job satisfaction. They hypothesized that all three concepts would be more highly correlated with the degree to which an act is instrumental to the attainment of valued outcomes and the avoidance of undesirable outcomes than with the degree to which the act is perceived to lead only to the attainment of valued outcomes.

Data were obtained by questionnaire from the sales force of three industrial companies. Measures of valence of outcome, expectancy instrumentality, effort expenditures, job performance, and job satisfaction were obtained. The findings provided no support for job effort and job performance and subordinate's description of that behavior.

Study II involved fifty supervisors in a large county government public works department. The same questionnaire was administered to them. The results again confirmed the hypothesis, and suggest that leader behavior tends to be under the control of the cognitive expectations of the leader. Nebeker and Mitchell (1974:365) contend that:

> if we wish to understand why a leader chooses to behave
> the way he does and how it might be possible to induce or
> encourage more appropriate behaviors, we need to know the
> leader's (a) perceived expectations that a behavior is
> related to the attainment of outcomes and (b) the
> evaluation of these outcomes.

James et al. (1977) examined psychological climate and an expectancy model. They define psychological climate as:

the individual's internalized representations of
organizational conditions and interrelations among
organizational conditions, and reflects a cognitive
structure of perceived situational influences in the
situation. (James et al. 1977:230)

The researchers assumed that expectancy theory of work motivation is

affected by the climate of the situation and thus performance would be

affected as well.

James et al. (1977) divided the study into two phases: Phase I to

report the intradomain analyses for VIE and psychological climate; and

Phase II to present hypotheses and tests of such concerning the

relationships between VIE and psychological climate.

The data were obtained by mailed questionnaires from 544 managerial

employees in a health care program. A psychological climate

questionnaire, and a VIE questionnaire were used to measure the

components. Statistical methods were used to test the reliability of

the psychological climate questionnaire and commonalities of .42 to .82

were found.

In Phase II, psychological climate covaried significantly with a

number of the variables representing a VIE model of work motivation.

Summary of Related Literature

This chapter has presented a review of the major research on

communication and work motivation. The first section was devoted to

research relating communication to organizational behavior and

management processes. The second section concentrated on work

motivation and the expectancy theory of work motivation research

relative to the relationship of these two concepts to organizational

behavior and management processes.

Empirical findings of the review of related literature were:

(1) Oral and written communication tends to be most effective most

of the time.

(2) Upward communication may be distorted by leadership behavior

and subordinate attitudes, and organizational structure.

(3) Communicator style may influence the effectiveness of the

communication system and workers' satisfaction.

(4) Knowledge of results, goals clarity and knowledge of roles may

increase productivity.

(5) The communication system may affect job satisfaction.

(6) The major communication concerns of teachers about their own

communication are concerns about self as a communicator, the

task of communicating, and concerns about the impact of their

communicating on others.

(7) The informal communication system may complement the formal

communication system in terms of its speed and accuracy.

(8) The expectancy theory of work motivation has been found to be

effective in predicting job productivity and performance, job

satisfaction, and occupational preferences.

(9) Motivation to work may be affected by the communication

climate.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter describes in detail the population for the study, the sample, the instruments used to collect the data, the data collection procedure, and the data analysis plan. The study was designed to investigate the relationship between the school communication system and teachers' work motivation. The subquestions for the study were:

(1) What is the relationship between school perspective and teachers' work motivation?

(2) What is the relationship between school organizational integration and teachers' work motivation?

(3) What is the relationship between personal feedback and teachers' work motivation?

(4) What is the relationship between communication with principal and teachers' work motivation?

(5) What is the relationship between the communication climate and teachers' work motivation?

(6) What is the relationship between horizontal communication and teachers' work motivation?

(7) What is the relationship between media quality and teachers' work motivation?

(8) What is the relationship between the size of the school and
teachers' work motivation?

(9) What is the relationship between teachers' years of experience
and teachers' work motivation?

(10) What is the relationship between teachers' job satisfaction
and teachers' work motivation?

(11) What is the relationship between the teachers' level of
satisfaction for the last six months and teachers' work
motivation?

Population for the Study

The study was a descriptive ex post facto study. According to
Kerlinger (1973:392) ex post facto research is appropriate in that "the
most important social scientific and educational research problems do
not lend themselves to experimentation, although many of them do lend
themselves to controlled inquiry of the ex post facto kind." Thus, the
study was designed to look at existing conditions and ascertain the
relationship of variables whose manifestations had already occurred.

The sample was chosen from the population of elementary teachers in
the Norfolk Public Schools. The school district is located in a large
city in southeastern Virginia and is considered an inner-city school
district. For practicality and to meet the requirements of the Norfolk
Public Schools Research Department, cluster sampling was used.

A list of all the elementary schools was obtained from the Norfolk
Public Schools Directory. A random sampling table was used to select

eleven schools from a total of forty-one elementary schools. The size

of the sample was arrived at by using the National Education Association

(1960) formula for small samples. All teachers in the selected schools

were included in the sample.

Operational Definitions

The operational definition for the school communication system is a

score on the Downs and Hazen (1971) Communication Satisfaction

Questionnaire. Teachers' work motivation is operationally defined as a

score on the Teachers' Expectancy Work Motivation (Miskel, 1978).

Measuring Instruments

Two instruments were used in the study: the Communication

Satisfaction Questionnaire and the Teachers Expectancy Work Motivation

Questionnaire. The Communication Satisfaction Questionnaire was

constructed in three stages by Downs and Hazen (1977). Three pilot

studies, a review of the literature and a collection of critical

incidents served as a basis from which the first draft was constructed.

After the first draft was administered to 225 managers and professionals

in universities, hospitals, the Army, government agencies, and

businesses, it was factor analyzed and item validity analysis were

calculated. Item validity analysis was used to determine whether the

items differentiated between satisfied and dissatisfied workers.

The first draft was then refined and administered to 410 managers

and professionals in four different types of organizations. The final

draft was then correlated with a measure of job satisfaction. The

correlation coefficients obtained ranged from a low of .04 to a high of .67, with most correlations above 0.40.

The Communication Satisfaction Questionnaire is composed of forty-two items and seven factors. The response categories range from very satisfied to very dissatisfied on a Likert-type scale of one through seven. The test-retest reliability of the instrument is 0.94.

The seven factors of the Communication Satisfaction Questionnaire are described by Hoy and Miskel (1978:251-252) as follows:

1. School Organizational Perspective. Items in this dimension reflect information relating to the overall functioning of the school.

2. Personal Feedback. This factor relates to personal achievement and work and how they are recognized by the school.

3. School Organizational Integration. This reflects the individual's satisfaction with the information that one receives about the school and the immediate work environment.

4. Communication with Principal. These items refer to two-way communication with the principal.

5. Communication Climate. This broad factor reflects communication at the school and personal levels or the extent to which communication motivates and stimulates workers to meet goals.

6. Horizontal Communication. This factor relates to formal and informal communication among fellow employees.

7. Media Quality. This reflects the degree to which teachers perceive the major forms of communication (memos, publications) as functioning effectively.

The Communication Satisfaction Questionnaire was adapted to the public school setting for this research effort. Two questions pertaining to the relationship with the principal were added and terms were changed to reflect public school terminology. For example, the term "manager" was changed to "principal" and the term "company" was changed to "school."

The questionnaire was then administered to twenty-nine public school teachers who were enrolled in a class in administration at a local university. The teachers taught in both elementary and secondary schools in areas surrounding the university. The questionnaire items were analyzed for reliability of scales using Cronbach's alpha. Reliability coefficients that were found between scales ranged from .76 to .88.

The Teachers Expectancy Work Motivation Questionnaire is composed of eighteen items divided into three components: expectancy, valence and instrumentality. The items are measured on a Likert-type scale ranging from one through five. The expectancy component is composed of three items on a five point scale ranging from "never" to "almost always." Seven items measure instrumentality on a scale ranging from "strongly disagree" to "strongly agree," also on a five point scale. Valence is also on a five point scale but from "less important" to "extremely important," with eight items. These components are combined into Vroom's (1964) force of motivation formula. The force of motivation is stated as

$$FM = E\Sigma IV$$

where   FM = force of motivation

      E = Expectancy

      I = Instrumentality

      V = Valence

The force on an individual to perform a particular act is calculated as the sum of the products of expectancy (the degree to which the individual believes that the act will lead to desired performance) and valence (the anticipated satisfaction associated with the particular outcome) times instrumentality (the degree to which one's level of effort leads to desired outcomes). The Teachers Expectancy Work Motivation Questionnaire was designed to measure work motivation using Vroom's (1964) force model which predicts the amount of effort an individual exerts as determined by his motivation to exert that effort.

Two questions were used to obtain the demographic information, years of experience at the present school, and size of school enrollment. Finally, two questions were asked to obtain a general response to job satisfaction.

Data Collection

Permission to conduct the study was obtained from the Research Division of Norfolk Public Schools. Afterwards, the Research Division notified each of the principals of the eleven selected elementary schools. Each principal was contacted additionally by telephone; the study was discussed with them; and a request was made for their

cooperation. As per request of the Research Division of Norfolk Public Schools a copy of the instrument was sent to each principal.

A packet was prepared for each teacher listed as working in the selected schools for the school year 1980-81. The packet contained an introductory letter requesting assistance and expressing gratitude, the questionnaire, and a self-addressed envelope. The questionnaires were delivered to the eleven selected schools and a contact person (not the principal) distributed the packets to the teachers. No identifying information was included in the packets to insure confidentiality of the participants. The questionnaires were returned to the contact person in each school. The questionnaires were collected from each school ten days later. A second collection was made five days later.

Data Analysis

The questionnaires were counted upon receipt and screened for missing data. The responses were transferred to Opscan sheets for computer analysis by SPSS. The frequencies were calculated both by item and by factor.

The means and standard deviations were calculated. Multiple regression analysis was used to analyze the collective and separate contributions of the seven factors of communication on the three factors of teachers' work motivation. Additionally, multiple regression was conducted using the combined model of teachers' work motivation. The multiplicative procedure was used to obtain the expectancy work motivation score for the formula, $FM = E\Sigma IV$ for the combined model. The .10 level of significance was used as a basis for establishing significance.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

This chapter is devoted to the presentation and analysis of the data. The chapter is divided into several sections. In the initial section the sample and the variables are described. Additionally, the demographic characteristics of the sample are presented. The results of the computations of teachers' work motivation and the independent variables follow. Results are presented for a second computation of the data in which the combined model of teachers' work motivation was used. Finally, a summary of the findings is given.

Description of the Sample

The subjects for the study were 234 elementary teachers employed by Norfolk Public Schools during the school year 1980-81. The original sample of 351 teachers was reduced by fifteen teachers, who had either left the school district or had been transferred from one of the eleven randomly selected schools during the school year. Thus, a total of 336 questionnaires were distributed. Of the 336 questionnaires 234 were returned, equalling a response rate of 70 per cent. The sample was considered representative of the elementary school population in Norfolk Public Schools since the schools were randomly selected.

Description of the Variables

The descriptive analysis was based on data obtained through the Communication Satisfaction Questionnaire and the Teachers' Work Motivation Questionnaire, copies of which are included in Appendix A. The independent variables were the school communication system, demographic variables, and job satisfaction variables. The dependent variable was teachers' work motivation.

The variable school communication system consisted of seven factors: (1) school perspective, (2) personal feedback, (3) school organizational integration, (4) communication with principal, (5) communication climate, (6) horizontal communication, and (7) media quality. The demographic variables were (1) years of experience at the present school and (2) the size of the school enrollment. Two measures of job satisfaction were added, one an assessment of job satisfaction and the other an assessment of the level of job satisfaction for the last six months. Finally, an open-ended question was included to allow for teacher's input on suggested changes that could be made to increase their satisfaction with the communication on their jobs.

The dependent variable teachers' work motivation consisted of three factors, instrumentality, valence, and expectancy. The three factors constitute Vroom's (1964) expectancy model of work motivation, $FM = E \Sigma IV$.

Frequencies and percentages were obtained for the multiple responses from the open-ended question. Multiple regression analysis

was used to ascertain the relationship between the independent variables

and the dependent variables. The .10 level of significance was used as

a basis for significance. A second analysis of the data was conducted

using multiple regression analysis to ascertain the relationship between

the independent variables and the combined model of teachers' work

motivation. The Statistical Package for the Social Sciences (Nie et.

al., 1975) was used to perform the calculations.

Description of the Demographic Variables

The means and the standard deviations of data are presented in

Table 1 for descriptive purposes. The minimum and maximum scores for

the combined model of teachers' work motivation, $FM=E\Sigma IV$, were 312 and

21,000. The possible range for the factors of the combined model were 7

to 35 for instrumentality, 8 to 40 for valence, and 3 to 15 for

expectancy.

The distributions of the demographic variable data are presented in

Tables 2 and 3. A brief examination of Table 2 shows that the largest

percentage of the teachers in the sample worked in their present school

from one to five years while the smallest percentage had worked in their

present school less than one year. Thirty-three or 14 per cent had

eleven or more years of experience in their present school.

A brief examination of Table 3 revealed that the largest percentage

of the teachers (n=115) worked in schools with enrollments of 501 to

1000 pupils. The smallest percentage of teachers, 7.7 per cent, worked

Table 1

Means and Standard Deviations of the Variables

Variable	School Sample	
	Mean	SD
Satisfaction-School Communication Variables		
School Perspective	3.237	1.333
Personal Feedback	3.060	1.327
School Organizational Integration	2.822	1.164
Communication with Principal	2.437	1.253
Communication Climate	3.064	1.335
Horizontal Communication	2.889	1.1611
Media Quality	2.777	1.142
Job Satisfaction	4.880	1.812
Satisfaction Last Six Months	2.214	0.751
Dependent Variable		
Teachers' Work Motivation	10021.230	5075.395
Instrumentality	11.338	3.055
Valence	32.530	7.150
Expectancy	25.081	4.899

N = 234

Table 2

Distribution of Number of Years Worked
at Present School

Number of Years	Number of Teachers	Per Cent
Less than one year	20	8.5
One year to five years	112	47.9
Six years to ten years	69	29.5
Eleven years and over	33	14.1
Totals	234	100.0

Table 3

Distribution of Teachers by School Enrollment

School Enrollment	Number of Teachers	Per Cent
0 – 350	18	7.7
351 – 500	101	43.2
501 – 1000	115	49.1
Totals	234	100.0

in schools with enrollments of 350 or less. The remaining 101 teachers or 43 per cent worked in schools with enrollments of 351 to 500 pupils.

Description of the Open-Ended Question

The results of the responses to the open-ended question are described in Table 4. The question asked was how communication could be changed to make the teachers more satisfied. The multiple responses indicated that the largest number of teachers (N=197) who responded were concerned with information about salaries. They either were concerned with information on salary negotiations or desirous that significant others become aware of the impact of low salaries.

Teacher input and decision making were mentioned by the next highest number of teachers. An example of the desire for input was the statement that "central administration needs to listen to teacher input and be more responsive to problems of teachers and staff." In reference to press coverage the respondents mentioned the desire to have the press cover accomplishments of the school district in lieu of excessive coverage of failures of the school district. The desire for small group meetings was concerned with meetings with administrators in groups small enough to discuss interests common to only a few of the respondents.

The results of the open-ended question indicated that the respondents were primarily concerned with communication about salaries, decision making, teacher input and supervisor-teacher relationships.

Table 4

Frequencies and Percentages of Responses
On Recommended Changes for Improved
Satisfaction with Communication
on the Job

Responses	Frequencies	Per Cent[a]
Salary information	197	.94
Decision-making	180	.85
Supervisor-teacher	120	.57
Teacher input	101	.48
Accurate information	80	.38
Community relations	15	.07
Small group meetings	15	.07
Actions taken on disruptive students	8	.04
Press coverage	9	.04
Personnel vacancies	7	.03

(N=210)

[a]Note: Each item is the percentage of the total number of teachers who responded to the open-ended question.

The open-ended question provided for more in depth responses than were possible with the Communication Satisfaction Questionnaire.

Multiple Regression Analysis of the Relationship Between the Independent Variables and Teachers' Work Motivation

The SPSS subprogram REGRESSION was used to assess the relationship between the independent variables and teachers' work motivation. Three separate regressions were conducted, one with each of the three factors in teachers' work motivation with the seven factors of the school communication system, the demographic variables and the job satisfaction variables.

For the variable instrumentality, when all of the independent variables were entered into the regression equation simultaneously, the overall F ratio was statistically significant (F=6.23, p < .10). An examination of Table 5 reveals that all but one of the school communication system factors were significantly related to instrumentality. The factors that were significant contributors to the regression were school perspective, personal feedback, communication with principal, communication climate, horizontal communication and media quality. Only school organizational integration was not a significant contributor.

A further examination of Table 5 indicated that horizontal communication was the highest contributor to instrumentality with a beta coefficient of 0.32. The second highest beta coefficient found was for communication climate with a beta coefficient of 0.26. Since all of the

Table 5

Results of Multiple Regression Analysis of the
Relationship Between Instrumentality and
the Independent Variables

Variables	B	Beta	F Ratio
School Perspective	1.0984	0.2149	3.88*
Personal Feedback	1.2111	0.2280	3.69*
School Organizational Integration	0.2595	0.0042	0.00
Communication with Principal	1.0870	0.1784	2.94*
Communication Climate	1.3569	0.2577	3.56*
Horizontal Communication	1.8808	0.3178	8.37*
Media Quality	1.4647	0.2382	4.01*
Job Satisfaction	0.2558	0.0668	1.04
Six Months Level of Satisfaction	0.3962	0.0607	0.87
Years of Experience Present School	0.1878	0.0322	0.29
Size of Enrollment	0.8712	0.011	0.03

*significant at $p < .10$

significant factors had positive regression coefficients it indicated
that high scores on instrumentality were associated with high scores on
the school communication system.

For the variable valence when all of the independent variables were
entered into the regression equation simultaneously, the overall F ratio
was statistically significant ($F=9.46$, $p < .10$). An examination of
Table 6 reveals that two of the communication factors were
significantly related to valence. The factors that were significant
contributors were horizontal communication and media quality. For
valence, media quality was the highest contributor with a beta
coefficient of 0.38. Horizontal communication was the second highest
contributor with a beta coefficient of 0.18. Since both of the
significant factors had positive regression coefficients it indicated
that high scores on valence were associated with high scores on
horizontal communication and media quality.

For the variable expectancy, when all of the independent variables
were entered into the regression equation simultaneously, the overall F
ratio was statistically significant ($F=9.24$, $p < .10$). An examination
of Table 7 revealed that one of the factors was related to expectancy.
The factor that was a significant contributor was horizontal
communication. Since horizontal communication had a positive regression
coefficient (0.22), it indicated that high scores on horizontal
communication were associated with high scores on expectancy. None of
the other independent variables were significant as shown in Table 7.

Table 6

Results of Multiple Regression Analysis of the
Relationship Between Valence and the School
Communication System

Variables	B	Beta	F Ratio
School Perspective	0.3550	0.0475	0.214
Personal Feedback	−0.3217	−0.0415	0.137
School Organizational Integration	0.5270	0.0592	0.318
Communication with Principal	1.1126	0.1251	1.622
Horizontal Communication	1.5805	0.1830	3.116*
Communication Climate	−1.5509	−0.2018	2.449
Media Quality	3.3671	0.3751	11.169*
Job Satisfaction	0.3654	0.0654	1.117
Six Months Level of Satisfaction	0.8593	0.0902	2.151
Years of Experience Present School	0.5462	0.0064	0.013
Size of Enrollment	0.4306	0.0380	0.448

*significant at $p < .10$

Table 7

Results of Multiple Regression Analysis of the
Relationship Between Expectancy and
the School Communication System

Variables	B	Beta	F Ratio
School Perspective	0.8655	0.0271	0.07
Personal Feedback	0.7573	0.0228	0.04
School Organizational Integration	0.5478	0.1442	1.87
Communication with Principal	0.4958	0.1305	1.75
Communication Climate	0.3795	0.1156	0.80
Horizontal Communication	0.8252	0.2236	4.62*
Media Quality	0.1076	0.0280	0.06
Job Satisfaction	0.1701	0.0713	1.32
Six Months Level of Satisfaction	0.7299	0.0179	0.08
Years of Experience Present School	0.2356	0.0646	1.29
Size of Enrollment	0.7597	0.0157	0.08

*significant at $p < .10$

Table 8

Results of Multiple Regression Analysis of the
Relationship Between the Combined Model of
Teachers' Work Motivation and the
School Communication System

Variables	B	Beta	F Ratio
School Perspective	96.1076	0.0181	0.03
Personal Feedback	317.6075	0.0577	0.27
School Organizational Integration	523.9887	0.0830	0.62
Communication with Principal	758.8249	0.1202	1.50
Communication Climate	543.2680	0.0996	0.60
Horizontal Communication	1448.777	0.2363	5.21*
Media Quality	301.2545	0.0472	0.18
Job Satisfaction	536.2031	0.0150	0.07
Six Months Level of Satisfaction	287.0316	0.1352	4.79*
Years of Experience Present School	339.8684	0.0424	0.48
Size of Enrollment	121.0984	0.0562	0.99

*significant at $p < .10$

Additional Findings

The data were analyzed a second time using the combined model of teachers' work motivation, FM=EΣIV. Multiple regression analysis was used to assess the relationship between the combined model of teachers' work motivation and the independent variables.

For the variable teachers' work motivation, when all of the independent variables were entered into the regression equation simultaneously, the overall F ratio was statistically significant (F=47.10, p < .10). An examination of Table 8 indicated that two of the independent variables were significantly related to the combined model of teachers' work motivation. The variables that were significant contributors to the regression were horizontal communication and level of job satisfaction for the last six months. Horizontal communication had the highest beta coefficient at 0.24. The beta coefficient for level of job satisfaction for the last six months was 0.14. Since both of the significant factors had positive regression coefficients it indicated that scores on horizontal communication were associated with high scores on the combined model of teachers' work motivation and that a higher level of job satisfaction for the last six months was associated with a higher level of teachers' work motivation.

Summary of Findings

The overall results of multiple regression analysis as shown in Table 9 showed that several significant relationships were found between

various factors in the school communication system and teachers' work

motivation. All but one of the factors in the school communication

systems had a significant relationship with instrumentality. The

factors that related significantly were school perspective, personal

feedback, communication with principal, communication climate,

horizontal climate, and media quality. Only school organizational

integration failed to reach the F ratio required for significance.

Two of the factors in the school communication systems were found

to have a significant relationship with valence. They were horizontal

communication and valence. Horizontal communication also had a

significant relationship with expectancy. Consequently, horizontal

communication was the only factor that had a significant relationship

with all of the factors in teachers' work motivation.

Two of the independent variables were found to relate to teachers'

work motivation when the second analysis of the data was performed. The

second analysis used the combined model of teachers' work motivation,

$FM=E\Sigma IV$. The two variables which were significantly related to the

combined model of teachers' work motivation were horizontal

communication and level of satisfaction for the last six months.

Table 9

Summary of Multiple Regression Analysis of the Relationship
Between Satisfaction With The School Communication
System and Teachers' Work Motivation

Independent Variables	Instrumentality	Valence	Expectancy
School Perspective	X		
Personal Feedback	X		
School Organizational Integration			
Communication with Principal	X		
Communication Climate	X		
Horizontal Communication	X	X	X[a]
Media Quality	X	X	
Job Satisfaction			
Six Months Level of Job Satisfaction	X	X	X[a]
Years of Experience Present School			
Size of Enrollment			

X means that there was a significant relationship.

[a]There was a significant relationship with the combined model.

CHAPTER V

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Introduction

The chapter is divided into several sections. The first section

presents the purpose of the study and the methods and procedures

utilized in the study. The second section is devoted to the discussion

of the findings, in which comparisons and contrasts are made with the

literature reviewed in Chapter 2, and explanations of the findings are

presented. The final section in this chapter consists of the

implications and recommendations for further research.

Summary

<u>Purpose of the Study</u>. The purpose of the study was to ascertain

the relationship between the school communication system and teachers'

work motivation. The research questions which guided the study were:

1. What is the relationship between school perspective and

    teachers' work motivation?

2. What is the relationship between personal feedback and

    teachers' work motivation?

3. What is the relationship between school organizational

    integration and teachers' work motivation?

4. What is the relationship between the communication with

    principal and teachers' work motivation?

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5. What is the relationship between communication climate and

    teachers' work motivation?

6. What is the relationship between horizontal communication and

    teachers' work motivation?

7. What is the relationship between media quality and teachers'

    work motivation?

8. What is the relationship between job satisfaction and teachers'

    work motivation?

9. What is the relationship between the level of job satisfaction

    for the last six months and teachers' work motivation?

10. What is the relationship between years of experience in the

    present school and teachers' work motivation?

11. What is the relationship between the size of school enrollment

    and teachers' work motivation?

A review of the literature indicated a lack of studies which had

investigated the relationship between the school communication system

and teachers' work motivation. Nevertheless, a theoretical basis exists

which asserts that both of these concepts are essential to an effective

organization. As such, it was assumed that a relationship existed

between the school communication system and teachers' work motivation.

Most studies in organizational behavior address these concepts

separately in conjunction with other management processes. Among the

motivation models, the expectancy model has been the most used for these

investigations. Consequently, the study was designed to investigate the

relationship between the school communication system and teachers'
work motivation.

Methods and Procedures. The sample for the study was composed of
234 elementary school teachers employed by Norfolk Public Schools. Data
was obtained through Downs and Hazens' (1978) Communication Satisfaction
Questionnaire, adapted for educational settings, and Miskel's (1980)
Teachers' Work Motivation Questionnaire. Additionally, demographic and
job satisfaction information was obtained from a series of questions.

Data were analyzed by means of multiple regression analysis, using
the Statistical Package for the Social Sciences (Nie et. al. 1975) to
perform the calculations. The dependent variable was teachers' work
motivation which was composed of three factors, instrumentality, valence
and expectancy. The independent variables were the seven factors of the
school communication system, two job satisfaction measures, years of
experience at the present school, and size of school enrollment. Three
regressions were performed, one with each of the three factors in
teachers' work motivation—instrumentality, valence and expectancy. The
multiple regression procedures tested the significance of the
relationship of each of the independent variables while controlling for
the effect of all of the other independent variables. The F ratios for
each independent variable indicated whether the relationship between
teachers' work motivation and the independent variable was significant.
The .10 level of significance was used as a basis for establishing
significance.

Discussion of Results

The research questions which guided the study were used as the basis for the discussion of the results.

The significant relationship found between school perspective and instrumentality indicated that the teachers who gave a high rating to school perspective also rated instrumentality high. Instrumentality referred to the relationship one sees between his level of performance and attaining personal goals. School perspectives assessed the teachers' satisfaction with the overall goals and policies of the school, the financial standing of the school, and changes within the school. No significant relationships were found between school perspective and the two other factors in teachers' work motivation, valence and expectancy.

The findings partially supported Barnard's (1938) contention that knowledge of purpose is essential to willingness to serve. Somewhat related to the findings were the results revealed by Futrell (1975) and Migliore (1977) who found a relationship between knowledge of goals and performance.

The findings indicated that teachers who rated personal feedback high also rated instrumentality high. Personal feedback was not related to valence nor to expectancy. The results were consistent with those of Piou (1979) who found a relationship between feedback and some of the factors in teachers' work motivation. Piou (1979) found a relationship between perseveration, preference, and professional

identification and feedback but no relationship was found between

fantasy/utilities choice and feedback.

No significant relationships were found between school

organizational integration and the three factors of teachers' work

motivation--instrumentality, valence, and expectancy. School

organizational integration referred to information about personnel news,

benefits and pay. In order for personnel news to serve as a work

motivator it would, of necessity, have to include examples of efforts by

personnel leading to desirable performance, performance by personnel

leading to desirable job outcomes, and examples of job outcomes that

were valuable to teachers. The results indicated that the personnel

news received by the teachers may not have been of this nature.

In reference to benefits and pay, one possible reason for the

failure to find a significant relationship may be that teachers receive

the same benefits and pay regardless of effort and performance beyond

the required amount for remaining on the job. As such, it is reasonable

to assume that their responses were based on benefits and pay rather

than on their satisfaction with the information received with reference

to benefits and pay.

A significant relationship was found between communication with

principal and instrumentality, indicating that the teachers who rated

their communication with the principal high also rated instrumentality

high. In assessing instrumentality, the relationship between one's

level of performance and one's probability of attaining job outcomes,

was referred to while in communication with principal the two-way

communication with one's principal and the principal's sense of fairness were assessed.

The teachers sampled failed to see a relationship between communication with principal and the two other factors in teachers' work motivation--valence and expectancy. In other words, valence, the anticipated satisfaction from attaining job outcomes, and expectancy, the relationship between one's level of effort and one's performance, were not seen as related to communication with the principal. One possible explanation for these results may be that communication with the principal did not include examples of desirable job outcomes, as previously discussed. Evidently the teachers' greater concern at this time was their communication with their supervisors, as noted from the findings of the open-ended question. Although this relationship was not assessed in the study, it suggested that other supervisory personnel's communication affected teachers' work motivation also.

Although no significant relationship was found between valence, expectancy and communication climate, there was a significant relationship between communication climate and instrumentality. These findings were similar to those found by Krivinos (1978), who found a relationship between communication climate and intrinsic work motivation. The studies differed in that Krivinos (1978) investigated work motivation as intrinsic and extrinsic while the expectancy work motivation model used in this study does not differentiate work motivation in that perspective.

A significant relationship was found between horizontal communication and all of the factors in teachers' work motivation, indicating that teachers who rated horizontal communication high rated instrumentality, valence, and expectancy high also. These results supported Barnard's (1938) contention that the informal system was vital to communication and that communication was a necessary component for willingness to serve.

Several explanations for these results seem appropriate. One possible explanation for these results is that grade level chairmen and helping teachers are chosen on a rotational basis. Since the grade-level chairman and the helping teacher are considered neither administrators nor supervisors but regular teachers, the communication between them and the teachers could be considered horizontal. Another possible explanation is that teachers probably consider the communication among each other more appropriate for discussing methods used, results obtained and for coordinating work than such discussions with superiors. Less distortion of information would be expected with horizontal communication than with upward communication thus allowing for freer discussions; however, the study did not address this issue.

The significant relationship found between media quality and two of the factors in teachers' work motivation—instrumentality and valence—indicated that teachers who rated media quality high also rated instrumentality and valence high. As a result, only expectancy did not show a relationship with media quality. In that media quality assessed the conduct and organization of meetings and the quality of all written

directives it may be considered written and oral communication. Thus, support was found for Dahl's (1954) results which indicated that written and oral communication were most effective in organizations.

The contents of the responses to the open-ended question included suggestions which were not directly related to communication. These results indicated that teachers were taking advantage of an opportunity to express their general dissatisfactions and not just dissatisfactions related to the school communication system.

No significant relationship was found between job satisfaction and any of the factors in teachers' work motivation. It is reasonable to assume that several factors accounted for the failure to find such a relationship. One possible explanation may be the attempt to assess job satisfaction through the use of one item. Significant relationships were found by Miskel et. al. (1980) and Zaremba (1979) using other more complex job satisfaction measures.

Another possible explanation may be that the teachers were associating their general dissatisfaction with contract and salary information at this time with their job satisfaction. This general dissatisfaction had been expressed a few days earlier by a vote to strike by the local education association. Such general discontent could have had an impact on the responses to this item.

Similarly, the level of job satisfaction for the last six months, which also did not have a significant relationship to teachers' work motivation, may have been affected by the general dissatisfaction with contract and salary. Furthermore, 41 per cent of the teachers had

indicated that their level of job satisfaction had gone down in the last six months. Additionally, the utilization of one item to assess the level of job satisfaction for the last six months may have again affected the results obtained.

Contrary to the findings of Kopelman and Thompson (1976), no significant relationship was found between the years of experience at the present school and any of the factors in teachers' work motivation. Kopelman and Thompson (1976) found that the amount of time an employee had been on the job was related to his work motivation. One possible explanation for these results may have been contingent upon the method used in this study to categorize the years of experience on the present job. The years were categorized into (1) less than one year, (2) one year to five years, (3) six years to ten years and (4) eleven years or over. Kopelman and Thompson (1976) looked at work motivation at only two points: the initial motivational force to work and at the end of the fourth year. Another possible explanation may be the total number of years of experience as a teacher was confounding the results.

Similarly, the size of the school enrollment, which showed no relationship to any of the factors in teachers' work motivation, may also have been affected by categorization. The categorization used was not consistent with the delineations of size of school enrollment used by the school district. Two delineations separated the small from the larger schools in the school district sampled. One was at the 450 student enrollment point which was used as the demarcation for additional clerical help and the other was the 600 student enrollment

point which was used as the demarcation for additional administrators. The results of the study were contrary to Herrick's findings in which school size was a significant predictor of teachers' work motivation in both multiunit and nonmultiunit schools.

The second analysis of the data, using the combined model of teachers' work motivation, yielded similar results as the analysis using each factor. These results supported Mitchell's (1974) contention that the separate factors in the expectancy model show as much association with independent variables as the combined model shows. The similarity was that horizontal communication was related to all of the factors in teachers' work motivation and to the combined model. Differences were that the level of job satisfaction for the last six months was related to the combined model but not to any of the factors when analyzed separately. Additional differences were that several of the various factors in the school communication and teachers' work motivation were related. Six of the seven factors in the school communication system were related to instrumentality and media quality was related to both instrumentality and valence.

The overall results of the study were similar to the results found in many of the work motivation studies using the expectancy theory. Instrumentality showed the strongest relationship to the independent variables, with valence second and expectancy third. Furthermore, most of the studies using the expectancy model have found significant relationships with the management processes studied even though many of the correlations were low. Unlike most of the studies using the

expectancy work motivation model, no significant relationship was found between all of the independent variables and teachers' work motivation. The results tend to indicate that some unexplained variance existed which has not as yet been identified.

Another possible explanation for the failure to find significance between all of the factors in both the school communication system and teachers' work motivation may be contingent upon organizational incentives which differ in educational settings. It is reasonable to assume that the job outcomes which were desirable for the teachers were not readily available. If this assumption is true then all of the components of teachers' work motivation were affected by a lack of desirable job outcomes.

Conclusions

As a result of the findings arrived at from the data collected for the study certain conclusions were formulated. The conclusions are:

1. Teachers who are satisfied with the teacher to teacher formal and informal communication in their schools are more highly motivated to work than are teachers who are dissatisfied.

2. Teachers who are satisfied with the school organizational perspective, personal feedback, communication with the principal communication climate, horizontal communication and media quality perceive that their level of performance leads to the attainment of personal goals.

3. Teachers who are satisfied with the quality of written
   directives they receive and with the organization and conduct
   of faculty meetings anticipate satisfaction from the attainment
   of personal goals.

4. Teachers whose level of job satisfaction has gone up in the
   last six months are more highly motivated to work than are
   teachers whose level of job satisfaction has gone down in the
   last six months.

Like most research studies the conclusions of this study may be
generalized to those school districts which are similar in
organizational structure, size, and location and other variables. The
possibility exists that different results may have been obtained if the
schools sampled were not in the same school district. The results may
have been influenced by the dissatisfaction expressed by some of the
teachers relative to the local situation at that time.

Implications

Theoretically, the results of the study revealed that horizontal
communication is related to teachers' work motivation. Thus, it
presents partial support for Barnard's (1938) theory and to the theory
on communication. Additionally, the results showed that the expectancy
model of work motivation may be used in educational settings in that the
results obtained were similar to the results obtained in other settings.

The results also suggest implications for school administrators.
In that horizontal communication was related to teachers' work

motivation, the data suggests that schools with effective horizontal communication will have more highly motivated teachers. The results also suggest that those principals whose directives are written clearly and whose meetings are well-organized will have more highly motivated teachers.

Further implications may be suggested for school boards. In that the expectancy model has as its basis the choice of job outcomes, it will seem desirable for school boards to increase valued job outcomes in an effort to increase teachers' work motivation. Such positive job outcomes as noted in the literature for other organizations may include incentives such as opportunities for pride, distinction, prestige, promotions, increased pay, personal achievement and positive advantages.

Recommendations

A research study, such as the present one only begins to address the problems associated with the school communication system and teachers' work motivation. As such several questions were encountered which could serve as impetus for further research.

First, why was no relationship found between the school communication system and teachers' work motivation? The theoretical basis and similar studies suggested such a relationship exists. As a result, it is recommended that the present study be replicated in elementary and secondary schools in varied localities in that the

conditions in the district studied might have been influenced by the teachers' decision to strike.

Second, the study showed horizontal communication was related to teachers' work motivation when the other factors in the school communication system were held constant. Would similar findings result if horizontal communication was used as the only variable in relationship with teachers' work motivation? It is recommended that a study be conducted to test the relationship between horizontal communication and teachers' work motivation, using just the two variables.

Third, what job outcomes do teachers' desire during this time and age? The study implied that the job outcomes teachers in this sample desired, such as pay, were not available to them or that the desired job outcomes were not given in this study. As a result, it is suggested that a study be conducted using the job outcomes the teachers initiate to study teachers' work motivation.

Mitchell and Biglaw (1973:453) suggested that participants generate their own outcomes when using the expectancy work motivation model since different outcomes may be relevant for different subjects.

Fourth, is there other variance in teachers' work motivation which is not assessed using the Teachers' Work Motivation Questionnaire? It is recommended that other measures of teachers' work motivation be constructed which would attempt to identify this unknown variance.

Finally, why was no relationship found between communication with the principal and teachers' work motivation? Some leadership studies

(House, 1971, Campbell, et al. 1970) have found that leadership behavior

is related to the behavior of the employees. It is recommended as a

result of the findings of this study that a study be conducted to test

the relationship between leadership behavior and teachers' work

motivation.

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APPENDIX A

COMMUNICATION SATISFACTION AND TEACHERS'
WORK MOTIVATION SURVEY

COMMUNICATION SATISFACTION AND WORK MOTIVATION SURVEY

INTRODUCTION. Most of us assume that the quality and amount of communication in our jobs contribute to both our job satisfaction and our productivity. Through this study we hope to find out how satisfactory our communication practices are and what suggestions you have for improving them. This section is designed for that purpose.

We appreciate your taking the time to complete the questionnaire. Hopefully, you should be able to complete it in 10-15 minutes.

> *Your answers are completely confidential, so be as frank as you wish.*
> *This is not a test--your opinion is the only right answer.*
> *DO NOT SIGN YOUR NAME--we do not wish to know who you are. The answers*
> *will be combined into groups for reporting purposes.*

1. How satisfied are you with your job? (check one)

_____ 1. Very dissatisfied

_____ 2. Dissatisfied

_____ 3. Somewhat dissatisfied

_____ 4. Indifferent

_____ 5. Somewhat satisfied

_____ 6. Satisfied

_____ 7. Very satisfied

2. In the past 6 months, what has happened to your level of satisfaction? (check one)

_____ 1. Gone up

_____ 2. Stayed the same

_____ 3. Gone down

3. If the communication associated with your job could be changed in any way to make you more satisfied, please indicate how.

_____

_____

_____

4. How many years have you worked at your present school?

_____ 1. Less than 1 year

_____ 2. 1 year to 5 years

_____ 3. 6 years to 10 years

_____ 4. 11 years or over

5. What is the size of the enrollment in your school?

_____ 1. 100 - 350

_____ 2. 351 - 500

_____ 3. 501 - 1000

	Very Satisfied	Satisfied	Slightly Satisfied	Indifferent	Slightly Dissatisfied	Dissatisfied	Very Dissatisfied

SECTION A. *Listed below are several kinds of information often associated with a person's job. Please indicate how satisfied you are with the amount and/or quality of each kind of information, by circling your answer.*

6. Information about programs in my job.	1	2	3	4	5	6	7
7. Personnel news.	1	2	3	4	5	6	7
8. Information about school policies and goals.	1	2	3	4	5	6	7
9. Information about how my work compares with others.	1	2	3	4	5	6	7
10. Information about how I am being evaluated.	1	2	3	4	5	6	7
11. Recognition of my efforts.	1	2	3	4	5	6	7
12. Information about grade level or subject area policies and goals.	1	2	3	4	5	6	7
13. Information about the requirements of my job.	1	2	3	4	5	6	7
14. Information about government action affecting my school.	1	2	3	4	5	6	7
15. Information about changes in your school.	1	2	3	4	5	6	7
16. Reports on how problems in my job are being handled.	1	2	3	4	5	6	7
17. Information about employee benefits and pay.	1	2	3	4	5	6	7
18. Information about the school's financial standing.	1	2	3	4	5	6	7
19. Information about accomplishments and/or failures of the school.	1	2	3	4	5	6	7

SECTION B. *Please indicate how satisfied you are with the following. (Circle the appropriate number at the right.)*

20. Extent to which principals know and understand the problems faced by teachers.	1	2	3	4	5	6	7
21. Extent to which the school communication motivates and stimulates an enthusiasm for meeting its goals.	1	2	3	4	5	6	7
22. Extent to which my principal listens and pays attention to me.	1	2	3	4	5	6	7
23. Extent to which the people in my school have great ability as communicators.	1	2	3	4	5	6	7
24. Extent to which my principal offers guidance for solving job related problems.	1	2	3	4	5	6	7

	Very Satisfied	Satisfied	Slightly Satisfied	Indifferent	Slightly Dissatisfied	Dissatisfied	Very Dissatisfied

SECTION B (Continued)

25. Extent to which the school's communication makes me identify with it or feel a vital part of it. 1 2 3 4 5 6 7

26. Extent to which the school's publications are interesting and helpful. 1 2 3 4 5 6 7

27. Extent to which my principal trusts me to perform my duties. 1 2 3 4 5 6 7

28. Extent to which I receive on time the information needed to do my job. 1 2 3 4 5 6 7

29. Extent to which conflicts are handled appropriately through proper communication channels. 1 2 3 4 5 6 7

30. Extent to which the grapevine is active in our school. 1 2 3 4 5 6 7

31. Extent to which my principal is open to ideas. 1 2 3 4 5 6 7

32. Extent to which horizontal communication with other employees is accurate and free-flowing. 1 2 3 4 5 6 7

33. Extent to which communication practices are adaptable to emergencies. 1 2 3 4 5 6 7

34. Extent to which my work group is compatible. 1 2 3 4 5 6 7

35. Extent to which our meetings are well-organized. 1 2 3 4 5 6 7

36. Extent to which the amount of supervision given me is about right. 1 2 3 4 5 6 7

37. Extent to which written directives and reports are clear and concise. 1 2 3 4 5 6 7

38. Extent to which the attitudes toward communication in the school are basically healthy. 1 2 3 4 5 6 7

39. Extent to which information communication is active and accurate. 1 2 3 4 5 6 7

40. Extent to which the amount of communication in the school is about right. 1 2 3 4 5 6 7

41. Extent to which I know where I stand with my principal. 1 2 3 4 5 6 7

42. Extent to which I believe my principal is fair in making decisions. 1 2 3 4 5 6 7

SECTION C. This section is designed to gather information about how faculty members feel about their jobs. Please circle your answers.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
43. High faculty initiative leads to the attainment of the desired educational objectives.	1	2	3	4	5
44. Energetic educators are not particularly successful teachers.	1	2	3	4	5
45. Expending high levels of energy does not lead to commensurate levels of student achievement.	1	2	3	4	5
46. Working as hard as I can results in goal achievement.	1	2	3	4	5
47. Putting forth a high degree of effort leads to a high level of performance.	1	2	3	4	5
48. Intensive efforts by educators leads to high student achievements.	1	2	3	4	5
49. Good job performance by a teacher requires hard work.	1	2	3	4	5

SECTION D. Different people want different things from their work. Here is a list of things that an educator could have on his or her job. How important is each of the following to you? Please circle your answer.

	Less Important	Moderately Important	Important	Quite Important	Extremely Important
50. Having positive relationships with students.	1	2	3	4	5
51. The opportunity to develop your skills and abilities.	1	2	3	4	5
52. The behavior of your students.	1	2	3	4	5
53. Positive feelings about yourself as an educator.	1	2	3	4	5
54. Keeping student frustration at a low level.	1	2	3	4	5
55. Your students acquiring an interest in the subject matter.	1	2	3	4	5
56. The chances you have to learn new things.	1	2	3	4	5
57. The chances you have to accomplish something worthwhile.	1	2	3	4	5

SECTION E. Please indicate by circling your answers how often it is true for you personally that the first phrase leads to the second one.

	Never	Sometimes	Seldom	Often	Almost always
58. High expenditure of teacher energy = high student achievement.	1	2	3	4	5
59. Hard work = goal achievement.	1	2	3	4	5
60. High expenditure of effort = high performance.	1	2	3	4	5

APPENDIX B

LETTER TO PARTICIPANTS

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF ADMINISTRATIVE AND EDUCATIONAL SERVICES

May 29, 1981

Dear Co-worker:

I am conducting a study at Virginia Polytechnic Institute and State University as partial fulfillment of the requirements for the doctoral degree in education. In order to make this a worthwnile study, I am requesting your cooperation and input.

The Research Department of Norfolk Public Schools nas shown an interest in the topic and granted permission for the study to be conducted. I will be investigating the school communication system and teacher work motivation and will need your perceptions of this facet of our school system in order to make it a worthwhile study.

I understand that time is a factor for you as it is also for me. So please complete the enclosed questionnaire immediately and return it in the self-addressed envelope. Your individual scores will not be identifiable in that I will be presenting grcup scores only. All information received will be handled confidentially.

Your contribution of time and consideration will be greatly appreciated since the study cannot be done without your and my co-workers assistance.

Sincerely yours,

Susie R. Wilson

cc

APPENDIX C

REQUEST TO CONDUCT STUDY

May 11, 1981

Director of Research and Testing
Norfolk Public Schools

Norfolk, Virginia 23501

Dear   :

     I am requesting permission to conduct a study with
Norfolk Public Schools' teachers for partial fulfillment
of the requirements for the doctoral degree in education.
The subject of the study is "An Investigation of the Rela-
tionship Between the School Communication System and
Teacher's Work Motivation."

     A random sample of five elementary schools would be
made and all teachers in these schools would be asked to
participate. A questionnaire consisting of 53 items would
be mailed to the selected teachers. Information desired
would be questions concerning the perceptions of teachers
with regard to the school communication systems and ques-
tions related to teacher activities which imply work moti-
vation. The information received will be treated confi-
dentially and professionally.

     If you would like further information please contact
me at   or   . Your consideration
will be kindly appreciated.

                                    Sincerely yours,

                                    Susie R. Wilson

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AN INVESTIGATION OF THE RELATIONSHIP BETWEEN

THE SCHOOL COMMUNICATION SYSTEM AND

TEACHERS' WORK MOTIVATION

by

Susie Russell Wilson

(ABSTRACT)

Advisor: Dr. Glen I. Earthman

The study was designed to investigate the relationship between the school communication system and teachers' work motivation. The theoretical basis for the study was Barnard's (1938) contention that communication is a vital element in organizations in that it serves as a vehicle for transmitting knowledge of purpose and as such is necessary for willingness to serve.

The sample was composed of 234 elementary teachers from eleven randomly selected schools in the Norfolk school district. Downs' and Hazen's (1978) Communication Satisfaction Questionnaire, adapted for educational settings was used to collect data on the school communication system. The Teachers' Work Motivation Questionnaire (Miskel, et. al. 1980), based on Vroom's expectancy work motivation model, was used to gather data on teachers' work motivation. Additional questions were asked to obtain demographic data and job satisfaction data. A 70 per cent return of questionnaires was received.

Multiple regression analysis was used to determine the separate and collective contributions of the independent variables to the dependent

variable. The independent variables were the seven factors of the school communication, two job satisfaction measures, years of experience at the present school, and size of school enrollment. The dependent variable was teachers' work motivation which was composed of three factors, instrumentality, valence and expectancy. Three regressions were conducted, one with each of the factors in teachers' work motivation. Frequencies and means were obtained for the demographic variables.

The results revealed that there was a significant relationship between the school communication system and teachers' work motivation in that some of various factors in both variables were significantly related. A significant relationship was found between horizontal communication and all three of the factors in teachers' work motivation--instrumentality, valence and expectancy. Media quality was related to two of the factors in teachers' work motivation-- instrumentality and valence. All but one of the factors in the school communication system were related to instrumentality.

A second analysis of the data using the combined model of teachers' work motivation revealed similar results. Horizontal communication and level of satisfaction for the last six months were related to teachers' work motivation.

Based on the results of the study, it was suggested that the study be replicated to test the relationship between the school communication system and teachers' work motivation in secondary schools. In addition, it was suggested that further research be conducted to test the

relationship between horizontal communication and teachers' work

motivation. It was also suggested that administrators interested in

developing higher levels of teacher work motivation advocate and foster

horizontal communication and that school districts increase the number

of desirable job outcomes.