

BUREAUCRATIC VARIABLES AND TEACHER
COMMUNICATION SATISFACTION

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CHAPTER I

INTRODUCTION

As more stress is placed on schools, communication in an educational organization becomes increasingly important. This stress is resultant from both external and internal concerns. Externally, the public is questioning the goals, approaches and products of the educational enterprise. Back to the basics, competency based education and accountability are bandwagons designed to enrapture the public with quick, easy solutions to the problems they feel exist in the school. The school system has had to accommodate the demand for resolving these concerns.

Internally, there has developed an expansion of the dichotomy between teachers at the base of the hierarchial structure and the administrators who are the superordinates in the hierarchial structure. Much has been written on the conflict between the professional who serves his client and the administrator who is concerned with the perpetuation of the bureaucratic organization.¹ In order to solve the problems in education that have merited external attention, increased communication efforts are needed to reduce this dichotomy so that administrators and teachers can mutually facilitate solutions.

Need for the Study

Before problems can be mutually solved by administrators and

teachers, the vertical communication channels must be open. If teachers are receiving or giving inadequate data that are pertinent to an educational problem; then solutions will be erroneously implemented. Therefore, the research currently being conducted in communication and bureaucratic structure needs to be analyzed so that the type of structure that enhances communication between administrators and teachers can be defined.

Purpose of the Study

This study will examine some organizational structures that facilitate teacher communication satisfaction. The components of organizational structure examined in this study are formalization, centralization, and complexity, which were structural variables identified by Jerald Hage and Michael Aiken.² Studying communication satisfaction as affected by the structural variables of an organization is important to understanding the interdependency of variables affecting communication. Actually, isolating individual communication problems from the entire bureaucratic framework can cause a researcher to leave out important structural variables ultimately affecting communication.³

If each structural variable is examined separately to discern its effect on teacher communication satisfaction, conclusions can be drawn as to how each can operate in an effective organizational structure. Thus, this paper will analyze the relationship between teachers' satisfaction with communication and the variables identified by Hage and Aiken as those comprising a formal organizational structure.

Teachers at the base of the hierarchial structure must be satisfied with the communication that provides them avenues to receive and send information necessary to the solution of current educational problems. Since communication permeates all aspects of the organizational structure, the elements that comprise the bureaucratic structure of a school system will be analyzed to ascertain which organizational framework is the most conducive to teacher communication satisfaction.

What is the relationship between the organizational variables of a bureaucracy and teacher communication satisfaction?

FOOTNOTES

¹See: Ronald G. Corwin, "Professional Persons in Public Organizations," Organizations and Human Behavior: Focus on Schools, ed. Fred D. Carver and Thomas J. Sergiovanni (New York, 1969), p. 214; Peter M. Blau and W. Richard Scott, "The Nature and Types of Formal Organizations," Organizations and Human Behavior: Focus on Schools, ed. Fred D. Carver and Thomas J. Sergiovanni (New York, 1969), p. 15.

²Jerald Hage and Michael Aiken, Social Change in Complex Organizations (New York, 1970), p. 15.

³Richard V. Farace, Peter R. Monge, and Hamish M. Russell, Communicating and Organizing (Reading, Massachusetts, 1977), pp. 50-55.

CHAPTER II

REVIEW OF LITERATURE

Definitions

Hage and Aiken have identified four variables that comprise the structure of a formal organization: formalization, centralization, complexity, and stratification.¹ These variables were selected by Hage and Aiken because they were general enough to apply to any organization.²

The test for a general variable is: does the dimension appear to be a timeless, culture-free continuum on which all analytical units can be located without too many being at one end of the scale or the other.³

If a general variable applies to all organizations, then meaningful hypotheses that are general enough to apply to all organizations can be drawn.⁴ This paper will deal with three of these four variables. Stratification, which was defined by Hage and Aiken as "the way in which rewards are distributed among jobs and occupations," was not measured since rewards such as status and salary are relatively fixed in all school systems as evidenced by salary schedules based on years of experience and training.⁵

Formalization

Formalization or the reliance on rules is deemed by Hage and Aiken to be either written or unwritten but always enforced.⁶ In

Max Weber's discussion of bureaucratic rules, he emphasizes the continuum or the degree to which rules are applied, when he states that general rules are "more or less stable, more or less exhaustive, and can be learned."⁷

Formalization is the degree to which rules, written or unwritten, are enforced within an organization.

Centralization

Centralization, according to Hage and Aiken, is the use of power to coordinate the various jobs and occupations within an organization.⁸ Peter M. Blau and W. Richard Scott discuss two criteria for authority, "voluntary compliance with legitimate commands and suspension of judgment in advance of command."⁹ Weber also stresses an authority structure in his characteristics of a bureaucracy, for he states that the foundation of "hierarchy and of levels of graded authority" leads to a system "in which there is a supervision of the lower officers by the higher ones."¹⁰

Centralization is the integration of an organization by means of a hierarchial structure with authority vested in a superordinate and accepted by a subordinate.

Complexity

Hage and Aiken have isolated the following bases for complexity:

Whether the training is formal or informal, the longer the period of required education, the more intricate the occupation, the more occupations that have long

training periods within an organization . . . [and] the degree to which members of an organization attempt to gain greater knowledge about their respective work activities.¹¹

Weber stresses the importance of complexity in his discussion of legal authority in a bureaucratic administrative staff. "The role of technical qualifications in bureaucratic organizations is continually increasing."¹² Again, Weber relates training with administrative staff requirements when he states that officials are appointed on the basis of "technical qualifications." In most rational cases, this is tested by examination or guaranteed by diplomas certifying technical training.¹³

Complexity is the number of occupations in an organization plus the specificity, training, expertness, and interest in improvement associated with these occupations.

Communication

The definition of organizational communication lacks general agreement although Karlene H. Roberts, Charles A. O'Reilly, Gene E. Bretton, and Lyman W. Porter's summative research on organizational communication stresses the need for such a definition. "First organization researchers and theorists should determine what communication is."¹⁴ Organizational theorists have defined communications according to "structural aspects (networks and channels)" or "as the medium through which other organizational activities are carried out."¹⁵ K.E. Tronc, in his study dealing with the communication of authority, offers a definition that emphasizes networks as well as the type of activity being communicated. "Communications is

regarded as the means by which act authorizations are transmitted among personnel and from one authority level to another."¹⁶ Richard V. Farace, Peter R. Monge, and Hamish M. Russell have utilized a more general definition of communication. "Communication refers to the exchange of symbols that are commonly shared by the individuals involved, and which evoke quite similar symbol-referent relationships in each individual."¹⁷

Communication is the transfer of messages, written or unwritten, between two or more persons and the mutual understanding of those messages.

Teacher Communication Satisfaction

Since there is a paucity of satisfaction research directly related to communication, Michael L. Hecht, in his study conceptualizing communication satisfaction, analyzed "general conceptions of satisfaction."¹⁸ He arrived at a concept of communication satisfaction that he referred to as the discrimination (expectation of communication) fulfillment (degree to which expectations are fulfilled) approach.¹⁹ "Satisfaction is the reaction to encountering the world one has been conditioned to 'expect'."²⁰

Carl W. Downs and Michael D. Hazen noted that in organizational research the term communication satisfaction "has apparently represented a unidimensional, generalized feeling which an employee has toward his total communication environment."²¹ Hazen and Downs hypothesized that communication is not unidimensional but multidimensional, and they analyzed the relationship between the factors of communication satisfaction and job satisfaction. They piloted a

questionnaire and factor analyzed their results. They arrived at eight factors of communication satisfaction that were measured on a second questionnaire. The final stage of their study related these eight dimensions of communication satisfaction to job satisfaction and found that the three with the highest correlations to job satisfaction were personal feedback, relation with supervisor, and communication climate.²²

While not dealing specifically with communication, Thomas J. Sergiovanni did isolate those factors that provided teachers the most satisfaction.

Relative to other activities, teachers derive the most satisfaction from work-centered activity. This finding was reflected in the predominance of achievement, recognition, and responsibility as sources of teacher job satisfaction.²³

Therefore, since teachers derive the most satisfaction from their work, communication related to job functions would be of most importance to teachers. This concept provides the rationale for using the three factors of communication satisfaction that Hazen and Downs determined to be the most closely related to job satisfaction in a definition of teacher communication satisfaction.

Teacher communication satisfaction is the degree to which a teacher's expectations of personal feedback, relation with supervisor, and communication climate reinforce his need for achievement, recognition, and responsibility.

Studies Relative to Organizational Variables and Communication

Communication

Several communication studies have been concerned with factors that go into effective communication in the vertical communication channel between superordinates and subordinates.²⁴ Louis L. Gelfand, in his study of the Pillsbury Company, found that subordinates' satisfaction with communication increased when vertical communication was encouraged by the superordinate.

At one plant where the plant manager encouraged communications, 81 percent of the personnel said the company 'tries to keep me informed,' and 58 percent said the company tries to give a 'fair deal.'²⁵

Harish C. Jain and Charles A. O'Reilly also support the need for effective open communications, but they, in two separate studies, go further by linking openness in the vertical communication channel to performance.²⁶ O'Reilly used a seven point scale on a questionnaire to 163 subjects in a county welfare agency to relate the importance of supervisor supportiveness in decision-making performance.²⁷

When the supervisor is approachable, that is, under conditions of high supportiveness, decision makers will use the more qualified source. When supportiveness is low, peers will be used more often, but this use is not reflected in improved decision making performance.²⁸

Thus, the communication with peers in the horizontal channel was not as important as the relationship with the supervisor in the vertical communication channel in regard to performance.

Jain's research also found a relationship between aspects of

communication effectiveness and performance. He utilized the questionnaire and supplementary interviews to gather information from 212 employees of two hospitals.²⁹ His report emphasized the fact that the amount of communication regarding task related matters between a supervisor and his subordinates increased when the supervisor's communication was viewed as positive.³⁰ In addition, Jain determined how this positive climate can be fostered.

This can be brought about by building employee confidence and trust in leadership. In other words, the supervisor must share information with his subordinates, consult them in matters of mutual interest and settle their grievances promptly. This in turn is related to supervisory performance.³¹

James B. Stull in his study did not deal specifically with performance, but he did analyze the components of openness that are perceived as the most desirable. His methodology consisted of having 100 supervisor-subordinate pairs from various levels of management in 12 manufacturing companies choose a preferred and actual supervisor response to a subordinate message. The responses either indicated acceptance, reciprocity, or neutrality-negativity on the part of the supervisor.³² "This additional analysis shows that these subordinates and supervisors perceived accepting responses more favorably than they did reciprocal or neutral-negative responses."³³

While these four studies have established the importance of openness in the vertical communication channel, they were limited to supervisory approaches and various outcomes. Gelfand established a need for supervisory efforts to open the vertical communication channel, and Jain and O'Reilly established a link between openness and performance. Stull, also emphasizing the importance of effective

communication in the vertical channel, concentrated on how the superordinate can effectively open the vertical communication channel by the type of responses he gives. However, none of these studies was concerned with communication as influenced by the entire bureaucratic structure. Most research does place "stress on individual differences rather than on the individual as an interdependent part of a system."³⁴

Hage, Aiken, and Cora Bagley Marrett's research in 16 social welfare and rehabilitation organizations did examine communication as an interdependent part of an organization. They related formalization, complexity, and centralization to the amount of task communication and the direction of that communication. Three of the six hypotheses they derived were as follows:

1. The greater the degree of complexity, the greater the proportion of horizontal task communication.
2. The greater the degree of formalization, the higher the proportion of vertical task communication.
3. The greater the degree of centralization, the higher the proportion of vertical task communication.³⁵

In order to arrive at the first hypothesis, the researchers reasoned that as the organization becomes more complex and diverse, the more difficult it is to successfully program activities from the hierarchial structure. Instead, the amount of communication links among employees increases, and the necessity to coordinate activities through feedback increases. On the other hand, as emphasis on centralization of authority and on formalization of rules increases, emphasis on programming for coordination will become greater. Programming implies the use of superordinate-subordinate interaction in the vertical communication channel.³⁶

Their results did show an increase in horizontal communication when an organization was more complex. They also found that, as centralization of power (measured by employee participation in decision-making) and formalization of rules (measured by job description and specified task procedures) became greater, a reliance on programming in the vertical communication channel increased.³⁷ While this study was concerned with amounts in the vertical and horizontal communication channels rather than with the effectiveness of the vertical communication channel as did the previous four, it is particularly important because of the methodology. Hage, Aiken, and Marrett studied communication as it was affected by the variables of a formal organizational structure.

Centralization

While other researchers have not dealt with centralization as an organizational variable as did Hage, Aiken, and Marrett, they have analyzed what occurs when communication is centralized in one administrative representative.³⁸ Mears, in his study of the communication network of an aerospace firm, found that the totally centralized network caused low morale and an increase in errors.³⁹ Similar findings were reported by Cohen, Robinson, and Edwards when they used an experimental set-up to measure effectiveness of communication networks in small groups that are part of a complex organization. They too found that "a predominantly decentralized organization was clearly the most effective organization in time taken to solve subgroup and organization problems."⁴⁰

John A. Athanissiades and Joseph Julian also worked with centralization; but, while the two previous studies dealt with centralization of communication in an organizational network, Athanissiades and Julian analyzed centralization of authority and its relationship to communication. Their results were similar.⁴¹ Athanissiades compared the distortion of upward communication in a police department with a heteronomous authority structure to a university with an autonomous authority structure.⁴² Julian compared communication blockages in five hospitals that were found to have either normative or coercive-normative power structures.⁴³ Both found that the less centralized, i.e., the normative and autonomous power structures, were more conducive to openness in the upward communication channel.

Victor A. Thompson stressed the fact that in an autocratic organization communication often became a one-way vertical downward pattern, superior to subordinate. This created blockage of communication which caused dysfunction, particularly in the area of the problem solving process of the organization.⁴⁴ Abbott examined the strict control of communication in a school setting and concluded that the strict exercise of communication control--superior to subordinate--had two harmful effects, especially in the area of innovation.

First, subordinates may be prevented from obtaining sufficient information to enable them to determine accurately the relevance of their immediate activities for achieving the terminal goals of the organization. Second, superordinates may be prevented from obtaining sufficiently accurate feedback from their activities to enable them to assess realistically the effects of their decisions.⁴⁵

Complexity

Complexity has evolved into a potent structural factor within the bureaucracy, particularly in an organization whose members are mainly professional. Blau and Scott expand on the nature of professionalism, especially regarding the hierarchical authority of the bureaucracy, as played against professional expertise.⁴⁶ Part of the difficulty lies in the authority realm. The bureaucracy expects the employee to submerge his/her judgment in job matters to those in superordinate positions. However, the professional has a loyalty not only to the organization but also to professional standards and control.

Professional control appears to have two sources. First as a result of the long period of training undergone by the practitioner, he is expected to have acquired a body of expert knowledge and to have internalized a code of ethics which govern his professional conduct. Second this self control is supported by the external surveillance of his conduct by peers, who are in a position to see his work, and who have the skills to judge his performance, and who, since they have a personal stake in the reputation of their profession, are motivated to exercise the necessary sanctions.⁴⁷

This internalized normative based control thus exerts pressure, not only on the professional individual in terms of loyalties, whether professional or organizational, but also in terms of organizational goals.

In a professional-employee society, the fundamental tension is not between the individual and the system, but between parts of the system--between the professional and the bureaucratic principles or organization.⁴⁸

This tension between parts of the system is evidenced by the expanding conflict registered between teacher groups and administrators in the public schools. Teachers are increasingly improving

their professional skills by further education, and this, plus several other factors such as the growing militancy of teacher organizations, further heightens the tension. "Specialization gives employees power; the more specialized they are, the less competent are administrators and laymen to supervise and evaluate them."⁴⁹

The implications of increased professional expertise in a bureaucratic organization are not just evident in the tensions produced but also in the need for a greater degree of coordination in more highly complex organizations.⁵⁰ "The system of specialization requires the interaction of persons whose specialities must be harmonized in order to achieve the organizational goal."⁵¹

John Brewer, in his case study of two organizations--one an underwriters department in a large insurance company, and the other, an electrical construction department of a light and power company--concluded that increased technical competence resulted in decreased supervision but an increase in communication to deal with the technical problems that arose in the departments examined.⁵² Thus, increased professional activity necessitates an increase in communication amount in order to coordinate activities.

Formalization

Alvin W. Gouldner, in his study of industrial bureaucracy, concluded that organizations are dependent upon rules for their efficient operation.⁵³ However, he also found that misapplication of rules and regulations could cause dysfunctions that could lead to apathy, goal displacement, legalism, and indulgency.⁵⁴

Aiken and Hage reported similar findings in their study of

organization alienation in 16 social welfare agencies. Where there was a heavy reliance on job codification, there was also alienation from work. "This means that there is great dissatisfaction with work in those organizations in which jobs are rigidly structured."⁵⁵

One study that at least on the surface seemed to find contrary results was the one in which Gerald H. Moeller and W.W. Charters compared the level of bureaucratization in a school system to the sense of power of teachers. This study directly related to the results of formalization since six of the eight items used to measure bureaucratization were measuring adherence to rules and regulations.⁵⁶ Their findings that a teacher's sense of power was greater in highly bureaucratized (formalized) systems were contrary to their hypotheses.⁵⁷ However, a teacher's sense of power in heavily formalized systems may be clouded by Hage and Aiken's "alienation from work" or Gouldner's "goal displacement." In other words, their sense of power may be seen as positive because of the low expectations they associate with their job. Thus, formalization can have dysfunctional results although Moeller and Charter's study confounds any clear cut analysis. Perhaps, analyzing formalization in relation to other organizational variables may clarify its effect.

Hypotheses

Each of the three dimensions of a bureaucracy has been analyzed as to possible dysfunctions of each and as to the conclusions of previous research that have linked each one with organizational

outcomes. Centralization was seen to be detrimental to openness of communication in several studies. Thompson and Abbott explained that centralization becomes dysfunctional since authority-oriented organizations rely on one-way downward communications and do not permit proper feedback. Thus, a greater degree of centralization of authority can be reasoned to have an adverse effect on teacher communication satisfaction.

Complexity is a dimension that is especially significant in an educational organization. While most educational institutions have relatively the same number of differing occupations, there could be differences in the level of professional interests and activities that are also an indication of the level of complexity. The conflict between the duality of roles of an organizational member who is both part of a bureaucratic structure and a professional with certain expertise was explored. However, an increase in professional competency does not have to cause teacher communication dissatisfaction, but it does place stress on communications. Brewer; Thompson; and Hage, Aiken, and Marrett emphasize the need for communication that coordinates the technical competencies of members. Thus, if an organizational framework allowed for feedback and was not one-way downward from superordinate to subordinate as described under the highly centralized structure, then teacher communication satisfaction would be possible even with greater complexity. However, because of the stress high complexity places on communication, schools with higher complexity will be more likely to have teacher communication dissatisfaction.

Dysfunctional formalization was shown to have such adverse

results as goal displacement, alienation, and apathy. However, one study by Moeller and Charters was a seeming contradiction since they reported positive results---increased sense of power by teachers---with an increase in formalization of rules. Examining formalization simultaneously with complexity might clarify the results. If there were a low level of complexity (interest in professional activity), then it would follow that there would be a low level of professional expectancies. Since teacher communication satisfaction is incumbent on the level of expectancy, formalization would not constrain professional desires if the teacher had a low level of expectancy. In fact, a low level of expectancy would coincide easily with the apathy seen as a rules dysfunction. On the other hand, if there were a high amount of professional activity, then the teacher's higher expectancy level would conflict with the rigidity of rules in a highly formalized bureaucratic organization, and dissatisfaction would result. Conversely, if complexity is low, then the demand for upward communication would decrease, and teachers would be more satisfied with one-way downward communication.

Thus, the following hypotheses can be made:

1. In school organizations formalization and complexity will significantly affect communication satisfaction.
2. In school organizations complexity and centralization will significantly affect communication satisfaction.
3. In school organizations low complexity leads to greater communication satisfaction.
4. In school organizations low centralization leads to greater communication satisfaction.
5. In school organizations low complexity coupled with high formalization leads to greater communication satisfaction.

FOOTNOTES

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¹⁸Michael L. Hecht, "Toward a Conceptualization of Communication Satisfaction," Quarterly Journal of Speech, LXIV (February, 1978), pp. 48-49.

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²³Thomas J. Sergiovanni, "Factors Which Affect Satisfaction and Dissatisfaction of Teachers," Organizations and Human Behavior: Focus on Schools, ed. Fred D. Carver and Thomas J. Sergiovanni (New York, 1969), p. 256.

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²⁶Jain, pp. 103-117; O'Reilly, pp. 632-635.

²⁷O'Reilly, p. 633.

²⁸Ibid., p. 635.

²⁹Jain, pp. 106-109.

³⁰Ibid., p. 114.

³¹Ibid.

³²Stull, p. 126.

³³Ibid., p. 127.

³⁴Farace, Monge, and Russell, pp. 50-51.

³⁵Jerald Hage, Michael Aiken, and Cora Bagley Marrett, "Organizations Structure and Communications," American Sociological Review, XXXVI (October, 1971), p. 861.

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³⁷Ibid., pp. 869-870.

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⁴⁷Ibid. p. 63.

⁴⁸Ronald Corwin, p. 214.

⁴⁹Ibid., p. 217.

⁵⁰Ibid.

⁵¹Thompson, p. 138.

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CHAPTER III

METHODOLOGY

Selection of the Subjects

The subjects for this study were selected on a random basis from Missouri schools that were termed middle sized. The student enrollment in these schools ranged from 1000 to 3000. This school range represents approximately one third of the school districts in the state. After a list of these middle sized schools was alphabetized, the ten schools randomly selected were: Bowling Green, Centralia, Crawford County, Farmington, Lafayette, Macon County, North County, Potosi, Schuyler, and Warren County. These schools represented nine percent of the middle sized schools in the state of Missouri.

Development of the Instrument

The instruments used to collect data were Likert scale questionnaires. They measured teacher perception of communication satisfaction, degree of formalization, and the degree of centralization in each respective school district. Complexity was measured by analyzing data collected on a Teacher Information Sheet. (See Appendix C.)

The instrument selected to measure communication satisfaction

was the "Communication Satisfaction Survey," developed by Hazen and Downs. It is an eight factor questionnaire consisting of 40 items. However, only three of the factors or 15 questions were included on the questionnaire. These factors, Personal Feedback, Relationship with Supervisor, and Communication Climate, correlate most highly with job satisfaction. The scoring of this instrument ranged from "1" (very satisfied) to "7" (very dissatisfied). The larger the aggregate score, the greater the degree of communication dissatisfaction. Hazen and Downs validated the instrument by administering it in four different organizational settings and by factor analyzing it each of these settings.¹ The test-retest reliability for the entire instrument is .94.²

The instruments chosen to measure formalization and centralization were taken from the "School Organizational Inventory" (SOI). The SOI, which consists of six subscales designed to measure bureaucratic structure, was adapted to educational institutions by S.A. Mackay from Richard H. Hall's organizational inventory.³ Norman Robinson and Keith F. Punch have utilized the SOI and have further attested to its validation. Reliability on all scales was above .80.⁴ Three of the six subscales were used. The Hierarchy of Authority scale measured centralization; whereas, the Procedural Specifications scale and Rules scale measured formalization. The SOI is scored so that the greater the aggregate score, the greater the degree of formalization and centralization.

In assessing complexity, Hage, Aiken, and Marrett devised a three point scale to indicate the nature or degree of that dimension.⁵ They determined complexity by the number of organizational

specialists within an organization and the amount of professional activity of the personnel. Professional activity was determined by awarding points in three specific areas: belonging to one or more professional organizations, attending two-thirds of the previous six meetings of any professional organization, presenting a paper or holding an office in any professional organization.⁵ Following their example, this researcher also used professional activity as part of the criteria to assess complexity. Each respondent filled out an information sheet that included items to determine both professional activity and organizational speciality, although more weight was assigned professional activity since the number of organizational specialists is fairly uniform among public educational institutions.

Specifically, the following areas were measured and points assigned: Two points were assigned for advanced degree attainment, masters or higher. The rationale was that since a bachelor's degree is an entry level degree for teaching, higher degree indicated a greater degree of professional commitment and knowledge. One point was assigned for membership in a teachers' association, because membership in such an organization demonstrated an interest in joining with colleagues to work toward common goals. One point was assigned for professional organization membership which indicated continued interest in maintaining contact with developments in specialized teaching areas. One point was assigned for membership in a school connected committee during the current school year. This would indicate one of two possibilities: either the teacher was chosen to serve on the committee because of expertise

or volunteered to serve because of professional interest. One point was allotted for attendance this past year at a training session or workshop, or enrollment in a course that is directly related to improving teaching but not required by the school district. Since most schools require some form of staff development, extra workshops or course work showed additional concern about individual improvement of teaching that was an indicator of professional growth. One point was assigned for attendance at three of the last six meetings of a professional organization that were held within a 25 mile radius of the employing school. A 50 percent attendance at professional meetings indicated a person who was serious about maintaining contact and working with colleagues in the same area of expertise, and a 25 mile radius was included to make attendance at the meetings realistic. Two points were awarded for those individuals who were qualified and working in an area in education other than classroom teacher, i.e. reading specialists, counselors, department chairpersons, co-ordinators, and other personnel who had functions more specialized than classroom teacher. This aspect of the information sheet was more directed to the organizational specialty aspect of complexity.

The Kuder-Richardson Reliability test determined that the reliability for complexity was .93. This instrument went more in depth than Hage, Aiken, and Marrett to include a greater range of professional attributes. Since the instrument they used in their study was successful in measuring those aspects of complexity they sought to measure, the conceptual approach in this study could also be considered valid.

The measuring instrument was pilot tested to determine the approximate amount of time needed to fill it out. This pilot was conducted at Oklahoma State University, Stillwater, Oklahoma, using graduate classes in the departments of Educational Administration and Higher Education and Curriculum and Instruction. Also, the pilot test was conducted in a high school and a junior high school in Joplin, Missouri. The total number of survey instruments used in the pilot was 70. It was estimated that the time required to answer the questionnaire was 12 minutes. This information was then supplied in the cover letter to the subjects to aid in attaining cooperation for the study.

Collection of the Data

The first step taken in order to begin the process of collecting the data was to gain cooperation of the school districts involved. A telephone call was placed to each superintendent, an explanation of the project was made, and the permission to conduct the survey in each school system was requested. Eight of the schools granted permission during the initial conversation. Two schools requested an explanatory letter from the researcher and from the researcher's adviser, but both schools finally decided against participation in the study. One of the schools felt that the participation would be too time consuming for the staff, and the other cited board policy as the reason for their nonparticipation. Five of the eight schools that agreed to take part in the study provided rosters of the staff employed in their districts. These faculty members' names were alphabetized and 20 were selected by using a table of random numbers.

This random selection mixed elementary, junior high, and senior high school teachers. The three schools that did not provide a faculty roster because of board policy offered to use the procedure outlined to them in the selection of the subjects. They were asked to alphabetize the faculty names and number each faculty member accordingly and were furnished with numbers from a random table so that the random selection could be completed. Thus, the researcher outlined the random procedure but did not name the actual respondents. The total number of teachers selected to participate in the research project was 160 (20 from each of eight schools).

It was decided that the most effective way to reach the faculty involved in the study was to use the in-school mailing system in each of the schools. Each participant received a cover letter, an information sheet, a questionnaire, and a stamped, addressed envelope so that the questionnaire could be returned to the researcher. For each participant from the districts providing rosters this information was placed in an envelope with the participant's name plus his/her school on it. The other three school districts were sent the same information, but the envelopes were left blank so that the superintendent could address them after he completed the random selection. A letter outlining the procedure to be followed was written to superintendents in all eight school districts, and again each was thanked for his invaluable aid in the project. Then the letter and the 20 envelopes were mailed to the school district for distribution.

Analysis of the Data

In order to examine the data a two-way analysis of variance was used. This statistical approach analyzed the relationship of the variables, formalization, centralization, and complexity, with communication satisfaction.

Limitations

This research was conducted with the following limitations:

1. Measurement of bureaucratic dimensions was made according to teachers' perception.
2. Complexity, formalization, and centralization were the only bureaucratic dimensions measured.

FOOTNOTES

¹Carl W. Downs and Michael D. Hazen, "A Factor Analytic Study of Communication Satisfaction," The Journal of Business Communication, XIV (Spring, 1977), p. 66.

²Ibid., p. 69.

³D.A. Mackay, "An Empirical Study of Bureaucratic Dimensions and Their Relations to the Characteristics of School Organization" (unpublished Ph.D. dissertation, University of Alberta, 1964), p. 46.

⁴See: Keith F. Punch, "Bureaucratic Structure in Schools: Towards Redefinition and Measurement," Educational Administration Quarterly, VI (Spring, 1960), pp. 43-57; Carl Ray Anderson, "Selected Bureaucratic Characteristics and Student Alienation in the Public Schools" (unpublished Ph.D. dissertation, Oklahoma State University, 1970), p. 32.

⁵Jerald Hage, Michael Aiken, and Cora Bagley Marrett, "Organization Structure and Communications," American Sociological Review, XXXVI (October, 1971), p. 870.

CHAPTER IV

RESULTS

Return Rates

In order to obtain responses to the questionnaire a direct mailing was made to 20 subjects located in each of eight school districts. In five of the districts the researcher had access to teacher rosters so that the individuals selected were identified prior to the mailing. Board policy in three of the districts precluded the acquisition of faculty rosters so that the superintendents of those districts selected the individuals to receive the questionnaire; however, the selection was based on a random sample table established by the researcher so that the superintendent matched the table with the corresponding teacher. The subjects answered the questionnaire and mailed it to the researcher.

One hundred and sixty questionnaires were mailed out, and after three weeks 126 responses were received. The total percentage of return was 79 percent. All of the responses were used.

Data Summary

Out of the 126 respondents, 89 or 71 percent was female while 37 or 29 percent was male. The highest percentage of respondents by grade designation was elementary teachers that made up 52 or 41

percent of the total. High school teachers numbered 49, or 39 percent, and junior high or middle school teachers comprised 25 respondents, or 20 percent of the total.

The first step undertaken was to dichotomize each of the three variables: complexity, centralization, and formalization. A numerical range, indicating either a higher or lower condition, was established for each variable. These ranges were determined by bisecting the distribution. Complexity, which had a possible total score value of 10, was divided into two groups; scores of zero through five were considered lower complexity, and six through 10 were considered higher complexity. Centralization with a total range between one and 50 was divided into lower centralization, ranging from one through 30, and higher centralization, ranging from 31 through 50. Formalization, with a total range up to 70, divided into lower formalization (scores of one through 47) and higher formalization (scores of 48 through 70). (See range distributions in Appendix B.)

Since there were 126 respondents, the two categories to be formed for each variable would contain responses from 63 teachers. Complexity was divided into two groups: the lower one representing complexity contained 66 respondents, or 52.4 percent of the total; and the other group, higher complexity, contained 60, or 47.6 percent of the total. The group representing lower centralization was composed of 65 respondents, or 51.6 percent; and the higher centralization group consisted of 61 respondents, or 48.4 percent of the total. The lower formalization grouping contained 67 respondents, or 53.2 percent; and the higher formalization group

had 59 respondents, or 46.8 percent of the total.

The SPSS program of Factorial Design with Unequal Cell Frequencies was used to analyze the data. The first two way analysis of variance related the independent variables of formalization and complexity to teachers' communication satisfaction. An F value of 3.92 is necessary before there is significance at the .05 level. The analysis of variance data showed an F of 0.26 for formalization. The mean score of communication satisfaction under conditions of high formalization was 41.17, and under conditions of low formalization the mean score was 38.92. The analysis of variance data showed an F of 2.85 for complexity. The mean score of communication satisfaction under conditions of high complexity was 42.79, and under conditions of low complexity the mean score was 37.14. The results of the data are shown in Table I.

TABLE I
EFFECTS OF FORMALIZATION AND COMPLEXITY
WITH COMMUNICATION SATISFACTION

Source	df	SS	MS	F
Formalization	1	84.834	84.834	0.259
Complexity	1	930.620	930.620	2.846
Interaction	1	486.545	486.545	1.488
Within (error)	122	39894.375	327.003	
Total	125	41396.374		

Thus, neither formalization nor complexity has individual or combined significant effects on teachers' communication satisfaction. An F value of 1.488 suggests that there is no interaction effect of formalization and complexity on teachers' communication satisfaction.

The second two way analysis of variance related the independent variables of complexity and centralization to teachers' communication satisfaction. An F value of 3.92 is necessary before there is significance at the .05 level. The data showed an F of 2.65 for complexity. The mean score of communication satisfaction under conditions of high complexity was 42.79, and under low complexity the mean score was 37.14. The data showed an F of 2.30 for centralization. The mean score of communication satisfaction under conditions of high centralization was 42.89, and under conditions of low centralization, 37.57. The results of the data are shown in Table II.

TABLE II
EFFECTS OF COMPLEXITY AND CENTRALIZATION
WITH COMMUNICATION SATISFACTION

Source	df	SS	MS	F
Complexity	1	861.835	861.835	2.650
Centralization	1	747.353	747.358	2.298
Interaction	1	43.733	43.733	0.134
Within (error)	122	39674.644	352.202	
Total	125	41327.590		

Thus, neither centralization nor complexity has individual or combined significant effect on teachers' communication satisfaction. An F value of 0.134 suggests that there is no interaction effect of complexity and centralization on teachers' communication satisfaction.

In summary, none of the independent variables tested--centralization, formalization, and complexity--has a significant effect on teachers' communication satisfaction.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Summary

The data do not confirm the hypotheses. Thus, it becomes necessary to re-examine the rationale for arriving at those hypotheses.

The hypotheses were deduced in three stages. First, definitions were established. The definitions of the bureaucratic variables were determined by examining the functions of each in an organization. Formalization was identified as the enforcement of rules, centralization was the extent to which authority was vested in a superordinate and accepted by a subordinate, and complexity, the last bureaucratic variable examined, was two faceted. First, it dealt with the number of occupations in an organization, but it also included preparedness of individual members of that organization, i.e., their amount of training and interest in improvement.

Next, a definition of teacher communication satisfaction focused on those aspects of communication that enhanced job satisfaction, since Sergiovanni's research indicated that teachers derive the most satisfaction from job related activities. Out of Hazen and Downs' eight dimensions of communication satisfaction, need for achievement recognition, and responsibility most directly related to job

satisfaction. The definition then was the degree to which a teacher's expectations of personal feedback, relation with supervisor, and communication climate reinforced his need for achievement, recognition, and responsibility. Thus, the definition was based on a teacher's job expectations.

The second step in arriving at the hypotheses used these definitions as a basis of discovering the effects of each of the bureaucratic structures on communication in that structure. Athanissiades, Julian, and Thompson reported the negative effects of centralization of authority on communication. Blockages in the upward communication channel created by a more centralized authority structure was found to be dysfunctional especially in the area of problem solving.

The research on formalization was a seeming contradiction. Both Hage and Aiken's research and Gouldner's study found negative effects resulting from a heavy reliance on rules in an organization. Gouldner described such negative effects as goal displacement and indulgency while Hage and Aiken pinpointed job dissatisfaction. However, Moeller and Charters, in their study of school organizations, found a positive effect, namely, increased sense of power in more highly bureaucratic (formalized) schools.

Complexity was found to be especially important in a school. While most schools have a similar number of differing occupations, the level of professional competency and interest in improvement, also indications of complexity, could be different. Increased competencies and interest in professional activities were not necessarily seen as having a negative effect on satisfaction. Brewer;

Thompson; and Hage, Aiken, and Marrett emphasized the need for a communication structure that coordinated rather than one which relied heavily on one way downward since a heavy reliance on one way downward in the vertical communication channel created blockages of communication.

The final step in arriving at the hypotheses was to study the possible interrelatedness of formalization, centralization, and complexity on teacher communication satisfaction. Since increased complexity was found to be neither negative nor positive but did require a specific organizational structure, each of the other two variables was considered together with complexity to see the effects of each combination on teacher communication satisfaction.

First, the effects of formalization and complexity on communication satisfaction were examined. It was reasoned that, in a highly complex organization, where there was a high degree of competency and much interest in improvement, teacher job expectations would be much higher. Conversely, if there were a lesser degree of complexity, then expectancies also would decrease. With this lower expectancy level a teacher would be less constrained by a more formalized structure. The rigidity of rules and this low expectancy level would demonstrate the apathy identified by Gouldner as a rules dysfunction. Since a definition of teacher communication satisfaction was dependent on a teacher's expectancy level, the relationship between a highly formalized and highly complex organization could be hypothesized. If there were a high interest in professional activity, the teacher's expectancies would be higher and would conflict with a more highly formalized

bureaucratic structure. Conversely, with a lesser degree of complexity and a lower expectancy level, teachers would be less dissatisfied with a highly formalized structure. This reasoning helped explain the apparent contradiction in the Moeller and Charter's research, for a teacher's sense of power might not be negatively affected if there was a low level of expectancy anyway.

Centralization also was reasoned to affect complexity in its relation to teacher communication satisfaction. Since research (Brewer; Thompson; Hage, Aiken, and Marrett) indicated the need for communication that coordinated increased competencies of members, a structure that allowed for feedback and was not one-way downward was needed. Thompson's, as well as Athanissiates and Julian's research, indicated that dysfunctional blockages did occur in more highly centralized authority structures. Thus, a highly complex organization would not adversely affect teacher communication satisfaction as long as centralization of authority was less. However, if the degree of centralization in a highly complex organization was so great that communication was primarily vertical and downward, then dissatisfaction would result.

Since formalization, centralization, and complexity were reasoned to be important aspects of communication satisfaction either by themselves or considered together, the following hypotheses were made:

1. In school organizations formalization and complexity will significantly affect communication satisfaction.
2. In school organizations complexity and centralization will significantly affect communication satisfaction.

3. In school organizations low complexity leads to greater communication satisfaction.
4. In school organizations low centralization leads to greater communication satisfaction.
5. In school organizations low complexity coupled with high formalization leads to greater communication satisfaction.

Three of the six subscales from the "School Organizational Inventory" (SOI)--devised by Hall, adapted to an educational institution by Mackay, and tested for reliability and validity by Robinson and Punch--were used. The Hierarchy of Authority scale measures centralization, whereas the Procedural Specification scale and Rules scale measure formalization.

The instrument selected to measure communication satisfaction was developed by Hazen and Downs and was entitled "Communication Satisfaction Survey." The three factors utilized from this instrument were Personal Feedback, Relationship with Supervisor, and Communication Climate. The test-retest reliability for the instrument was .94. Communication satisfaction, centralization, and formalization were measured using a Likert type questionnaire.

Complexity was measured by using a teacher information sheet. Following the lead of Hage and Aiken, 10 items were listed that would indicate both professional activity and organization specialists, although more weight was assigned professional activity since the number and type of organizational specialists is fairly uniform among public educational institutions.

The subjects for this study were selected from Missouri schools with a range of student enrollment of 1000 to 3000. Ten schools were randomly selected to sample with eight finally complying with

the study. Twenty subjects per school were randomly selected making a total of 160 teachers participating in the study. The return rate was 79 percent, or 126 questionnaires out of the 160.

The method of analysis used was an analysis of variance test. Each variable was dichotomized into high and low categories with approximately 63 respondents per category. Communication satisfaction was the dependent variable with complexity, centralization, and formalization being the independent variables.

The first two way analysis tested was the effect of formalization and complexity on communication satisfaction. Neither was found to have individual or combined significant effect on communication satisfaction. The second two way analysis of variance showed that neither complexity nor centralization had individual or combined significant effect on communication satisfaction.

Discussion

Since the rationale for development of the hypotheses as well as the instrumentation, sampling, and statistics seem defensible, explanation for the rejection of the hypotheses might be found elsewhere.

One reason may be inherent in the nature of an educational institution. Professional employees who are specialized in specific areas and are also generally knowledgeable in the field of education comprise the staff. Their specific job function is to teach, and within the organizational structure they are autonomous, i.e., when the doors of the classrooms are closed they are in complete command of the clients in that classroom. They generate their own

mini-bureaucracy (rules, authority, and decision making). The effect of this powerful position on the teacher could lead to a sense of power that reaches beyond the classroom situation to the whole organization. Although there are occurrences when this feeling is mitigated (teacher evaluation and negotiations), generally the teacher believes that he/she is operating from a position of equality not only with his/her colleagues but also with his/her superordinate. This may lead to a greater sense of participation in the educational institution, and this sense of participation may minimize the effects of centralization, formalization, and complexity.

Another explanation could be low expectations on the part of teachers. By the nature of the educational institution, teachers achieve both the apex and nadir of their status in the bureaucracy. Skills, degrees, and knowledge are already set when a teacher is employed. These entry level skills generally are also exit level skills. Movement is horizontal rather than vertical so that status and prestige are immediately confirmed. Finally, with the confirmation of tenure, security is reached. The apex has been attained, and there is no urgent need to increase production or effort. The result of this state of mind is to expect little in the way of interference from the superordinate. That is, expectations of job advancement are no longer a consideration, and the teacher expects not more, but less, of himself/herself and also of the bureaucratic structure.

The size of the school districts sampled also could have had an influence on the data. The schools chosen were medium sized with a student enrollment between 1000 and 3000 and with a faculty

size between 73 and 178. A district of this size could exhibit a lesser degree of bureaucratic influences than those of larger school districts. There are fewer levels of organizational structures in small and mid-sized schools than in larger ones. In general, the schools studied had an organizational chart that had a superintendent and building principals. The chain of command included neither layers of assistant or associate superintendents nor line personnel. This organizational structure could lend itself to a greater degree of openness or, conversely, to a reduced sense of closedness. If the sense of teacher autonomy and power are added to these environmental situations, the result could be a reduction in communication dissatisfaction and a reduced perception of bureaucratic control.

Another factor in the result could be that bureaucratic implementation in educational institutions may be different from those in other institutions. Generally, educational organizations are client or people centered. Because of the dominance of people oriented employees, both teachers and administrators, a closer relationship between subordinate and superordinate could exist. Certainly teacher perceptions about the degree of institutional bureaucratization could be lessened because of the people orientation of that institution. The orientation toward people is also evident in the goals of a school organization. These goals include not only the acquisition of skills and knowledge but also the acquisition of social and psychological skills. This duality of goals, cognitive and affective, generates an environment that stresses process as well as product. That is, in a people oriented

organization there is as much concern for the development of the client or person as there is for his/her possession of skills and knowledge. This attitude resides not only with the teaching staff of the institution but also with superordinate or administrative staff as well. For example, the thrust or purpose of administration is more than simply fulfilling the bureaucratic goals of the institution through enforcement of rules and regulations or through the exercise of the prerogatives of authority; it involves improving teacher performance through such activities as in-service, supervision, and involvement. In other words, those aspects identified by Hazen and Downs as comprising communication satisfaction--need for achievement, recognition, and responsibility--are inherent in an educational institution. The thrust of administration is cooperation and coordination of people to achieve the goals of the institution; this necessitates facilitation of people and not product.

In conclusion, several reasons have been posited for the hypotheses of this study not to have been proved: teacher autonomy, low expectations of teachers, size of the school districts sampled, and the nature of the educational institution. These factors operating separately or in combination could have produced the results reported rather than the results expected.

Recommendations

As this research was being conducted some other possibilities for future research were noted. Since the size of the school district might have been a factor in the failure of the hypotheses,

it is recommended that public educational institutions of sizes other than those surveyed and tested in this study (1000 to 3000) be examined particularly those of a larger school size. This could further clarify the effects of school size on the results of this study. It is also recommended that this study be conducted with the same size schools but in a different geographical area. Perhaps, a different location would yield the expected results.

Another recommendation would be that this research problem be approached from a different theoretical base than the political and technical emphasized in this study. A different theoretical basis such as the aesthetic or ethical might lead to a better understanding of how communication satisfaction is achieved in school settings.

This research explored the effect of bureaucratic structure on communication satisfaction in order to identify the constrictures that exist in an organization. Once the sources of constrictures were identified, then measures could be taken to lessen their effects and thus help to produce a more productive environment. This concern is still valid, and future research could provide more insight into this area.

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APPENDIX A

TABLE COMPARING BUREAUCRATIC MEANS
TO COMMUNICATION SATISFACTION

TABLE III
 THE MEANS OF CENTRALIZATION, FORMALIZATION,
 AND COMPLEXITY IN RELATIONSHIP TO
 COMMUNICATION SATISFACTION

	Communication Satisfaction	
	High	Low
Centralization	42.89	37.57
Complexity	42.79	37.14
Formalization	41.17	38.92
Complexity	42.79	37.14

APPENDIX B

TABLE LISTING DESCRIPTIVE STATISTICS
OF BUREAUCRATIC VARIABLES AND
COMMUNICATION SATISFACTION

TABLE IV
RANGES, MEANS, MEDIAN, AND MODE FOR CENTRALIZATION,
FORMALIZATION, COMPLEXITY, AND
COMMUNICATION SATISFACTION

	Range	Means	Median	Mode
Centralization	31	30.65	33.00	30.93
Formalization	39	46.98	47.07	51.00
Complexity	9	5.25	5.32	7.00
Communication Satisfaction	90	40.09	37.50	25.00

APPENDIX C

INFORMATION SHEET USED TO

ASSESS COMPLEXITY

TEACHER INFORMATION SHEET

1. Indicate by check mark the highest degree you have attained.

BS/BA MS/MA Specialist Doctorate

2. Are you a member of a teachers' association?

Yes No

3. Are you a member of a professional organization (other than teachers' association)?

Yes No

4. Are you now or have you in this current school year been a member of a school connected committee?

Yes No

5. Do you subscribe to a professional journal that is not part of your membership in a teacher or professional organization?

Yes No

6. Have you attended a training session, a workshop, or taken course work related to professional improvement that was not required by the school district in the past year?

Yes No

7. If you are a member of a professional organization, and the meetings are within a 25 mile radius, have you attended at least three (3) of the last six (6) meetings?

Yes No

8. List any title other than classroom teacher that applies to your position in the school system. (Examples: counselor, psychologist, coordinator, reading supervisor, etc.)

9. Sex

Female Male

10. Current teaching assignment.

____ Elementary ____ Jr. High/Middle School ____ High School

11. Number of years in teaching.

12. Size of faculty in the school system.

13. Size of faculty in your building.

APPENDIX D

QUESTIONNAIRE USED TO ASSESS FORMALIZATION,
CENTRALIZATION, AND COMMUNICATION
SATISFACTION

SCHOOL ORGANIZATIONAL INVENTORY/COMMUNICATION

SATISFACTION SURVEY

Instructions: In this series of statements, you are asked to indicate how well each one describes the organizational characteristics of your school. For each statement, circle the answer to the right which you feel comes closest to describing your own school organization. The five possible choices are: Always True (AT), Often True (OFT), Occasionally True (OCT), Seldom True (ST), and Never True (NT).

1. A person who wants to make his own decisions would quickly become discouraged in this school.
2. Rules stating when teachers arrive and depart from the building are strictly enforced.
3. The use of a wide variety of teaching methods and materials is encouraged in this school.
4. Staff members of this school always get their orders from higher up.
5. The time for informal staff get-togethers during the school day is strictly regulated by the administration.
6. Staff members are allowed to do almost as they please in their classroom work.
7. The teacher is expected to abide by the spirit of the rules of the school rather than stick to the letter of the rules.
8. We are to follow strict operating procedures at all times.
9. Nothing is said if you get to school just before roll call or leave right after dismissal occasionally.
10. Going through proper channels is constantly stressed.
11. There can be little action until an administrator approves a decision.
12. The teachers are constantly being checked for rule violations.

13. The school has a manual of rules and regulations for teachers to follow.
14. Each staff member is responsible to an administrator to whom the member regularly reports.
15. A person can make his own decisions without checking with anyone else.
16. There is only one way to do the job -- the principal's way.
17. I have to ask the principal before I do almost everything.
18. No one can get necessary supplies without permission from the principal or vice-principal.
19. Written orders from higher up are followed unquestioningly.
20. The same procedures are to be followed in most situations.
21. Even small matters have to be referred to someone higher up for final answer.
22. Teachers are expected not to leave their classroom without permission.
23. Whenever we have a problem, we are supposed to go to the same person for an answer.
24. Any decision I make has to have my superior's approval.
25. Red tape is often a problem in getting a job done in this school.

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 the appropriate answer. The seven possible choices are: Very Satisfied (VS), Satisfied (S), Slightly Satisfied (SS), Indifferent (I), Slightly Dissatisfied (SD), Dissatisfied (D), and Very Dissatisfied (VD).

26. Information about how my job compares with others.
27. Information about how I am being judged.
28. Recognition of my efforts.
29. Reports on how problems in my job are being handled.

Please indicate how satisfied you are with the following. Follow same procedure in answering as above.

30. Extent to which my superiors know and understand the problems faced by subordinates.
31. Extent to which school communication motivates and stimulates an enthusiasm for meeting its goals.
32. Extent to which my supervisor listens and pays attention to me.
33. Extent to which the people in my system have great ability as communicators.
34. Extent to which my supervisor offers guidance for solving job related problems.
35. Extent to which the school's communication makes me identify with it or feel a vital part of it.
36. Extent to which my supervisor trusts me.
37. Extent to which I receive on time the information needed to do my job.
38. Extent to which conflicts are handled appropriately through proper channels.
39. Extent to which my supervisor is open to ideas.
40. Extent to which the amount of supervision given me is about right.

VITA²

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Doctor of Education

Thesis: BUREAUCRATIC VARIABLES AND TEACHER COMMUNICATION
SATISFACTION

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