BUREAUCRATIC ORIENTATIONS AS RELATED TO THE NEED
FULFILLMENT DEFICIENCIES OF TEACHERS IN A
MEDIUM SIZE SCHOOL DISTRICT IN TEXAS

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

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By

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The purpose of this study was to determine the direction and strength of the relationships that exist among teachers between bureaucratic orientation (the criterion) and each of the five human need variables that include security, social, esteem, autonomy, self-actualization, and four demographic factors that include sex, experience, educational level, and age. This study was also concerned with determining if the bureaucratic orientation of teachers is affected by deficiencies in their human needs and by their demographic differences. Determination of these relationships was accomplished by using an intercorrelation matrix of product-moment correlations and stepwise multiple regression.

The respondents were 137 high school teachers from a school district in eastern Texas. The survey instruments used were the Work Environment Preference Schedule (a measure of bureaucratic orientations) and the Porter Need Satisfaction Questionnaire (a measure of need fulfillment deficiencies).

Of the human need variables, the data indicate that the need for esteem, autonomy, security, and self-actualization
influence motivations of teachers toward the school organization and account for a significant proportion of the variance in teachers' bureaucratic orientations. Social need, however, did not contribute significantly to the variance in educators' bureaucratic orientations. Each of the four demographic variables (sex, years of teaching experience, educational level, and age) contributed significantly toward explaining the variance in teachers' bureaucratic orientations. The evidence from this study, therefore, appears to support the supposition that teachers' need states and selected demographic items influence their bureaucratic orientations.
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CHAPTER I

INTRODUCTION

The concept of bureaucracy that was originally developed by Weber (16) has gained wide acceptance as a theoretical framework. A vast amount of literature exists on the general topic of bureaucracy, which tends to focus on bureaucracy from at least three distinguishable perspectives.

These distinctions, according to Punch (13), are important because the three different definitional uses suit various purposes. First, bureaucracy is used to denote the characteristically modern form of social organization. In this view, bureaucracy is the organizational form designed to accomplish large-scale administrative tasks by systematically coordinating the work of many individuals. In this sense bureaucracy is synonymous with large-scale or formal organizations. Second, bureaucracy refers in detail to the internal structure of organizations, with emphasis on differentiating between contemporary organizations. Third, bureaucracy is used to symbolize arbitrary power, inefficiency, red tape, and so on. This third point of view is not related to the purposes of this study because it resembles "the opprobrious stereotype of the bureaucrat," as mentioned by Gordon (1, p. 8), and it is also reminiscent of some of the
dysfunctional characteristics of bureaucracy described by Merton (7).

The first perspective, which is the most relevant to this investigation, is used as basis for discussion. The bureaucratic model is one of the more fruitful approaches used by sociologists in the study of organizational style and its human effect (8). This assumption is interpreted by Owens (9) to indicate that bureaucracy does not mean inefficiency or red tape, but rather refers to an administrative tool that is adapted to the needs of a large and complex organization.

In writing about the bureaucratic structure in schools, Punch (13) postulates that the school can be conceptualized as a bureaucracy, which reflects its formal organizational structure. Presumably, school systems that are in the process of becoming larger and more complex tend also to become bureaucratic in nature. As a consequence, teachers in such systems may develop bureaucratic orientations that assist them in coping with such complexities. These complexities may be the size of the school organization, degree of interaction, personality of members, congruence of goals, levels of decision making, and state of the system.

Substantiating teachers' reactions to the complexities of organizational structure are the findings of Gordon (1). Gordon makes inferences concerning the extent to which bureaucratic attitudes and values (which he calls
bureaucratic orientations) may be rewarded by organizations that advance bureaucratic principles. Moeller and Charters (8) assert that each member of the school system learns his or her role in that system and, in so doing, assesses his or her attitudes in relation to others. Awareness of attitudes towards others enables teachers to develop bureaucratic orientations in relation to their varying levels of psychological need deficiencies. In short, bureaucratic orientations appear to be influenced by many diverse teacher variables such as prepotent psychological needs, their personalities, their social groups, their relations with administrators, and the structure of their school.

The level of bureaucratic orientation seems to be limited by the organizational variable. Thus, the school system sets the general level of bureaucratic orientation and the teachers vary from this level according to their own personal orientations toward these bureaucratic principles. This variance may be accounted for by demographics such as years of experience, education level, sex, and age. Maslow's (5) hierarchy of needs and the demographic variables form the predictors upon which this research is conducted.

It is assumed that the teachers who comprise the subjects of this investigation have the prepotent psychological needs (physiological, security, belongingness and love, esteem, and self-actualization) as described in Maslow's (5) needs hierarchy. Maslow's hierarchy of needs is recognized by
many writers who adopt it as a theoretical framework for their numerous writings. Maslow's theory serves as a basis for understanding the concept of human motivation. Motivation, according to Leavitt (4), is a complex of forces, drives, needs, tension states, and other internal psychological mechanisms that start and maintain activity toward the meeting of personal goal achievement. The cognitive approach to motivation as propounded by Maslow (6) states that individuals decide what to do on the basis of their goals and their assessment of whether or not various behavioral alternatives will lead to these goals. He further argues that the five basic needs are related to one another and are arranged in a hierarchy of prepotency. This means that the more prepotent the need, the more it precedes other needs in human consciousness and requires responsive behavior. This observation leads to Maslow's fundamental postulate that higher-level needs become activated as lower-level needs become satisfied.

The works of Porter (10, 11), which rely heavily on Maslow's (5) theory, are based in industrial settings. Later investigations, especially those conducted by Sergiovanni and Starratt (14) and Trusty and Sergiovanni (15), are educationally based. The studies in both industrial and educational settings that use Maslow's theory support the basic contention that employees have perceived psychological needs that vary according to their organizational positions. An understanding of the level of the need perceptions held by individuals in
professional positions would seem to be appropriate for the study of organizational problems. In many cases individuals are rewarded within the organization on the basis of their academic or technical qualifications for a job rather than for satisfaction of their psychological needs. If organizational leaders were aware of the psychological needs and of their varying degrees in individuals, personnel errors might be reduced and organizational effectiveness might thereby be increased.

Few studies are concerned with how variations occur in teachers' bureaucratic orientations in relation to their prepotency of human need. Psychological needs are assumed to have a great influence on teachers' behavior. It may seem desirable for school administrators not only to be aware of these need deficiencies but also to realize the consequences of high deficiencies in these prepotent needs on teachers' orientation toward school. An understanding of need fulfillment deficiencies and their relationship to the orientations of teachers would seem to be of considerable value in the successful administration of schools.

The types of orientations studied occur in formal work settings in schools. Although such attitudes are believed to affect the process of teaching and learning both directly and indirectly, they may influence the ways schools accomplish their tasks.
It is the purpose of this study, therefore, to investigate the bureaucratic orientations and the need fulfillment deficiencies of teachers. This study is significant in that by using the findings of this investigation, schools may be able to reach a better understanding of the needs, attitudes, and the types and behaviors of individuals who are particularly adaptable to bureaucratic organizations.

Statement of the Problem

The problem with which this study is concerned is to ascertain the extent to which the bureaucratic orientations of teachers vary in relation to their psychological need deficiencies.

Purposes of the Study

The specific purposes of this study are as follows:

1. To investigate the variance in the bureaucratic orientations and the need fulfillment deficiencies of public school teachers as measured by the Work Environment Preference Schedule (WEPS), and the Porter Need Satisfaction Questionnaire (PNSQ);

2. To contribute information, based on the findings, that may be useful in improving the teaching-learning environments of the schools studied and provide a basis for further educational research.
Research Questions

Specifically, this study investigates the following research questions.

1. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by the prepotency of their security need disposition?

2. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by the prepotency of their social need disposition?

3. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by the prepotency of their esteem need disposition?

4. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by the prepotency of their autonomy need disposition?

5. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by the prepotency of their self-actualization need disposition?

6. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by their sex?

7. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by their years of experience?
8. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by their education level?

9. Will a significant proportion of the variance in teachers' bureaucratic orientations be accounted for by their age?

Definitions of Terms

The following terms are defined as they pertain to this study.

**Bureaucratic orientation** is "personality construct, which reflects a commitment to the set of attitudes, values, and behaviors that are characteristically fostered and rewarded by bureaucratic organization" (1, p. 3). This variable is operationalized by deriving scores on the Work Environment Preference Schedule (WEPS) (3).

A **Medium sized school district** has a population range of from 10,000 to 25,000 average daily attendance.

**Need fulfillment** refers to "The desirable state of affairs, outcomes, or returns a person acquires from either his or her own thinking or the action of others" (12, p. 13).

**Need fulfillment deficiencies** refer to "differences between perceived and amount of present fulfillment of needs and the amount of fulfillment respondents believe should be available in their positions" (11, p. 4). This variable is utilized by deriving scores on the Porter Need Satisfaction Questionnaire (PNSQ).
The Porter Need Satisfaction Questionnaire (PNSQ) (11) is an instrument that measures the need fulfillment deficiencies of respondents.

A High school teacher is one who is responsible for the instruction of students in a high school.

The Work Environment Preference Schedule (WEPS) (3) is an instrument that measures the bureaucratic orientations of respondents.

Predictor Variables

The predictor variables are as follows:

1. Security needs (freedom from fear; freedom from coercion or feeling of arbitrary treatment; need for order and rules to guide action);
2. Social needs (needs for belongingness and love);
3. Esteem needs (the desire for achievement, mastery, and competence; the desire for prestige, status, importance, and recognition);
4. Autonomy needs (implied status of initiative and independent judgement);
5. Self-actualization needs (self-fulfillment, personal growth and responsibilities);
6. Sex (male; female);
7. Years of experience (0-5 years; 6-10 years; 11 and over years);
8. Educational level (bachelor's degree; master's degree; doctorate degree);
9. Age (21-30 years; 31-40 years; 41-50 years; 51 and over years).

Theoretical Framework

Weber's Bureaucracy

Weber (16) originated the concept of bureaucracy as a model for use in his analysis of organized industrial society. Later writers were to use his model as an ideal standard to which the existing structure of an organization could be compared. To understand fully his concept and put its uses and criticisms into perspective, his purposes as well as the characteristics of the model must be explored.

Weber's (16) concern is with the role bureaucracy plays in allowing certain people to influence other people. In order to influence a large number of people legitimately, followers must be obligated to obey the orders of the leader, and the leader must believe that he or she has the right to order the followers. According to Weber, the leader needs administrative method as a tool with which to administer his or her orders to large numbers of members.

Weber (16) constructed a model of his perception of the perfectly rational organization— one that performs its job with maximum efficiency. Basing his model on reasoning rather than empirical evidence, he describes the characteristics of his ideal administrative framework.
1. Impersonal and formal conduct. Personality and emotionally based relationships interfere with rationality. Therefore, nepotism and favoritism on a nonperformance-related basis should be eliminated.

2. Employment and promotion on the basis of technical competence and performance. These criteria are the real basis for legitimization of authority. Following them ensures that the best qualified people will pursue a career in the organization and remain loyal to it.

3. Systematic specialization of labor and specification of responsibilities. All the work necessary to accomplish the tasks of the organization should be divided into specific areas of competence. Each employee and supervisor would have authority over his functions and would not interfere with the conduct of others' jobs.

4. Well-ordered system of rules and procedures that regulate the conduct of work. Rules serve several purposes: a. They standardize operations and decisions. b. They serve as receptacles of past learning. c. They protect incumbents and ensure equality of treatment. The learning of the rules represents much of the technical competence of incumbents because they tell them what decision to make and when to make it.

5. Hierarchy of positions such that every position is controlled by a higher one. The hierarchy of authority is impersonal, based on rules, and the superior position is held by one having greater expertise. Thus, compliance with rules and coordination is systematically ensured.

6. Complete separation of the property and affairs of the organization from the personal property and affairs of the incumbents. This serves to prevent the demands and interests of the personal affairs from interfering with the rational impersonal conduct of the organizational business (16, pp. 196-204).

The influence of bureaucratic organizational structures on the attitudes and values of individuals cannot be over-emphasized. As mentioned previously, it is in the work setting that bureaucratic orientation is conceptually related
to the tasks which comprise the jobs that individuals perform in an organization. To investigate the extent to which the task could be performed in relation to having psychological need deficiencies is the purpose of this investigation.

**Maslow's Need Hierarchy**

Maslow (6) views human motivation in terms of a hierarchy of five needs that may be categorized as follows:

1. Physiological (physical) needs;
2. Security (safety) needs;
3. Belongingness and love (social) needs;
4. Esteem needs;
5. Self-actualization needs.

Maslow describes each need category in the following fashion:

**Physiological needs.**—Physiological needs are basic to the need structure and are considered essential to the existence of the living organism. Maslow (6) believes that these needs (air, water, food, sleep, sex) are relatively independent of each other and of other motivations.

The physiological needs undoubtedly are the most prepotent of all needs. For example, unless employees are provided with the means to gratify their basic physiological needs, which consist of the fundamental biological functions of human organisms, an organization will get little result from incentives that are designed to provide employees with esteem, feelings of belonging, or opportunities to grow. In
this investigation it is assumed that educators' basic physiological needs have been met; thus, in accordance with Porter's (10) conceptualization, at the base of teachers' prepotent need hierarchy is the need for security.

Security.---Security needs (freedom from fear; need for order and rules to guide action) assume considerable importance in an organizational setting. Even when their basic body needs are met, employees still must have their safety needs gratified with job security and freedom from coercion or feelings of arbitrary treatment. Clearly defined regulations and limits of responsibility--knowing exactly what is expected of them--are other examples of security-gratification measures.

The desire for psychological security is of particular interest to school organizations since safety needs may become the predominant motivators when physiological needs are fulfilled. Psychological safety takes the form of ordering the environment into a predictable pattern and attempting to cope with the anticipated difficulties of the future. Demands for supplemental unemployment benefits, pension plans, termination pay, and other forms of economic insurance stress the need for predictability and security. The desire for the familiar and the predictable goes a long way toward explaining the resistance to change or authority found in many organizations. It is not the direction or nature of the
change that is being resisted; it is the fact that change implies something new and unfamiliar—a psychological threat.

**Belongingness and love.**—When the safety needs are satisfied, the social needs for belongingness and love emerge. Needs for belongingness and love are perhaps most strongly felt in relation to an individual's parents, husband, wife, or children. In addition, these needs are experienced in social contexts (the need for warm relationships with friends; the feeling of being "one of the gang"). The work environment is also a social environment, and the same needs apply for feelings of belonging and affection. Unless employees feel that they are an integral part of the organization and that their fellow workers want them on the team, they will be dominated by the need for belongingness and unlikely to respond to higher-order opportunities or incentives.

**Esteem.**—The esteem needs are considered to be egoistic needs and are of two kinds. Maslow (6) describes two major types of esteem needs, the first of which is the desire for achievement, mastery, and competence. In organizational terms, people want to be well trained and good at their jobs; they also want to feel that they are achieving something important when they perform their jobs. The second esteem need type encompasses the desires for prestige, status, importance, and recognition (6).
School organizations have many ways of fulfilling both types of needs in their employees through such means as providing challenging work assignments, performance feedback, performance recognition, personal encouragement, and by involving employees in goal setting and decision making. Esteem needs may be summarized as the needs for self-respect, accomplishment, and achievement. An important corollary to the need for esteem and achievement, perhaps as important as the need itself, is that the achievement must be recognized and appreciated by someone else. Maslow (6) believes that few people are able to continue a pattern of achievement and success without the added encouragement and additional motivation provided by recognition of success by others. The desire for prestige and status (in reality, a form of recognition by others) is an important aspect of the drive for achievement. Attaining goals leads to feelings of self-respect, strength, and confidence. On the other hand, continued failure, frustration, and defeat can result in feelings of inadequacy and a withdrawal from competitive situations. When all these needs have been adequately met, according to Maslow, employees will become motivated by the desire for self-actualization.

Self-actualization.—Self-actualization, the capstone of the hierarchy of needs, is self-fulfillment. Maslow's original statement, "What a man can be, he must be" (6, p. 46),
may be paraphrased to state that what a man can do, he must do. He further asserts that when physiological, security, love, and esteem needs have been adequately met, employees will become motivated by the desire for self-actualization. Employees who are motivated by self-actualization needs try to find meaning and personal growth in their work and actively seek out new responsibilities. Maslow stresses that individual differences are greatest at this level; any number of ways may be found to achieve self-actualization on the job. For some individuals, producing work of high quality may be a means of self-actualization. For others, self-actualization may come through developing creative, useful ideas.

Maslow's (5) need hierarchy, from its first development, was and is viewed as a technique for understanding human motivation. Researchers who have employed Maslow's theory in their works include Porter (11) who developed the Porter Needs Satisfaction Questionnaire (PNSQ). Even though Porter eliminated physiological needs (one of Maslow's five needs) and added autonomy because of the need levels of the respondents he used in his study, he continues to view Maslow's need hierarchy as the key to understanding the theory of motivation. Moreover, autonomy, as used by Porter (10) contains factors that resemble the items included in Maslow's esteem category; Porter, however, put these items into a separate category since they appear to be logically distinct.
from other items that are commonly associated with the term esteem. Therefore, the autonomy items have been inserted in the hierarchical order of needs between the esteem category and the self-actualization category, to which they have some relation.

Weber's (16) bureaucratic theory and Maslow's (5) needs hierarchy theory were adopted as theoretical frameworks for the present research because they contain valuable groundwork information for the study. This relevance is predicated on the fact that Maslow's theory provides a vast literature on workers' motivation and needs, and Weber's theory provides a rich literature on workers' personality constructs that the research was investigating about teachers. The statements of hypotheses that reflect the contention of this investigation are thus stated.

**Hypotheses**

**H**\(_1\): A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for security.

**H**\(_2\): A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent social needs.

**H**\(_3\): A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for esteem.
H₄: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for autonomy.

H₅: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for self-actualization.

H₆: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their sex differences.

H₇: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their years of experience.

H₈: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their educational level.

H₉: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their age.

Assumptions

It is assumed that some elements of bureaucracy exist in all schools; some schools have a high degree of bureaucracy while others may have a moderate or low degree of bureaucracy. It is also assumed that the level of bureaucracy is predetermined within individual schools by the administrators of those schools; thus, teachers develop
values and attitudes in adapting to the bureaucratic organizational arrangements within those schools. Based on the level of perceived bureaucratic orientation, it is further assumed that teachers will be motivated to perform their duties in accordance with the organizational arrangements within those schools.

Limitations

The scope of this study is limited only to the teachers in two high schools in a public school district that is located in the southwestern part of the United States. The findings and conclusions are generalizable only to the population studied.
CHAPTER BIBLIOGRAPHY


CHAPTER II

REVIEW OF RELATED LITERATURE AND RESEARCH

Introduction

The study of bureaucratic organization is of special significance for social scientists as well as educational administrators. Implicit in its importance is the way in which an understanding of bureaucracy helps in accomplishing large scale administrative tasks by systematically coordinating the work of many individuals. Studies of bureaucracy are important for social as well as educational research. Such studies also receive wide acceptance when they pertain to the relationship between organizational structure and the bureaucratic characteristics that are associated with it. Recognizing the heuristic value of Weber's (45) bureaucratic concept, some writers (23, 25) have developed theoretical models that relate structure to the personality, behavior, and attitudes of organizational members. Based on their theories is the contention that bureaucratic structures do affect the manner in which participants in organizations perform their duties.

The impact of bureaucracy on the individual and organization is believed to be less than desirable by a few writers who criticized Weber's bureaucratic theory. These critics
emphasize that Weber overlooks the dysfunctional aspects of bureaucracy—the unintended consequences of bureaucratic concept which they concede tends to erode its efficient and rational operation. As indicated by MacKay (23), most of their contentions are based on educated conjecture rather than scientific evidence. This investigation hopes to contribute some new evidence to the growing body of research data regarding the effects of bureaucratic orientations on organizational members.

Robert Merton (26) is one of the first writers to draw attention to the unintended consequences of bureaucratic organization. He sees control and coordination by rules as an aid to the organization's rationality because rules promote predictability of behavior even though they also regulate bureaucrats' behavior. He asserts that as rules receive more emphases, they are no longer the means for achieving organizational goals but become personal goals in themselves. This displacement of organizational goals by personal goals then leads to organizational ineffectiveness.

In Gouldner's (17) work, the concept of unintended consequences of control through rules is also emphasized. He argues that rules define minimum acceptable behavior and performance requirements as well as desired behavior and performance. When organizational goals are not adopted by employees as their own, the consequence is performance at the minimal levels specified by the rules. Such a situation
leads to increased demand for control by the hierarchy, which in turn can lead to successively higher amounts of formalization and sometimes successively lower amounts of innovation and creativity. It is therefore wise of school administrators to motivate teachers by accommodating their needs in addition to satisfying the school organization's goals. Only in meeting the congruence between the goals of the organization and the individuals' goals can team spirit, innovation, and creativity be engendered from teachers.

Like Merton (26), Selznick (38) believes that means can become ends through goal displacement. In his view, goal displacement arises from the need to delegate powers to subunits in the organization which in turn develop goals of their own. This shift from overall organizational goals to specific subunit goals leads to recentralization of control by top management in an attempt to reintegrate efforts toward the major organizational goals.

There is a commonality in the emphases raised by Gouldner (17), Merton (26), and Selznick (38). Unlike Weber (45) their concern is with the internal workings of the organization and some of the undesirable consequences of using bureaucratic rules to control behavior in organizations. Weber, on the other hand, is concerned with the role that bureaucracy plays in society—the positive function of bureaucracy or the ideal standard to which the existing structure of an organization could be compared.
Other writers such as Blau and Scott (6), do not see goal displacement as inevitable. They posit that when organizations of subunits are not threatened and are secure in their relationships, they can adopt more advanced subsequent goals after meeting their initial goals.

More elaborate in scope and more relevant in nature to this investigation are the organizational theories of Argyris (2, 3, 4, 5) and Presthus (33, 34). They describe the organization as a living system. To these authors, organizations are entities composed of interpersonal relations that exist beyond the plans, written rules, and official public statements. The viewpoint in modern organization theory that expresses the inherent conflict between individuals' needs and organizations' requirements is emphasized by their works. These writers are concerned with the effect of large organizations on the individuals who work in them and how these individuals are receptive to organizational demands. Individuals who are highly motivated and whose needs are fairly well met by the organizations are apt to yield more to organizational demands than those whose needs are not met.

Studies on Bureaucracy

Studies have been conducted to test the validity of Gordon's (15) Work Environment Preference Schedule (WEPS) and to apply its concepts to employees in various types of organizational settings (including school organizations). The
theorizing of Weber (45), and the subsequent research investigations of Gordon (13, 14) and Gordon and Khalique (16) support the notion that work environments, which are represented by a bureaucratic organizational model, would appeal to individuals with specified personality traits. Individuals who are considered to be bureaucratically oriented are inclined to place a high value on conformist behaviors and on being systematic and orderly and to place a low value on having personal independence of action and on engaging in new and varied activities. Selznick (37) observes that bureaucratic attitudes (of the type measured by WEPS) are differentially held among organizational levels, being stronger at the lower levels and weaker at the higher levels. Selznick's investigation reveals high need deficiencies at lower organizational levels because the individuals at these levels need more satisfaction of these needs than those at higher levels.

Endelsohn (12) found that older bureaucratic workers are more satisfied with their work. He also claims that older and nonminority workers have a more internal locus of control than younger minority workers. Based on this finding, Endelsohn raises interesting issues that have been the focus of organizational administrators. Those issues include (a) the development of techniques for identifying the moderating influences of changing work force composition on organizational structure and performance, (b) the creation of
intervention processes to effect a greater degree of congruence of organizational goals with the expectations of heterogeneous cohorts of the work force, and (c) the recognition of differences in effectiveness of motivational factors (intrinsic and extrinsic) between segments of the work force, and development of reward systems appropriate to particular groups.

The second and third issues relate to this dissertation which investigates the extent to which deficiencies of teachers vary in relation to their bureaucratic orientations. An understanding of this relationship may be useful in assisting educational decision-makers to educate the youths in their schools more effectively. Although Endelsohn's (12) study was conducted in the civil service, the basic principles that underly bureaucratic orientations and motivational factors tend to operate in a similar fashion in educational settings.

Henry (19) attempts to measure the differences in the role perceptions and expectations that exist among civil service personnel with respect to the extent of bureaucratic and professional orientations. His finding shows that all respondents tended to view the role (both perceptions and expectations) in a combination of bureaucratic and professional orientations. He concludes that the bureaucratic and professional orientations were more significant among role incumbents than among non-incumbent respondents. It is
the contention of this dissertation that teachers' perceived roles influence their orientation towards the expected bureaucratic principles designed by the school system.

Valiere (43) attempts to identify the problems which confront governmental contracting officers that are detrimental to their functions, satisfaction, achievement, and morale in relation to their work. The research provides an insight into the working environment of the respondents by identifying their receptiveness to the work environment. According to Valiere, the contracting officers have the greatest job performance and satisfaction when they have freedom of interaction and shared responsibility. This dissertation may parallel Valier's findings in that teachers' need factors appear to have an impact upon their bureaucratic orientations.

Although the reported studies were conducted in business and governmental settings, they are important as background for the present investigation because (a) they reveal the perceived and the expected roles of workers in bureaucratic environment, (b) they indicate that people who occupy professional positions in an organization are more susceptible to bureaucratic orientations than others, and (c) to this extent they assume that the behavior of individual members of an organization is in some way related to the satisfaction of their need factors. Implicit in these assumptions is the provision of a direction for the basic bureaucratic behavior that is tested regarding teachers in this dissertation.
Bureaucracy and Educational Research

The presence of so much literature on bureaucracy makes it possible for numerous studies to be conducted on the bureaucratization of school systems. MacKay (23), whose study involves elementary and junior high schools as bureaucratic organizations, found that schools differ in their degree of bureaucratization on four of the dimensions studied—subordination, impersonalization, rule conformity, and traditionalism. McKay also states that "in a professional organization such as a school, well defined and emphasized authority relationships among staff members are not associated with productivity" (23, p. 151). Thus teachers appear to feel restricted as a result of authority of the school structure.

A study by Adams, Kimble, and Marlin (1) examines relationships between school size and the self reports of teachers on their teaching styles. In order to do this, the researchers used indices that assess information on teachers' perceptions of their own teaching practices. It was found, however, that teachers' perceptions of their own behavior may not be accurate and, therefore, the effects of school size and level may prove to influence other factors more than they appear to affect teaching practice. Associated with school size are such factors as number of employees, number of students, levels of decision making, financial dimensions, and pressures from the school community. These factors
culminate to form the complexities in school organizations that Punch (35) mentions.

The research conducted by Ryan (36) investigates how reorganization of educational institutions can be facilitated and impeded by features of the existing organization. The features referred to are those that are prevalent in complex school organizations. In dealing with these elements of size, the school system must be careful to incorporate personal needs of teachers in its endeavor to achieve organizational objectives. It is in so doing that teachers will support without reservation the goals of the organization. Even though this study was conducted in an institution of higher learning, the findings have implications not only for university administrators, but also for administrators in elementary and secondary schools by providing useful information on how administrators can motivate educators to perform. When introducing change and overcoming resistance, Ryan (36) asserts that administrators must be aware of the importance of the school as a group, with norms from which faculty members, regardless of individual characteristics, are reluctant to deviate.

Gordon and Khalique (16) conducted a study in India about school educators' morale, and they conclude that educators who have higher levels of expressed morale are more bureaucratically oriented toward the school system than those who have lower levels of expressed morale. Expressed morale
is defined as teachers' overall satisfaction with their assigned duties, their colleagues, their superiors, and the general actions of the higher administration. According to Gordon and Khalique, a higher score on the morale scale reflects a higher level of expressed morale by individuals who are bureaucratically oriented. The purpose of discussing this study is not to compare the bureaucratic orientations of employees in the United States with those in other countries; rather, it may benefit the educational community, particularly the school district in which this investigation was conducted, to determine if perceived need deficiencies are directly related to the orientations individuals have toward bureaucratic organizations.

In a study conducted by Trickett and Moos (41) on the assessment of school environment, the conclusion is similar to those of Gordon and Khalique. That is, bureaucratically oriented individuals are committed to the attitudes, values, and behaviors that are rewarded by bureaucratic organizations.

King, Drummond, and McIntire (21) also studied educators' perceptions of the work environment and their support for open education. They found that educators who are supportive of open education tend to be less bureaucratically oriented than those who do not support open education. Support for open education, according to this study, indicates lack of adherence to rules, regulations, and standard operating procedures (informality); lack of support for open education,
on the other hand, indicates an acceptance of bureaucratic orientation (support for formal rational organization).

The finding in Spinks' (40) study shows an expressed tendency among teachers for autonomy from client influence to increase as bureaucracy increases. Their responses seem to indicate a tendency for autonomy from an organizational standpoint to decrease as the rules and regulations dimension of bureaucracy increases. These results lead Spinks to conclude that educators should desire some structure within which to carry on the work of the profession, or the organizational climate may be perceived differently by administrators and teachers. This finding supports the earlier assumption raised by other studies in business and government areas (12, 19, 43) which is that the perceptions of the workers who desire a favorable bureaucratic structure for the performance of their professional work may depend on their position in the organization's hierarchy. Furthermore, teachers' perceptions of their prepotent needs may influence their bureaucratic orientations and thus influence their job performance.

These studies on educational bureaucracy are significant for this investigation because of the background information supplied, and because the findings may be used as a model by school systems in dealing with teachers' personal needs and organizational goals. The goals of the organization are translated into the numerous activities that individuals
must perform. The satisfaction of individuals' needs, in the process of performing these activities, is the basic question that school administrators and researchers are trying to answer. In an attempt to answer the question, this study hopes to discover how the satisfaction of teachers' needs affects their bureaucratic orientations. MacKay's (23) study is important as a foundation for this investigation because (a) it shows that schools are different in their bureaucratization, and (b) it reveals that the behavior of individual teachers to some extent is related to the structural framework within which they work.

As previously stated, Adams, Kimble, and Martin (1) and Ryan (36) substantiate the fact that teachers' satisfaction and a willingness to change can be attained through faculty involvement in decision-making. These studies indicate that organizational change is presumably designed to facilitate goal attainment; for the same reason, teachers should be involved in the decision-making process and in activities that seek to reduce the levels of their psychological need deficiencies and thus enhance their levels of performance. Under such conditions, it is assumed by this study that orienting teachers toward the school can be achieved.

The studies of Gordon and Khalique (16), King, Drummond, and McIntire (21), and Trickett and Moos (41) support the notion that the more bureaucratically oriented an employee, the more likely he or she is to feel secure and have a sense
of belongingness in a social environment. It may be inferred from these studies that teachers' satisfaction may be influenced by the level of their psychological need deficiencies.

Studies Related to Workers' Need Fulfillment Deficiencies

Theories have been advanced over the years about the motivation of workers. Such theories, along with other studies, have been full of contradictory findings. In the past several decades, there has been an accumulation of knowledge on the theories of motivation and much progress has been reported by the studies made that utilize these theories. Brayfield and Crockett (7) and Herzberg, Mausner, and Snyderman (20) found that satisfaction is an indicator of an employee's motivation to come to work. Using an expectancy theory, Graen (18), Porter and Lawler (32), and Vroom (44) assert that people are motivated to come to work only if it is the most positively attractive or valent behavior that is open to them. People who say that they are satisfied with their jobs are in effect saying that their jobs are somehow instrumental in satisfying their needs; on the other hand, people who say that they are not satisfied with their jobs are saying that their jobs are not instrumental in satisfying their needs. Thus, the people who are dissatisfied with their jobs are likely to come to work less often.
Porter and Lawler (32) contend that satisfaction indirectly influences one's motivation to perform a job effectively. Satisfaction influences motivation to perform because it has the power to influence the valence or attractiveness of certain kinds of rewards. Satisfaction that results from the fulfillment of teachers' prepotent needs may indicate the direction of their bureaucratic orientations.

Several other studies investigate the need fulfillment deficiencies of workers--Porter (29, 30, 31), Trusty and Sergiovanni (42), Sergiovanni and Starratt (39), Chisolm, Washington, and Thibodeaux (10). Although Porter's studies (29, 30, 31) were conducted in industrial settings, the studies that have been conducted in educational settings produced results that are similar. Porter (31) supports the contention that one's management position seems to be an important indicator for determining the extent to which psychological needs are fulfilled. Porter (29) also reiterates that lower level management personnel have greater need deficiencies than upper level management personnel. On the whole, Porter's studies form a foundation upon which many other studies in educational settings are based.

**Educational Research in Need Fulfillment Deficiencies**

Trusty and Sergiovanni (42) found that educators have perceived psychological needs that vary according to their professional roles. Sergiovanni and Starratt (39) conclude
that educators whose need deficiencies are not satisfied by a positive work environment will seek personal satisfaction from community or family activities. The researchers also suggest that educators who do not receive adequate job satisfaction will generally display a mediocre level of occupational performance.

The research by Nicholls (28) supports the notion that outstanding creative achievement in adults depends on an endogenous or internal task orientation. This emphasizes the contention that conditions which facilitate motivation might indeed produce intellectual development and performance in teachers.

In her study of need achievement and need fulfillment deficiencies as they affect the promotional aspirations of educators, Chisolm (9) concludes (as does Porter) that need deficiencies vary according to the position held in the organization. She also supports Maslow's statement that "while perceived differences in social, autonomy, and self-actualization are attributed to chance, these needs areas do function as motivators as a whole" (24, p. 46).

The studies by Brodinsky (8) and Divoky (11) stress that the work responsibilities and pressures on educators have increased substantially during the last decade. They therefore support Sergiovanni's and Starratt's (39) position that educators' need deficiencies should be adequately satisfied by positive work environments.
In a study on job motivation and the need fulfillment deficiencies of educators, Chisolm, Washington, and Thibodeaux (1) reaffirm the finding of Chisolm's (9) study that educators' need deficiencies depend upon their positions in the organization. They further posit that school administrators should identify the levels of prepotency at which educators operate as a group and as individuals. The identification of need fulfillment deficiencies can be essential to understanding organizational behavior, that is, behaviors that are manifestations of job motivation.

Miskel, DeFrain, and Wilcox (27) state that educational organizations require their personnel to exhibit motivational behaviors that will help solve organizational tasks. These behaviors are exemplified by personnel who join and remain in the organization, perform tasks dependably, and engage in spontaneous innovative work activities. The recognition of teachers as the primary assets or resources of educational organizations, therefore, creates even a greater impetus for such organizations to satisfy their prepotent needs.

The studies covered in this section support the notion that workers whose basic needs are satisfied are motivated to remain and perform on the job. By the same token, it may be said that teachers whose prepotent needs are fairly well met exhibit attitudes that tend to support bureaucratic orientations (13).
Because educational organizations deal primarily with people, an increase in the organizational search to satisfy the needs of these workers is the concern of the researchers who have studied the need fulfillment deficiencies of teachers. The satisfaction of perceived psychological needs is assumed to affect the level of orientation of teachers toward the school.

Summary

This review of the literature and research that is relevant to bureaucratic orientations and hierarchy of needs focuses on the works and studies that support these theories. Each of these investigations has been useful in testing Weber's (45) and Maslow's (24) concepts. Findings from these studies provide important information to the educational community. Bureaucratic orientation is used as personality construct of individuals in an organization as a contemporary society comprising the tasks that individuals perform. The need hierarchy framework is utilized to analyze factors that are related to job motivation. The cognitive approach to motivation assumes that people decide what to do depending on their psychological needs (24).

Essentially, prepotency—the extent to which one's psychological needs are gratified—may greatly influence one's bureaucratic orientations. Additional factors (such as sex, years of experience, educational level, and age) may also
affect the variance between teachers' bureaucratic orientations. There is supportive evidence from certain studies that used the same variables to determine the behaviors of workers in bureaucratic organizations. It was found that schools are involved in the trend for organizations to become more bureaucratized (25). Faced with expanded enrollments, increased specialization, and greater complexity, McKague (25) asserts that schools are becoming increasingly bureaucratic.

The bureaucratic features of schools alone, however, are not related to certain types of teachers' behavior. Such links are noticeable only if teachers respond negatively to the types of organizational behavior that tend to be associated with level of bureaucracy. Other research found that the way in which school organizations relate those bureaucratic characteristics to the teachers makes a great impact. MacKay (23) contends that the behavior of individuals in an organization is in some way related to the structural framework in which they work. Because a greater part of teacher behavior may be attributed to recognition and satisfaction of their needs by schools, bureaucratic and need hierarchy models are investigated by this dissertation.
CHAPTER BIBLIOGRAPHY


Determining to what extent motivational and demographic variables account for the variance in the bureaucratic orientations of teachers is the purpose of this study. This chapter contains a description of the population from which the sample was drawn and a presentation of the data collection procedures.

Teachers in a school system that is located in the southwestern part of the nation responded to three questionnaires, each of which measures specific variables under investigation. The predictor variables are need variables (security, social, esteem, autonomy, and self-actualization) and demographic variables (sex, experience, educational level, and age) while the criterion variable is bureaucratic orientation.

Population and Sample

Teachers in a school district that is located in the southwestern part of the United States comprise the population for this investigation. The school district is considered a medium-sized district which is of 2 senior high, 6 junior high (or middle), and 16 elementary schools. The average daily attendance is approximately 19,000 students, and there are 790 teachers. The study involves only the two high schools
which have a combined average daily attendance of 4,600 students and approximately 242 teachers. Since the population is fairly small, coupled with the objective of at least a 65 per cent return rate, the entire population of teachers was asked to participate in the study.

Data Collection Procedures

Permission to collect data by administering the questionnaires to high school teachers in the district was requested from the superintendent (Appendix A). Upon the superintendent's approval of the request (Appendix B), the cooperation and participation in administering the questionnaires to teachers was requested from the principals and, subsequently, all respondents. Along with an explanation of the general purposes of the study, the questionnaires (Appendices C, D, E) were delivered to the teachers through the offices of the two high school principals.

To ensure a good return, the respondents were asked to complete the instruments anonymously and return them to the offices of their respective principals for collection. After ten days, follow-up requests were sent to the respondents through the principals' offices asking for completion and return of the instruments. These follow-up efforts aided in the return of 187 questionnaires out of the 242 distributed, which is a 77 per cent return rate.

Of the 127 questionnaires distributed to respondents in high school A, 93 (73%) were returned and all were usable.
Of the 117 questionnaires distributed in high school B, there were 94 (80%) completed and usable responses. These data are shown in Table I.

**TABLE I**

NUMBER AND PERCENTAGE OF RESPONDENTS BY SCHOOL

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Number (N) of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School A</td>
<td>127</td>
<td>93</td>
<td>73.22</td>
</tr>
<tr>
<td>High School B</td>
<td>117</td>
<td>94</td>
<td>80.34</td>
</tr>
<tr>
<td>Total</td>
<td>242</td>
<td>187</td>
<td>77.00</td>
</tr>
</tbody>
</table>

In order to maintain anonymity, the collected responses were quantified and coded into a language that is usable by the computer.

All responses on the returned questionnaires were key-punched on machine punch cards at the Computing Center, North Texas State University, for computer program analysis by the Statistical Package for the Social Sciences (SPSS) (6) as primary reference.

**Description of Sample**

Table II data show the number and percentage of respondents by educational level, years of experience, and sex.
These data are discussed broadly in relation to the sex of the teachers and the total group of respondents.

The majority (81%) of the male teachers who have 5 years or less teaching experience have only a bachelor's degree. However, the majority (65%) of the male teachers who have 11 or more years of teaching experience have a master's degree. For the group of male teachers (87), 24 per cent have only a bachelor's degree and 76 per cent have a master's degree. Forty-five male teachers (52%) have taught for 11 or more years.

Forty-eight per cent of the female teachers who have 5 years or less teaching experience have only a bachelor's degree. However, the majority (52%) of the female teachers who have 11 or more years teaching experience have a master's degree. For the group of female teachers (100), 44 percent have a bachelor's degree and 56 per cent have a master's degree, but only 38 per cent have taught for 11 or more years.

Numerically, a master's degree is held by more male (66 of 87) than female (56 of 100) teachers. Male teachers also have more teaching experience; 45 (of 87) males but only 38 (of 100) females have taught for 11 or more years.

For the total respondents (187), 87 (47%) are male and 100 (53%) are female. A master's degree is held by 122 (65%) of the teachers, and only a bachelor's degree is held by 65 (35%) of the total respondents. Forty-six (25%) of the teachers have taught 5 years or less, 58 (31%) have taught
<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Male Teachers</th>
<th></th>
<th>Female Teachers</th>
<th></th>
<th>Total Respondents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degree</td>
<td>N</td>
<td>%</td>
<td></td>
<td>Degree</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Bachelor's</td>
<td>17</td>
<td>81.0</td>
<td>1</td>
<td>1.5</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Master's</td>
<td>1</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sub-total Males</td>
<td>18</td>
<td>20.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 yrs.</td>
<td>Bachelor's</td>
<td>2</td>
<td>9.5</td>
<td>22</td>
<td>33.3</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Master's</td>
<td>2</td>
<td>9.5</td>
<td>22</td>
<td>33.3</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Sub-total Males</td>
<td>24</td>
<td>27.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 yrs.</td>
<td>Bachelor's</td>
<td>2</td>
<td>9.5</td>
<td>43</td>
<td>65.2</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Master's</td>
<td>2</td>
<td>9.5</td>
<td>43</td>
<td>65.2</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Sub-total Males</td>
<td>45</td>
<td>51.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 over yrs.</td>
<td>Bachelor's</td>
<td>21</td>
<td>24.0</td>
<td>66</td>
<td>76.0</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Master's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sub-total Males</td>
<td>87</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N and % of Group</td>
<td>Bachelor's</td>
<td>21</td>
<td>24.0</td>
<td>66</td>
<td>76.0</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Master's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sub-total Males</td>
<td>87</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE II
EDUCATIONAL LEVEL, TEACHING EXPERIENCE, AND SEX OF RESPONDENTS
between 6 and 10 years, and 83 (44%) have taught 11 or more years.

Table III data show the age groupings for the male and female respondents. The majority (41%) of the group of male teachers (87) is between 41 and 50 years of age. The majority (46%) of the group of female teachers (100) is between 31 and 40 years of age. For the total respondents (187), 36 teachers (19%) are between 21 and 30 years of age, 72 teachers (39%) are between 31 and 40 years of age, 57 teachers (30%) are between 41 and 50 years of age, and 22 teachers (12%) are 51 years of age or older.

TABLE III
RESPONDENTS GROUPED BY SEX AND AGE

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Males</th>
<th>Females</th>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>21-30 years</td>
<td>16</td>
<td>18.39</td>
<td>20</td>
</tr>
<tr>
<td>31-40 years</td>
<td>26</td>
<td>29.89</td>
<td>46</td>
</tr>
<tr>
<td>41-50 years</td>
<td>36</td>
<td>41.38</td>
<td>21</td>
</tr>
<tr>
<td>51 and over</td>
<td>9</td>
<td>10.34</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>100.00</td>
<td>100</td>
</tr>
</tbody>
</table>
A demographic profile of the teacher-respondents to this study is as follows. The average teacher-respondent is a female, who is over 30 years of age, who has at least 11 years' teaching experience, and who has a master's degree.

Description of Instruments

Three instruments are used to measure the constructs under study. These are (a) the Work Environment Preference Schedule (WEPS) (3), which assesses bureaucratic orientation factors, (b) the Porter Need Satisfaction Questionnaire (PNSQ) (7), which assesses need fulfillment deficiencies, and (c) the Personal Data Form (PDF) (Appendix E), which assesses demographic factors.

The Work Environment Preference Schedule (WEPS)

Gordon (3) developed the Work Environment Preference Schedule (WEPS), which is designed to assess a personality construct that he labels as bureaucratic orientations, and which is derived from Weber's (9) theory of bureaucracy. Bureaucratic orientation reflects a commitment to a set of attitudes, values, and behaviors that are characteristically fostered and duly rewarded by bureaucratic organizations.

High scores on the WEPS, asserts Gordon (3), typify individuals who accept authority, prefer impersonalized work relationships, and seek the security of organizational and in-group identification. Low scores are made by individuals who do not so characterize themselves.
Reliability.—The reliability of the WEPS (its consistency of measurement) was established by Gordon and Khalique (4) in a study of educators' morale. The internal consistency reliability of the WEPS was found to be .84. Stability of the WEPS as measured by test-retest coefficients obtained from two samples of school counselors, was also high at .82.

Validity.—Content validity of the WEPS was established by a panel of judges who were appointed for this purpose. This panel agreed that the measure is a valid instrument for assessing the construct under investigation.

According to Gordon and Khalique (4), the Work Environment Preference Schedule has proven to be appropriate for evaluation of individuals' perception in an educational environment. The instrument consists of four sub-scales, which represent components of commitment to bureaucracy, are (a) subordination, (b) impersonalization, (c) rule conformity, and (d) traditionalism. They are explained as follows.

(a) Subordination entails a willingness to comply fully with the stated wishes of the superior and to have decisions made by higher authority;

(b) Impersonalization entails a preference for impersonal or formal relationships with others on the job, particularly individuals at different organizational levels;

(c) Rule conformity entails a desire for security afforded by adherence to rules, regulations, and standard operating procedures;
(d) Traditionalism entails a need for security provided by organizational identification and conformity to group norms (3).

Scoring.—Since the WEPS is easily scored by hand, no scoring stencil is needed. The WEPS consists of 24 items for which respondents were asked to indicate their perceptions of the educational environment on a five-point scale that ranges from strongly agree to strongly disagree. Only a single total score is obtained for WEPS. Two points are given for each response of strongly agree or agree, one point for undecided or disagree, and zero points for strongly disagree. The maximum score is 48, and the minimum score is 0. Scoring is done by counting the number strongly agree and agree responses, multiplying this value by two, and adding the result to the sum of the undecided and disagree responses.

The Porter Need Satisfaction Questionnaire (PNSQ)

Originally, the Porter Need Satisfaction Questionnaire (PNSQ) (7) was designed for use in industrial settings, but it was later adapted for use in educational settings by Trusty and Sergiovanni (8). This instrument was used to assess the needs fulfillment of respondents that meet Maslow's (5) hierarchical needs classification. Porter (7) distinguishes his needs categories from those of Maslow by replacing physiological needs with an autonomy need category, which he
added to his instrument. Because of the assumption that managers (the respondents for whom the instrument was originally designed) are most likely to have gratified their basic physiological needs, Porter asserts that these needs have been fairly well satisfied. Porter includes an autonomy category (between esteem and self-actualization) that appears to be implied in Maslow's classification system.

**Reliability.**—In regard to the reliability of the PNSQ, Chisolm (1), in a study that involves need achievement, need fulfillment deficiencies, and promotional aspirations of educators, found the reliability of the PNSQ, (its consistency of measurement) to be high. The internal consistency reliability of the PNSQ in that study was .82. The stability of the PNSQ, which was measured by test-retest coefficient (with four weeks intervening, N = 68), was also .82.

**Validity.**—The content validity of the PNSQ was established as part of Chisolm's (1) study by a panel of judges who were appointed for this purpose. The panel determined that the instrument was a valid measure of educators' need deficiencies.

On the administered instrument, the Porter Need Satisfaction Questionnaire items were randomly arranged; the items, however, are listed below according to need categories. The categories and their hierarchical arrangement are in general agreement with the classification system used by Maslow (5).
The only exception is the deletion of the category that relates to the most prepotent needs (physiological) since these needs are presumed to be adequately satisfied for persons in managerial positions. Autonomy was inserted by Porter between the esteem and self-actualization categories.

The categories and their items are as follows:

1. **Security needs:** The feeling of security in my professional position;

2. **Social needs:**
   a. The opportunity, in my professional position, to give help to other people;
   b. The opportunity to develop close friendships in my professional position;

3. **Esteem needs:**
   a. The feeling of self-esteem a person gets from being in my professional position;
   b. The prestige of my professional position inside my school (that is, the regard received from others in my school);

4. **Autonomy needs:**
   a. The authority connected with my professional position;
   b. The opportunity for independent thought and action in my professional position;
   c. The opportunity, in my professional position, for participation in the setting of goals;
d. The opportunity, in my professional position, for participation in the determination of methods and procedures;

5. **Self-actualization needs:**
   
a. The opportunity for personal growth and development in my professional position;

   b. The feeling of self-fulfillment a person gets from being in my professional position (that is, the feeling of being able to use one's unique capabilities, realizing one's potentialities);

   c. The feeling of worthwhile accomplishment in my professional position (7).

**Scoring.**—From a list of 13 work-connected statements, respondents were asked to circle a number on a rating scale extending from 1 - 7 (where 1 represents low- and 7 represents high-need fulfillment) to indicate how much they believe there is a particular work-connected characteristic in their present school position. Respondents indicated:

   (a) How much is there now? 1 2 3 4 5 6 7, and

   (b) How much should there be? 1 2 3 4 5 6 7, relating to statements such as "the opportunity for personal growth and development in my professional position."

Differences between (a) and (b) responses were computed to yield a need-fulfillment deficiency score for each item and difference scores in each need category were added. The
larger the sum of such scores, the greater the perceived need fulfillment deficiency; the smaller the sum of the scores, the less the perceived need fulfillment deficiency.

**Personal Data Form (PDF)**

Respondents were asked to indicate their sex, years of experience as teachers, level of educational attainment, and age. The information derived from the four items constitutes important demographic information that was used to analyze the predictor variables.

The four items on the personal data form were coded in the following manner (Appendix E). Item 1 (sex), male 1, female 2; item 2 (years of experience as a teacher), 0-5 years 1, 6-10 years 2, 11 and over years 3; item 3 (educational level), holder of bachelor's degree 1, holder of master's degree 2, holder of doctoral degree 3; item 4 (age), 21-30 years 1, 31-40 years 2, 41-50 years 3, 51 and over years 4.

**Procedures for Analyses of Data**

The analyses of data are based on a stepwise multiple regression technique that uses nine predictor variables. All nine variables were entered into the regression equation, but only those that were sufficient in contributing to the explained variance are retained for subsequent analyses. The order of inclusion was determined by the respective contribution of each variable to the explained variance and not in
The entry of the variables into the regression equation (employing the stepwise regression technique) took the following order: esteem (need variable), sex (demographic variable), autonomy (need variable), security (need variable), age (demographic variable), self-actualization (need variable), educational level (demographic variable), experience (demographic variable), and social (need variable).

In the stepwise regression method, each variable is treated as if it were added to the regression equation in a separate step after all other variables are included. The increment in $R^2$ (or in the explained sum of squares) due to the addition of a given variable is taken as the component of variance for that variable.

The rationale for choosing the stepwise technique was to eliminate any biases in predetermining the ordering among variables. Stepwise method allows the computer to enter the variables in single steps from greatest to least contribution, provided that they explain variance in conjunction with those variables already in the regression equation. The variable that explains the greatest amount of variance in the criterion variable enters first, the variable that explained the greatest amount of variance in conjunction with the first variable is entered second and so on until all nine variables are exhausted. In other words, the variable that explains the greatest amount of variance, which is unexplained by the
variables already in the equation, enters the equation at each step. Any variable that does not enter the regression equation did not contribute sufficiently toward explaining the criterion variable. Pearson's product moment coefficient values of correlations were examined to determine the strength and direction of relations between the criterion variable paired with each of the predictor variables.

Summary

This chapter describes the population and sampling that were used in the investigation. Procedures that were used in data collection as well as the instruments chosen for the study are discussed. Reliability and validity of each of the measures used in the investigation are reported, and a description of the data analyses procedures used in testing the hypotheses are outlined. The data finding and a discussion of the results are reported in Chapter IV.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

ANALYSES AND DISCUSSION OF DATA RESULTS

This chapter presents the analyses of data based on the tests of nine hypotheses and discussions of the findings that result from the tests of hypotheses. Sections that discuss additional findings and implications of the findings constitute the latter part of the chapter.

Methods for Testing the Hypotheses

Nine hypotheses were tested using multiple regression analysis as the statistical technique. Since the variables were allowed to enter the regression equation in a stepwise manner, according to their order of contribution in explaining the criterion measure of bureaucratic orientations of teachers, the reporting of results does not follow the order in which the hypotheses were initially arranged. The order of presentation and discussion of these factors is esteem (need variable), sex (demographic variable), autonomy, security (need variables), age (demographic variable), self-actualization (need variable), educational level, years of experience (demographic variables), and social (need variable). The stepwise regression analysis reordered the predictor variables (security, social, esteem, autonomy, self-actualization, sex, years of experience, educational level,
and age) according to their entry into the regression equation which was due to their contribution to the explained variance in bureaucratic orientations.

The relationships that exist between the scores of the WEPS (criterion variable), the subscores of the PNSQ (predictor variables), and the interrelationships among the predictors are of interest in determining the extent to which the variables under investigation vary together. The delineation of such variability led to the formulation of the hypotheses which became the focus of this investigation. The hypotheses that are tested are as follows.

$H^1$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for security.

$H^2$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent social needs.

$H^3$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for esteem.

$H^4$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for autonomy.

$H^5$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for self-actualization.
$H^6$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their sex differences.

$H^7$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their years of experience.

$H^8$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their educational level.

$H^9$: A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their age.

Intercorrelations among the Variables: Conditions for Multiple Regression Analyses

The acceptable situation for using multiple regression analysis is when the correlations among the predictor variables are low. Existence of low correlations simplifies the interpretation of the test of hypotheses. Kerlinger postulates that "the ideal multiple regression situation is when the correlations between the predictor variables and the criterion variable are high, and the correlations among the predictor variables are low" (5, p. 662). For this study, such desired situation was found with all the need variables used in the investigation except security need.
By utilizing multiple regression analysis, it is assumed that low correlations among the predictor variables may indicate their ability to explain variance, and, also, how far the relation regresses toward the mean. The higher the correlations between the criterion and predictor variables, the greater the explanation of variance and, by contrast, the lower the correlations the less the chance of explaining the variance.

**Criterion Variable**

For the purposes of this study, bureaucratic orientation is the criterion variable. Supporting this choice is the explanation of this variable as a personality construct that reflects a commitment to the set of attitudes, values, and behaviors which are characteristically fostered and rewarded by bureaucratic organizations.

**Predictor Variables**

With respect to the correlations among the predictor variables, all need variables (except security need) approach the ideal situation by having significant correlations with the criterion variable as well as significant correlations among other predictor variables. In Table IV, the significant relations among the demographic variables (sex, experience, educational level, and age) are simply indicative of the groups that have more or fewer respondents in each category. Since the ideal multiple regression situation is approached
TABLE IV

SIMPLE PEARSON COEFFICIENTS OF CORRELATIONS AMONG
ALL PREDICTOR AND CRITERION VARIABLES
(N = 187)

<table>
<thead>
<tr>
<th>Bureaucratic Orientation</th>
<th>Security</th>
<th>Social</th>
<th>Self-Actualization</th>
<th>Autonomy</th>
<th>Esteem</th>
<th>Sex</th>
<th>Years' Exp.</th>
<th>Educ. Level</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bur. Orient.</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>0.095</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>-0.225&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.293&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Act.</td>
<td>-0.435&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.368&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.406&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>-0.390&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.462&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.390&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.553&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Esteem</td>
<td>-0.485&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.172&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.346&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.666&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.511&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>-0.275&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-0.028</td>
<td>0.155</td>
<td>0.220&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.036</td>
<td>0.214&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>-0.086</td>
<td>0.044</td>
<td>-0.063</td>
<td>-0.027</td>
<td>0.053</td>
<td>0.006</td>
<td>-0.130&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.022</td>
<td>0.011</td>
<td>-0.087</td>
<td>-0.093</td>
<td>0.038</td>
<td>-0.087</td>
<td>-0.208&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.555&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1.000</td>
</tr>
<tr>
<td>Age</td>
<td>-0.087</td>
<td>-0.041</td>
<td>-0.062</td>
<td>-0.112</td>
<td>-0.055</td>
<td>-0.048</td>
<td>-0.090</td>
<td>0.736&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.520&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>SD =</td>
<td>6.930</td>
<td>1.478</td>
<td>1.691</td>
<td>3.249</td>
<td>3.994</td>
<td>4.060</td>
<td>0.500</td>
<td>0.809</td>
<td>0.478</td>
</tr>
</tbody>
</table>

<sup>a</sup> p < .05
<sup>b</sup> p < .01
<sup>c</sup> p < .001
with the use of four need variables because of their significant correlations with the criterion and among themselves, the results of this study must be considered with this fact in mind.

Results of Hypotheses Testing

Table V data show the interpretation of the strength of contributions of explained variance in the criterion by the predictors and the increment of these contributions is based on the analyses of multiple regression. The coefficients $R^2$ show the measure of variance in the teachers' bureaucratic orientations that are accounted for by each of the nine predictor variables (security, social, esteem, autonomy, self-actualization, sex, experience, educational level, and age). The $r$ and $r^2$ exhibit a similar measure of correlations as the $R$ and $R^2$, but the $r$ and $r^2$ are ordinary correlation coefficients used in analyzing simple regressions, while the $R$ and $R^2$ are used in multiple regression analyses. The $R$ and $R^2$ range from a minimum of 0 to a maximum of 1.0 and have no negative values, while the $r$ and $r^2$, on the other hand, exhibit a range of possible values from -1.0 for a perfect negative correlation to +1.0 for a perfect positive correlation. In summary, $R$ provides an indication of the magnitude of relations between the criterion variable and two or more predictor variables, while $R^2$ is an estimate of the
proportion of the variance of the criterion variable accounted for by the predictor variables.

Hypothesis Three

The data on line 1, Table V, show that $R^2$ is .23536, which indicates that 23 per cent of the variance in bureaucratic orientations of teachers is accounted for by their esteem need. The entry of esteem as the first variable into the regression equation results in a 23 per cent contribution by esteem need to the explained variance in teachers' bureaucratic orientations. A critical $F$ ratio of 10.83 with 1/185 degrees of freedom is required for significance at the .001 level of confidence; therefore, with an $F$ ratio of 56.94, esteem need is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 3; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their prepotent need for esteem.

Hypothesis Six

The data on line 2, Table V, reveal that $R^2$ is .26596, which indicates that 26 per cent of the variance in bureaucratic orientations of the teachers is accounted for with the addition of their sex identity into the multiple regression equation. Changes in the $R^2$ occur in this step because of the sex variable that is added to the equation. The increment of .03060, or 3 per cent in $R^2$, is regarded as the
<table>
<thead>
<tr>
<th>Line</th>
<th>Variable</th>
<th>Multiple R</th>
<th>$R^2$</th>
<th>Increment $R^2$</th>
<th>Degrees of Freedom</th>
<th>F</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Esteem</td>
<td>.48514</td>
<td>.23536</td>
<td>.23536</td>
<td>1/185</td>
<td>56.9440</td>
<td>.001</td>
</tr>
<tr>
<td>2</td>
<td>Sex</td>
<td>.51572</td>
<td>.26496</td>
<td>.03060</td>
<td>2/184</td>
<td>33.3340</td>
<td>.001</td>
</tr>
<tr>
<td>3</td>
<td>Autonomy</td>
<td>.54666</td>
<td>.29883</td>
<td>.03287</td>
<td>3/183</td>
<td>25.9980</td>
<td>.001</td>
</tr>
<tr>
<td>4</td>
<td>Security</td>
<td>.56434</td>
<td>.31848</td>
<td>.01965</td>
<td>4/182</td>
<td>21.2630</td>
<td>.01</td>
</tr>
<tr>
<td>5</td>
<td>Age</td>
<td>.57918</td>
<td>.33545</td>
<td>.01697</td>
<td>5/181</td>
<td>18.2730</td>
<td>.01</td>
</tr>
<tr>
<td>6</td>
<td>Self-actualization</td>
<td>.58627</td>
<td>.34372</td>
<td>.00826</td>
<td>6/180</td>
<td>15.7120</td>
<td>.001</td>
</tr>
<tr>
<td>7</td>
<td>Educational level</td>
<td>.58707</td>
<td>.34465</td>
<td>.00093</td>
<td>7/179</td>
<td>13.4480</td>
<td>.001</td>
</tr>
<tr>
<td>8</td>
<td>Years' of experience</td>
<td>.58737</td>
<td>.34500</td>
<td>.00035</td>
<td>8/178</td>
<td>11.7960</td>
<td>.001</td>
</tr>
<tr>
<td>9</td>
<td>Social</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>9/177</td>
<td>.0001</td>
<td>.05</td>
</tr>
</tbody>
</table>
component of variance attributable to the addition of sex variable at this step. A critical F ratio of 6.91 with 2/184 degrees of freedom is required for significance at the .001 level of confidence; therefore, with an F ratio of 33.33, sex is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 6; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their sex differences.

Hypothesis Four

The data on line 3, Table V, show that $R^2$ is .29883, which indicates that 29 per cent of the variance in bureaucratic orientations of the teachers is accounted for with the addition of autonomy need to the regression equation. The increment of .03287, or 3 per cent in $R^2$ for this step, is taken as the component of variance attributed to the autonomy variable addition to the equation. A critical F ratio of 5.42 with 3/183 degrees of freedom is required for significance at the .001 level of confidence; therefore, with an F ratio of 25.99, autonomy need is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 4; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their prepotent need for autonomy.
Hypothesis One

The $R^2$ shown on line 4 of Table V is .31848, which indicates that 31 per cent of the variance in bureaucratic orientations of the teachers is accounted for in conjunction with their security need being added to the regression equation. The increment of .01965, or 2 per cent in the $R^2$ that occurred in this step, is regarded as the component of variance attributed to the addition of the security need variable to the equation. A critical F ratio of 3.32 with 4/182 degrees of freedom is required for significance at the .01 level of confidence; therefore, with an F ratio of 21.26, security need is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 1; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their prepotent need for security.

Hypothesis Nine

Line 5 data in Table V show that $R^2$ is .33545, which indicates that 33 per cent of the variance in bureaucratic orientations of the teachers is accounted for with the addition of the age variable to the regression equation. The increment of .01697, or 2 per cent in $R^2$ noticed in this step, is taken as the component of variance attributed to the age variable being added to the equation. A critical F ratio of 3.02 with 5/181 degrees of freedom is required for
significance at the .01 level of confidence; therefore, with an F ratio of 18.27, age is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 9; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their ages.

**Hypothesis Five**

The data on line 6 in Table V show that the $R^2$ is .34372, which indicates that 34 per cent of the variance in bureaucratic orientations of the teachers is accounted for in conjunction with their self-actualization need being added to the regression equation. The increment of .00826, or 1 per cent in $R^2$ noticed in this step, is regarded as the component of variance attributed to the self-actualization need variable being added to the equation. A critical F ratio of 3.74 with a 6/180 degrees of freedom is required for significance at the .001 level of confidence; therefore, with an F ratio of 15.71, self-actualization need is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 5; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their prepotent need for self-actualization.
**Hypothesis Eight**

The data on line 7 in Table V show that the $R^2$ is .34465, which indicates that 34 per cent of the variance in bureaucratic orientations of the teachers is accounted for with the addition of educational level to the regression equation. The increment of .00093, or .09 per cent in $R^2$ observed in this step, is taken as the component of variance attributed to the educational level variable being added to the equation. A critical $F$ ratio of 3.51 with 7/179 degrees of freedom is required for significance at the .001 level of confidence; therefore, with an $F$ ratio of 13.45, educational level is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 8; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their educational level.

**Hypothesis Seven**

The $R^2$ shown on line 8 in Table V is .34500, which indicates that 34 per cent of the variance in bureaucratic orientations of the teachers is accounted for with the addition of the years of teaching experience variable to the regression equation. The increment of .00035, or .03 per cent (though minimal), is regarded as the component of variance attributed to the years of experience variable being added to the equation. A critical $F$ ratio of 3.27 with
8/178 degrees of freedom is required for significance at the .001 level of confidence; therefore, with an F ratio of 11.79, years of experience is a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore supports Hypothesis 7; significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their years of teaching experience.

**Hypothesis Two**

Social need contributes the least to explaining the variance in the teachers' bureaucratic orientations. The low F ratio level does not warrant the addition of the social need variable to the regression equation for further computation (see line 9 of Table V). A critical F ratio of 1.88 with 8/177 degrees of freedom is required for significance at the .05 level of confidence; therefore, with an F ratio of .0001, social need is not a significant variable in explaining the variance in the teachers' bureaucratic orientations. This finding therefore does not support Hypothesis 2; significant proportion of the variance in teachers' bureaucratic orientations is not accounted for by their prepotent social needs.

**Summary of Hypotheses Testing**

By using multiple regression technique to test the hypotheses, it was found that all except hypothesis 2 are
supported. The reason for such supportive finding stems from the fact that every predictor variable other than social need contributes significantly to explaining the variance in teachers' bureaucratic orientations. The significant F ratios and increment in $R^2$ determine the extent of contributions by the predictors to the explained variance in the criterion variable.

Further investigations also employ analysis of variance to provide additional findings. These findings are discussed in the following section.

Additional Findings

Additional data are presented in Tables VI through IX. These data reveal evidence of relationships that exist among the predictor variables which were not included in the hypotheses.

**Sex**

In the multiple regression analysis, it was found that the sex variable accounts for a significant proportion of the variance in teachers' bureaucratic orientations. Further investigation of this variable through analysis of variance shows the mean score of the male respondents ($\bar{x} = 33.44$) is higher than that of the female respondents ($\bar{x} = 29.64$). The F ratio is significant ($p<.001$) and the eta squared portrays the significant proportion of bureaucratic orientations contributed by male variable (see Table VI). This finding
suggests that male teachers tend to be more bureaucratic in their organizational perceptions than female teachers.

**TABLE VI**

ANALYSIS OF VARIANCE SHOWING PROPORTION IN BUREAUCRATIC ORIENTATIONS ACCOUNTED FOR BY SEX

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>674.737</td>
<td>1</td>
<td>674.737</td>
<td>15.115</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8258.557</td>
<td>185</td>
<td>44.641</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Eta = .2748; Eta Squared = .0755.*

**Years of Teaching Experience**

The experience variable, which accounts for a significant proportion of the variance in teachers' bureaucratic orientations, was analyzed by (a) 0 to 5 years of experience, (b) 6 to 10 years of experience, and (c) 11 or more years of experience. Of the three categories in the experience variable, Table VII data show that there is no significant difference in the mean scores. The lack of discrepancy in the mean scores is reflected in the nonsignificant F ratio, which suggests that no category in the experience variable taken alone contributes significantly to the explained variance in teachers' bureaucratic orientations.

It may be inferred from these data that these teachers, irrespective of years of experience, are bureaucratically
TABLE VII
ANALYSIS OF VARIANCE SHOWING PROPORTION IN BUREAUCRATIC ORIENTATIONS ACCOUNTED FOR BY EXPERIENCE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>122.910</td>
<td>2</td>
<td>61.455</td>
<td>1.283</td>
<td>.2795</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8810.384</td>
<td>184</td>
<td>47.883</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Eta = .1173; Eta Squared = .0138.

inclined in their orientations. This finding may be due to the fact that these respondents, who have chosen teaching as a profession, are oriented toward the organizational structure because of knowledge of the organization and probably because of what the organization can offer them.

**Educational Level**

A significant proportion of the variance in teachers' bureaucratic orientations is accounted for by their educational level that was classified by (a) bachelor's degree and (b) master's degree. Since there is no major difference in the mean scores of teachers who have bachelor's degrees ($\bar{x} = 31.200$) and those who have earned master's degrees ($\bar{x} = 31.325$), it is assumed that having either a bachelor's or master's degree contributes fairly equally to teachers' explained bureaucratic orientations. The nonsignificant F ratio data in Table VIII also confirms the lack of disparity
between the mean scores of the two components of the educational level variable, which also suggests equal contribution.

### TABLE VIII

**ANALYSIS OF VARIANCE SHOWING PROPORTION IN BUREAUCRATIC ORIENTATIONS ACCOUNTED FOR BY EDUCATIONAL LEVEL**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.468</td>
<td>1</td>
<td>4.468</td>
<td>.093</td>
<td>.7613</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8928.826</td>
<td>185</td>
<td>48.264</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Eta = .0224; Eta Squared = .0005.*

In addition to the major interest in identifying educational level as accounting for a significant proportion of the variance in teachers' bureaucratic orientations, there is a secondary concern. This concern is based on the premise that a degree cannot be used as a single indicator to determine the extent of contribution in bureaucratic orientations.

**Age**

Age variable is categorized into (a) 21 to 30 years, (b) 31 to 40 years, (c) 41 to 50 years, and (d) 51 years and older. The 41 to 50 age group has the highest mean score \(\bar{x} = 33.123\), while the 21 to 30 age category has the second highest mean score \(\bar{x} = 32.889\). The 31 to 40 age group has
third highest mean score ($\bar{x} = 30.347$), and the 51 and over age group ranks fourth by mean score ($\bar{x} = 28.046$).

TABLE IX

ANALYSIS OF VARIANCE SHOWING PROPORTION IN BUREAUCRATIC ORIENTATIONS ACCOUNTED FOR BY AGE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>576.324</td>
<td>3</td>
<td>192.108</td>
<td>4.207</td>
<td>.0066</td>
</tr>
<tr>
<td>Within Groups</td>
<td>8356.970</td>
<td>183</td>
<td>45.667</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\text{Eta} = .2540; \text{Eta Squared} = .0645$.

It may be reasoned that teachers in the 21 to 30 and 41 to 50 age categories present a similar pattern of developing their organizational perceptions than those teachers in the 31 to 40 and 51 and over age categories. Supporting this assumption is a significant F ratio ($p<.01$) and the .0645 eta squared, which indicates that a significant proportion in bureaucratic orientations is accounted for by the most contributing age category. Implicit in this assumption is the reasoning that those who respond to organizational principles vary more in explaining the variance in teachers' bureaucratic orientations. It may be speculated that older teachers (51 years and over) have had their share of contributing to the organization and have benefited from what the organization has to offer; additionally, the reason why their mean score is
the lowest may stem from the fact that they are now moving or looking toward retirement. Younger teachers, on the other hand, may be trying to meet their needs by orienting themselves toward organizational principles; they may also achieve their objectives by matching what they can contribute to the organization with what the organization can provide.

The statements of relationships furnish information about the extent of covariation between variables. These relationships are discussed in the section that follows.

Discussion of Covariation among Variables

Interpretations of correlations among the predictor variables were pursued during the data analysis process. These interpretations reveal significant correlations among the predictor variables and significant correlations between the predictor variables and the criterion variable.

Close inspection of the intercorrelations indicate a possible explication of the ideal multiple regression situation suggested by Kerlinger (5). Of the five need variables (esteem, autonomy, security, self-actualization, and social), the security need does not correlate with the criterion variable. The situation found in this study is near the ideal multiple regression situation. Although there is no one way of interpreting intercorrelations, this situation makes it possible to interpret the correlations that resemble the ideal multiple regression situation mentioned by Kerlinger.
Another concern is the ordering of variables in the multiple regression equation. The order used in this study is based on the research surrounding the theory. The step-wise multiple regression technique permits the ordering of the variables into the regression equation according to their contributions in explaining the variance in the criterion. It was a surprise to find that all variables except social need have significant F ratios and significant $R^2$ increments, which indicates the great contributions of these variables in explaining the variance in bureaucratic orientations. In the sections that follow, findings of the tests of the hypotheses are discussed with relevance to the predictor variables and their contributions to the explained variance of the bureaucratic model.

Need Variables

That teachers' conformity to the rule of bureaucratic organization is affected by the level of their prepotent needs is supported empirically through regression analysis when bureaucratic orientation is used as the criterion measure. The five need subsets that constituted the predictor variables are reported below and are discussed according to their entry order into the regression equation.

Esteem need.--Esteem need is the first variable to gain entry into the regression equation. Since the F ratio based
on the coefficient of determination associated with this need is statistically significant, esteem need contributes to the explanation of the variance in teachers' bureaucratic orientations.

According to the motivation theory (7), esteem needs are egoistic in nature and represent the desire for mastery, achievement, and competence. Esteem needs also represent the desire for prestige, status, importance, and recognition. If one is not satisfying these needs, it is likely that one may turn to the organization and adhere to its rules and regulations. In organizations, people want to feel confident about themselves and the importance of their jobs and achievements. Maslow (7) summarizes esteem need as the need for self-respect, accomplishment, and achievement. The need for esteem and achievement must be recognized and appreciated by significant others, particularly those within the organization in which one is employed. Many people continue a pattern of achievement and success with the added encouragement and additional motivation provided by recognition of success from employers in the organization.

The more deficient the satisfaction of peoples' prepotent needs, the more they strive to satisfy them. The significant proportion of esteem need (in accounting for the variance in the teachers' bureaucratic orientations in this study) reflects the emergence of the need for esteem as the most prepotent. By implication, the teachers have high esteem
need deficiencies and therefore strong desires to have them fulfilled through adhering to the school system's bureaucratic orientations. That the esteem need deficiency has a high correlation with bureaucratic orientations of teachers is not an unanticipated finding because the person who is deficient in esteem need may seek ways of gratifying this need. By joining an organization and being oriented toward organizational principles, individuals' deficiencies in esteem need may be lowered. A person whose esteem need is gratified in a bureaucratic environment may be assumed to approach an activity with feelings of self-respect, strength, and confidence. The opposite may be true when this need is not being met; low self respect, weakness, and lack of confidence may ensue.

One of the discriminating behaviors of teachers who have deficient esteem needs is their tendency to engage in activities (orientations) that they deem capable of satisfying such needs. From the findings in this study, it is assumed that teachers are attracted to the school's organizational orientations in an attempt to satisfy their esteem need. Teachers' commitments to school bureaucratic orientations have a tendency to increase relative to having their esteem need deficiencies decreased. Assessment of the teachers' need for esteem indicates that their willingness to commit themselves to the school bureaucratic orientations is systematically related to their desire to have this need satisfied. Thus it may be speculated that the teachers in this study
tend to continue working in a bureaucratic environment because they place high values on being accorded self respect and on setting high standards for themselves.

In assessing the effect of esteem need upon explained variation in bureaucratic orientations, it was found that esteem need contributes almost 25 per cent of the proportion accounted for by all the nine variables in explaining the variance in teachers' bureaucratic orientations. On the basis of this finding, esteem need is not only statistically significant but also sheds light on the prestige of teachers' professional positions inside and outside the school organization. Regression analysis does, however, indicate esteem need as a significant component of the explained variation in the teachers' bureaucratic orientations.

Autonomy need.—Autonomy need is the second need variable to enter the regression equation. Autonomy need contributes significantly in explaining the variance in teachers' bureaucratic orientations. According to motivation theory (7), autonomy needs are logically distinct from more common esteem items such as the needs for prestige, accomplishment, and achievement. On the basis of this distinction, Porter (10) claims that the autonomy need is composed of items such as needs for authority, independent thought and action, and participation. School organizations have many ways of fulfilling the autonomy need areas through orienting employees
toward organizational principles (such as allowing these individuals some influence and independent opinion in their professional positions). Orientation toward the organization's principles may also take the form of involving employees in goal setting, decision making, and providing opportunities for participation in the determination of methods and procedures.

The means to facilitate the gratification of employees' autonomy needs are found in well-structured organizations such as school systems which employ bureaucratic orientations. Bureaucratic organizations (such as the one in which this study was conducted) must adopt a method to use as a tool to motivate employees. The theoretical framework of bureaucratic organizations is composed of impersonal and formal conduct, professional competence and performance, a well-ordered system of rules and procedures that regulate the conduct of work, hierarchy of positions, and separation of the property and affairs of the organization from the property and affairs of the employees (2). The provision of an atmosphere of impersonal and formal conduct by school organizations may generate professional competence and performance in the teachers.

It should not be a surprising finding that the autonomy need contributes significantly to the explained variance in the bureaucratic orientations of teachers because of the nature of authority connected with their professional
position in the school setting. Autonomy need exhibits not only a significant mean score but also accounts for a great proportion of the variance in explaining teachers' bureaucratic orientations. A high mean score in the respondents' need variable for autonomy may be indicative of their low level of satisfaction or high deficiencies of this need. This finding seems to support Trusty and Sergiovanni's (12) report that the largest deficiencies for professional educators are in satisfying the needs for esteem, autonomy, and self-actualization. It may be inferred from these studies that teachers' upper-level needs are not satisfied until their lower-level needs are fairly well satisfied. In essence, teachers are more deficient in upper-level than lower-level needs.

The significant contribution of the respondents' autonomy need in the study in explaining the variance in bureaucratic orientations may be associated with the respondents' desire to have their autonomy need satisfied by the school organization. Supporting this finding is the assumption that the more deficient people are in a prepotent need (autonomy), the more they strive to satisfy it. Since the autonomy need is associated with bureaucratic orientations, it is assumed that the teacher-respondents for this research are bureaucratically oriented (4). Bureaucratically oriented individuals tend to place a high value on impersonality; that is, they have a preference for impersonal or formal relationships with co-workers. The
encouragement of such impersonality by the school organization may assure the teachers of equality of treatment and facilitation of rationality.

Security need.—Need for security is the third variable to enter the regression equation. The F ratio, based on the coefficient of determination, indicates that security need accounts significantly for the explanation of variance in the bureaucratic orientations of the teachers.

According to Maslow's (7) need hierarchy theory, security need is derived from the desire for a peaceful, smoothly running, stable environment. Implicit in this assumption is the belief that school employees should have their safety needs gratified with job security and freedom from coercion or arbitrary treatment. Maslow theorizes that broader aspects of the attempt to seek safety and security are seen in the preference many people have for familiar rather than unfamiliar things, for the known rather than the unknown. It could be reasoned that clearly defined regulations and limits of responsibility (knowing exactly what is expected of school employees) are examples of Maslow's (7) security-gratifying measures. A school organization's actions, which may arouse uncertainty with respect to continued employment or discrimination, may threaten employees' security and jeopardize their desire to become oriented toward the organization's principles. The desire for psychological
security should be of particular interest to school organizations since the safety needs may become the predominant motivators when the physiological needs are fulfilled.

In school organizations, teachers who have low deficiency in safety need may not desire job security to satisfy such need. This reasoning is influenced by the need theory that suggests that gratification releases a person from the domination of one need, allowing for emergence of a higher-level need (7).

The significant contribution made by the security need in explaining the variance in bureaucratic orientations suggests the orientation of teachers toward bureaucratic principles. The proportion of variance in bureaucratic orientations accounted for by this need may explain a need by the teachers for security provided by organizational identification and conformity to group norms; it may also explain a desire by these teachers for security afforded by adherence to rules, regulations, and standard operating procedures. On the other hand, the significant F ratio and the position in the entry order of the security need into the regression equation, attest to the strength of this variable with respect to other variables in the contributions made in explaining the variance in the criterion variable.

The premise that the variance in teachers' bureaucratic orientations is accounted for by their security need is borne out by the results obtained from multiple regression analysis
presented in Table V, line 4. This study is concerned with the relative strength of explained variance in the bureaucratic orientations accounted for by the need variables, which includes the security need. Because security need is a correlate of bureaucratic orientations, it should not be assumed that this need is completely satisfied. Assuming security needs were completely satisfied, it would not be an effective motivating factor to these teacher-respondents. On the basis of the needs hierarchy theory (7), there is an assumption that the successive emergence of higher needs is limited in that lower needs are never completely satisfied.

Based on a significant incremental coefficient of determination in bureaucratic orientations determined by security need, it may be suggested that teachers in this study tend to adapt toward bureaucratic principles in order to be rewarded with security gratification. In other words, these individuals are bureaucratically oriented and tend to place high values on gaining economic and material benefits and on having clearly defined work objectives. Studies by Gordon and Khalique (4), Drummond and McIntire (6), and Trickett and Moos (11) suggest that the more bureaucratically oriented an individual, the more likely he or she is to be inclined to feel secure and have a sense of belongingness in a social environment. Their findings also lend support to the findings of this study, especially in the view of the school system as an
organization that has a well ordered system of rules and procedures which regulate the conduct of work.

**Self-actualization need.**—Self-actualization is the need to be what an individual wants to be, to achieve fulfillment of life goals, and to realize the potential of one's personality. The need for self-actualization motivates educators to be the best teachers that they are capable of being. In this study, self-actualization is the fourth need variable to enter the regression equation.

The fact that self-actualization has a significant mean score, coupled with its relative position with other predictors in their contributions to the explained variance in the criterion, may suggest that the teacher-respondents are deficient in their self-actualization need. This finding is supported by a study by Porter (9) which indicates that the need for self-actualization is generally the least satisfied. Another study that is supportive was conducted by Trusty and Sergiovanni (12). They report that the greatest need deficiency for professional educators is satisfying their self-actualization need. This need is not so apparent as others presumably because many individuals are still preoccupied with lower-level needs.

Employees who are motivated by the need for self-actualization tend to find meaning and personal growth in their work and actively seek out new responsibilities.
According to Maslow (7), individual differences are greatest at this level; any number of ways may be found to achieve self-actualization on the job. For some individuals, quality work may be a means of self-actualization; for others, self-actualization may emerge through creativity and useful ideas. The environment that provides the ideal vehicle through which self-actualization need may be realized is found in a bureaucratic organization. The fact that self-actualization has a significant F ratio and a significant coefficient of determination may indicate that self-actualization contributes sufficiently to the variance in bureaucratic orientations.

The sharing of self-actualization with other predictors to account for the variance in bureaucratic orientations may not be construed to mean that this need was prepotent in the respondents to this study. Implicit in this reasoning is the fact that few people ever have their self-actualization need satisfied because of their lower-level needs that remain unsatisfied. The upper-level needs such as self-actualization become prepotent only after the lower-level needs have been fairly well satisfied. A similar relationship seems to exist between this study's finding and the postulation of Alderfer (1) in terms of the contribution made by self-actualization. Alderfer states that employees who are deficient in self-actualization try to engage in those activities that will satisfy such need; discontent and restlessness may develop unless individuals do what they are best suited to do.
The difference between Alderfer's finding and that of this study may rest with the need level of the respondents and the location of the study. Teachers who responded to this study are not the type of employees whose self-actualization needs are prepotent in the midst of unsatisfied lower-level needs; it is necessary to reiterate the nature of the small semi-rural school district in which this study was conducted. The importance of this investigation is the portrayal of self-actualization as a significant variable that contributes to explaining the variance in teachers' bureaucratic orientations. Self-actualization may be viewed as a variable that affects teachers' perceptions with regard to opportunity for personal growth and development, feelings of worthwhile accomplishment, feelings of self-fulfillment in their professional position as they progress toward attaining higher degrees, and movement into administrative positions.

Social need.—Satisfactory associations with others, belonging to groups, and giving and receiving friendship and affection typify social need. Social need is the only need variable in the study that produces a finding that does not support its hypothesis (hypothesis 2). The F ratio (.001), based on coefficient of determination, is negligibly small and hence indicates that social need does not account for the explanation of variance in the bureaucratic orientations of
It may be speculated that the failure of social need to explain the variance in teachers' bureaucratic orientations may stem from the sample population itself. Social interaction is less prevalent in a small semi-rural location, which is representative of the school district in which this study was conducted, than in a large urban area. According to the needs hierarchy theory (7), the more prepotent a need is, the more it precedes other needs in human consciousness and demands to be satisfied. In essence, higher-level needs become activated as lower-level needs become satisfied.

Maslow (7) suggests that for the majority of the people, needs at the first three lower levels are more satisfied than those at the upper levels. This study indicates a finding similar to Maslow's postulation since the majority of the teacher-respondents seem to express higher deficiencies in the upper-level needs (esteem, autonomy, and self-actualization) than the lower-level needs (security, and social) (see Table V). The importance of the needs to belong, love, and socialize in a modern society helps to perpetuate the insatiable nature of social need. In bureaucratic organizations, the need to belong causes an individual to seek relationships with co-workers, peers, superiors, and subordinates.

Surprising as it may seem, social need does not share in the contribution to the explained variance in bureaucratic orientations of teachers, perhaps, because of the
conservative nature of the area in which this investigation was conducted. The implication for educational organizations may be that of developing methods aimed at emphasizing the satisfaction of any need that becomes prepotent to teachers, because if an individual cannot satisfy a need at a given level for any period of time, that need again becomes a potent motivator. In other words, if any need is left unsatisfied, it reemerges and dominates the way individuals orient themselves toward bureaucratic principles. Maslow (7) feels that maladjustment may stem from frustration of such needs.

**Demographic Variables**

In designing methods aimed at satisfying the need variables, it is necessary to take into consideration the analysis of some personal or demographic variables that relate to the teacher-respondents. The importance of personal variables is the reason for the inclusion of four of them—sex, age, educational level, and teaching experience—in the study. The effects of the four demographic variables that are used as predictor variables are discussed in the following sections.

**Sex.**—Results obtained from the multiple regression analysis indicate that sex contributes a significant proportion of the variance in explaining the bureaucratic orientations of teachers. The sex differences determined by the analysis of variance in Table VI indicate a higher mean score for the male teachers than for the female teachers, which in
essence suggests that male teachers tend to be more bureaucratic in their orientations than female teachers.

It may well be the case, as implicitly suggested by Moeller (8), that male teachers feel themselves more motivated and more committed to their jobs than female teachers. It may be conjectured that the differences between the sexes are more probable in a small conservative area (such as the one in which this study was conducted) than in a large urban area.

Age.—Age is the second demographic variable that entered the regression equation. Its significant F ratio shows that the age variable accounts for a significant proportion of explained variance in the teachers' bureaucratic orientations.

The analysis of respondents' age furnishes important information to aid in directing administrative actions in terms of continued employment, promotion, transfer, and retirement programs, which may, in turn, help to satisfy the security needs of teachers. The results of this study also could aid school administrators in planning retirement benefits for teachers and developing good recruitment programs to attract new and competent teachers to replace those who retire.

This study indicates that the mean scores of teachers in the 21 to 30, 31 to 40, and 41 to 50 age categories display a more common pattern than for the 51 and older age category. This may be interpreted to mean that the majority of the teachers are of middle age and as such, the school system
should start long-term planning for these teachers if it has not already done so. It could also be speculated that these middle-aged teachers are satisfied with their present situation and have no desire to move about. These findings support those of Gordon and Khalique (4), who states that bureaucratic orientation is positively associated with age. He claims that the older an employee, the more bureaucratic he or she tends to be. Such inclination toward bureaucratic principles by the teacher-respondents may stem from the fact that as teachers approach middle age, they tend to settle down and remain with the school organization; in order to benefit fully from what this organization has to offer in terms of satisfying their needs, the teachers have a tendency to be bureaucratically oriented.

Educational level.—As used in this study, educational level means the highest earned degree. Bachelor's and master's degrees are the only two types of degrees earned by the teachers in this study. The absence of any teachers who hold doctoral degrees may stem from many speculative reasons such as lack of motivation and competition because of the small nature of the area, or lack of proximity to institutions of higher learning that offer doctoral programs. Again, it may be assumed that these teachers have a sense of complacency because, for their small school district, a doctoral degree
is neither a requirement nor of any advantage in the performance of their duties.

Even though there is a difference in the number of teachers who hold bachelor's degrees (N = 65) and those who hold master's degrees (N = 122), their mean scores are the same. It may be reasoned that one's orientation toward organizational principles cannot be determined by the type of degree one earns. Rather, advanced degrees may be pursued by teachers when the school system emphasizes such degrees by using them as a measurement tool in providing some of the security needs (employment, promotion, and salary review). This reasoning is supported by Valiere (13), who states that in using educational and formal career requirements as a tool to measure the achievement of organizational goals, employees in turn benefit by improving their morale and satisfying other prepotent needs.

**Years of teaching experience.**—Teachers' years of experience is the last demographic variable that entered the regression equation. Since the F ratio is significant, years of teaching experience contributes significantly to explaining teachers' bureaucratic orientations. Results from this study indicate that teachers who have taught for 11 or more years have a tendency to accept their bureaucratic orientations more so than teachers who have fewer years of experience. It may be reasoned also that such teachers have a tendency to stay
with the organization; remaining with a school organization may indicate a desire to contribute to the school system in return for what the system has to offer.

This finding is supported by Moeller (8), who claims that teachers who have long periods of service generally have more experience and more opportunity to contribute to the organization than their more junior colleagues. This postulation of Moeller's may be interpreted to mean that teachers who have more years' teaching experience generally have more understanding of the school system than their counterparts who have fewer years of experience. Gordon (3) also reports that the longer the period of service an employee has, the more bureaucratic he or she tends to be.

Summary

The results from the multiple regression analysis are the bases for determining that the selected predictor variables are useful in explaining the variance in bureaucratic orientations. The regression of the five need variables—esteem, autonomy, security, self-actualization, and social—as predictors indicates that all variables except social are significant in accounting for explained variance in the teachers' bureaucratic orientations. Selected demographic variables—sex, age, educational level, and years of teaching experience—are significant in explaining the variance in their orientations.
Demographic variables are revealed through regression analysis as significant in contributing to the explained variance in the teachers' bureaucratic orientations. They also serve as indicators by which school administrators may better satisfy the needs of teachers.


CHAPTER V

SUMMARY, IMPLICATIONS, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Summary

The purpose of this study is to determine whether the bureaucratic orientations of teachers are affected by their need fulfillment deficiencies (need variables), sex, years of experience, educational level, and age (demographic variables). This study is also concerned with determining the direction and strength of any associations that exist between the criterion variable and each of the nine predictor variables. Information derived from this study may form a basis for understanding the needs of those teachers within a bureaucratic organization such as a school.

The population sample is composed of 187 teachers from a school district located in the eastern part of Texas. The instruments used include the Work Environment Preference Schedule (WEPS), a measure of bureaucratic orientations, the Porter Need Satisfaction Questionnaire (PNSQ), a measure of need fulfillment deficiency, and a personal data form, from which data categorizing the respondents were derived.
A step-wise multiple regression technique, using data derived from the WEPS, PNSQ, and the demographic information, was employed to test the following hypotheses.

1. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for security.

2. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent social needs.

3. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their need for esteem.

4. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their prepotent need for autonomy.

5. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their need for self-actualization.

6. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their sex.

7. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their years of experience.
8. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their educational level.

9. A significant proportion of the variance in teachers' bureaucratic orientations will be accounted for by their age.

An investigation of the nature of the relationships between the criterion and each of the predictor variables was made possible through an examination of intercorrelation matrix or product-moment correlations. A presentation was made of the results of the multiple regression analysis using each of the prepotent need and demographic variables as predictor measure of influence on bureaucratic orientations.

Using esteem need as the predictor variable, hypothesis three is confirmed. The need for esteem, which influences motivation of teachers toward the school organization, explains a significant amount of variance in their bureaucratic orientations. Using this finding, a school district may become sensitive to teachers' needs for esteem in relationship to the prestige of their professional position.

With autonomy need as the predictor variable, hypothesis four is supported by multiple regression analysis. The need for autonomy accounts for a significant proportion of the variance in the teachers' bureaucratic orientations. Using this finding and the knowledge that the autonomy need
includes needs for participation and independent thought and action, a school system should encourage a constant involvement of its teachers in goal setting and decision making.

Using security need as the predictor variable, hypothesis one is confirmed. Analysis of multiple regression reveals that security is a variable that contributes significantly in explaining teachers' bureaucratic orientations. Since needs for security are assumed to be derived from a peaceful and stable environment, school employees may have a feeling of security in their professional position through the satisfactions received from bureaucratic organization. In providing such an environment, the school system (in its attempt to satisfy teachers' security needs) should not exclude the employees' desire for psychological security.

The need for self-actualization, as revealed by the multiple regression analysis, is a significant variable that accounts for a significant degree of variance in explaining teachers' bureaucratic orientations (hypothesis 5). Though self-actualization needs are satisfied later in life because of earlier preoccupations with lower-level needs, it does contribute significantly in this study to the variance in teachers' bureaucratic orientations.

With social need as the predictor variable, hypothesis 2 is the only hypothesis that is not supported when tested by multiple regression analysis. Of the five need variables chosen for this investigation as predictor variables, social
need offers no significant contribution to the explanation of the variance in teachers' bureaucratic orientations. The lack of support of the hypothesis may indicate the fairly conservative attitudes of the respondents, who may be influenced by the non-urban conditions of the area in which this study was conducted.

The four demographic variables—sex, age, educational level, and years of experience—provide significant contributions to explaining the variance in the teachers' bureaucratic orientations. For the analysis of variance on the sex variable, there is an indication that male teachers contribute more than female teachers to the explained variance in the teachers' bureaucratic orientations. Such sex differences may indicate that male teachers are more bureaucratically oriented than female teachers. The significant associations between these demographic variables and bureaucratic orientations may emphasize their importance and also suggest the care that the school system should take in designing criteria that may affect teachers' recruitment, promotion, demotion, transfer, and dismissal. Information deduced from the finding on sex, age, years of experience, and educational level adds more dimension to the study not only by providing additional findings but also by serving as indicators by which school administrators can better satisfy teachers' needs.
Implications

The manner by which teachers are attracted to a school as a bureaucratic organization is revealed through the use of bureaucratic orientations as the criterion measure. Much of the variance in the orientations is accounted for by the teachers' need and demographic variables that were chosen as predictors. However, teachers' attraction to the bureaucratic orientations of a school may be dependent upon the potency of the need to be gratified and the ways in which the school system can meet these needs. Implicit in this statement is the assumption that changes in the motivational behaviors of teachers can be effected by the school system.

As previously mentioned, in support of the need hierarchy theory and the findings of others, employees experience less gratification of the upper-level needs than the lower-level ones because when the lower-level needs are fairly well satisfied, they cease to become prepotent. The findings of this study indicate that there is a tendency toward non-gratification of the needs of the teacher-respondents. The implication for educational organizations may be that they need to endeavor to develop ways and means of gratifying the needs of teachers that may emerge as prepotent. Lack of satisfaction of such needs that may become prepotent can cause frustrations and make it difficult to orient the teachers toward bureaucratic principles. Because of the contact and the influence that school administrators have
on teachers, it may be suggested that conditions in which teachers' psychological needs are satisfied may also be those that engender their full cooperation.

Although bureaucratically oriented individuals may be attracted to an organization because of the desire to gratify their prepotent needs, organizational goals and expectations are not always congruent with individual needs. In an attempt to deal with this incongruity, the individual may respond with noninvolvement and indifference, a decision to attempt to move up the organizational hierarchy, or a decision to leave the organization. The decision to stay and grow with the organization may be the reason why the majority of the teachers in this study possess many years of experience. They may have been anxious to adjust and therefore made such changes that were commensurate with their desire to grow with and move up the organizational hierarchy.

Serious attempts to understand and relate to the needs of teachers are fundamental to the logical development of bureaucratic orientations. The ideal result may be a situation in which teachers' needs and motivations are congruent with the organizational setting and its goals.

Conclusions

The various hypothesized factors that lead to the assessment of the influences on teachers' bureaucratic orientations may now be considered together. Human-need states constitute
a greater part of such influences. A major conclusion of this study, therefore, is that teachers who have prepotent needs become more bureaucratically oriented than those whose needs are fairly well gratified because of their desire to have such needs satisfied. It may also be concluded that the more prepotent the needs, the more deficient these teacher-respondents are in such needs.

Other conclusions drawn from the results of the investigation are that male teachers are more oriented toward bureaucratic principles than female teachers; the older an employee, the more bureaucratic he or she tends to be; teachers with long periods of service are inclined to be bureaucratically oriented. Although implicit as it may seem, the size and characteristics of schools may affect teachers' opportunity to develop close friendships in their professional positions.

Recommendations for Further Research

Although the purpose of this study was to investigate whether the five need variables could account for a significant proportion of the variance in teachers' bureaucratic orientations, the results reveal that selected demographic factors of teachers explain a major portion of this variance as well. Of the nine predictor variables, only social need does not provide a significant contribution to explaining the criterion. Perhaps the number of respondents to the study
does not reflect enough variety to warrant different results.

Because of financial constraints, this study was restricted to one school district and the teachers of its two high schools. The replication of this study in another geographic area that has more school districts and more high schools may produce insightful comparisons. Liberalization of this study to include teachers in elementary and junior high schools may produce interesting results. The involvement of a larger sample may also reveal a different result in the pattern of the contribution by male and female teachers to explaining the variance in teachers' bureaucratic orientations. Insightful findings could also result from a larger sample in which the ethnic origins of the teachers are sufficiently varied to provide another predictor variable.

Attempts should be made to determine the type of attraction to the bureaucratic organization for teachers who have both high and low bureaucratic orientations, and by teachers who have both high and low need fulfillment deficiencies. It would be of value to discover how teachers' level of bureaucratic orientation affect their teaching and learning process.

The search for ways to satisfy human needs should not be done at the expense of the knowledge of how the satisfaction or dissatisfaction of prepotent needs may affect learning environments. Teachers are attracted to
effectively and carefully planned school organizations that demand independent initiative and promise the fulfillment of deficient need states.
APPENDICES
APPENDIX A

Letter of Request to the Tyler Independent
School District Superintendent

College of Education
North Texas State University
Denton, Texas 76203
February 10, 1982

Dr. Bob Browning, Asst. Superintendent
Division of Educational Operations
Tyler Independent School District
1319 West Eight Street
Tyler, Texas 75710

Dear Dr. Browning:

A research project, under the auspices of North Texas State University, Division of Public School Administration and Supervision, is being undertaken for the purpose of assessing and analyzing some factors which can be useful in explaining the bureaucratic orientations of teachers. More specifically the investigation is designed to examine the influence on bureaucratic orientations that stems from their various psychological need dispositions.

It is believed that high school teachers in the Tyler Independent School District might be able to assist us in providing data essential to the successful completion of this study. If there is agreement to participate in the study, it will be necessary to ask teachers in the high schools to respond to the items on each of the enclosed questionnaires. All responses are completely anonymous and will be treated in that manner.

I am requesting your permission to allow members of your professional staff to participate in this project. We think the results of the study will be useful to educators who are seeking to better understand various organizational arrangements and how those arrangements influence the psychological need dispositions of persons in educational organizations.
Your favorable response to this request would indeed be appreciated. We look forward to hearing from you at your earliest convenience.

Sincerely yours,

/s/

Macartan Ukpong

/s/

Grace B. Chisolm, Ph.D.
Assoc. Professor of Education
APPENDIX B

Letter of Approval from the Office
of School Administration, Tyler
Independent School District

Tyler Independent School District
School Administrative Office
P. O. Box 2035
Tyler, Texas 75710
March 4, 1982

Dr. Grace Chisolm
Professor of Education
North Texas State University
NT 13378
Denton, TX 76203

Dear Dr. Chisolm:

I wanted to let you know that Macarton (Marc) O. Ukpong, employed by Texas College, Tyler, Texas, has our permission to use Tyler Independent School District's resources in order to gather information for his dissertation.

We look forward to offering assistance in any way possible.

Sincerely,

Bob Browning

cc: Dr. David Johnson
Texas College

hlp
APPENDIX C

Work Environment Preference Schedule (WEPS)

In most organizations, there are differences of opinion as to how the organization should be run, or how people should conduct themselves. Following are a number of statements concerning these matters. You are asked to give your own personal opinion about each statement.

Specifically, this is what you are asked to do. Examine each statement and, using the key provided below, decide on the extent to which you agree or disagree with the statement. Then place the appropriate symbol, on the line next to that statement.

Now look at the example below. Suppose that you strongly disagree with the statement "Safety rules are made to be broken." First, you would notice that SD stands for Strongly Disagree on the key. Then, you would place the symbol "SD" on the line next to the statement. Notice that this has been done for you.

Example:  SD  Safety rules are made to be broken.

INSTRUCTIONS: For each of the statements below, indicate your response by placing the appropriate letter(s) (i.e. SA, A, U, D, or SD) in the space provided. You may find yourself agreeing strongly with some of the statements and disagreeing just as strongly with others. In each instance, choose the symbol that comes closest to representing your own opinion. Whether you agree or disagree with a particular statement, you can be sure that many other people feel the same way you do. Be sure to make one choice, and only one choice, for each statement and do not skip any. Now go ahead.

Key:  1. Strongly Agree  SA
       2. Agree  A
       3. Undecided  U
       4. Disagree  D
       5. Strongly Disagree  SD

1. People at higher levels are in the best position to make important decisions for people below them.
2. Relationships within an organization should be based on position or level, not on personal considerations.

3. In dealing with others, rules and regulations should be followed exactly.

4. A person's expressions of feeling about his/her organization should conform to those of his/her fellows.

5. A person's first real loyalty within the organization should be to his/her superior.

6. Formality, based on rank or position, should be maintained by members of an organization.

7. A person should avoid taking any action that might be subject to criticism.

8. Outsiders who complain about an organization are usually either ignorant of the facts or misinformed.

9. In a good organization, a person's future career will be pretty well planned out for him/her.

10. A person should think of himself/herself as a member of the organization first, and an individual second.

11. People are better off when the organization provides a complete set of rules to be followed.

12. Within an organization, it is unwise to question well-established ways of doing things.

13. A superior should expect subordinates to carry out his/her orders without question or deviation.

14. Within the organization, it is better to maintain formal relationships with other people.

15. There is really no place in a small organizational unit for the nonconformist.

16. Pins, written commendations, ceremonies etc. are all signs of a good organization.

17. The most important part of a superior's job is to see that regulations are followed.
18. In general, a person's rank or level should determine his/her relationships towards other people.

19. Job security is best obtained by learning and following standard work procedures.

20. A person should defend the actions of his/her organization against any criticism by outsiders.

21. A person should do things in the exact manner that he/she thinks his/her superior wishes them to be done.

22. Within an organization, a person should think of himself/herself as a part in a smoothly running machine.

23. It is better to have a complete set of rules than to have to decide things for oneself.

24. Length of service in an organization should be given almost as much recognition as level of performance.
APPENDIX D

Porter Need Satisfaction Questionnaire (PNSQ)

INSTRUCTIONS: Following will be listed several characteristics or qualities connected with your professional position. For each such characteristic, you will be asked the following questions:

a. How much of the characteristic is there now connected with your professional position?

b. How much of the characteristic do you think should be connected with your professional position?

For each of the 13 items, respond to questions "a" and "b" above by circling a number on the rating scale extending from 1 to 7, where low numbers represent low or minimum amounts, and high numbers represent high or maximum amounts.

<table>
<thead>
<tr>
<th></th>
<th>(min)</th>
<th>(max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-a</td>
<td>1 2 3 4 5 6 7</td>
<td>I. The opportunity for personal growth and development in my professional position.</td>
</tr>
<tr>
<td>1-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2-a</td>
<td>1 2 3 4 5 6 7</td>
<td>II. The opportunity to develop close friendships in my professional position.</td>
</tr>
<tr>
<td>2-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3-a</td>
<td>1 2 3 4 5 6 7</td>
<td>III. The opportunity for independent thought and action in my professional position.</td>
</tr>
<tr>
<td>3-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4-a</td>
<td>1 2 3 4 5 6 7</td>
<td>IV. The prestige of my professional position inside the school (that is, the regard received from others in my school).</td>
</tr>
<tr>
<td>4-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5-a</td>
<td>1 2 3 4 5 6 7</td>
<td>V. The feeling of worthwhile accomplishment in my professional position.</td>
</tr>
<tr>
<td>5-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6-a</td>
<td>1 2 3 4 5 6 7</td>
<td>VI. The opportunity, in my professional position, for participation in the determination of methods and procedures.</td>
</tr>
<tr>
<td>6-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7-a</td>
<td>1 2 3 4 5 6 7</td>
<td>VII. The feeling of self-esteem a person gets from being in my professional position.</td>
</tr>
<tr>
<td>7-b</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
VIII. The prestige of my professional position outside my school (that is, the regard received from others not in the school).

IX. The opportunity, in my professional position, to give help to other people.

X. The feeling of self-fulfillment a person gets from being in my professional position (that is, the feeling of being able to use one's own unique capabilities, realizing one's potentialities).

XI. The opportunity, in my professional position, for participation in the setting of goals.

XII. The feeling of security in my professional position.

XIII. The authority connected with my professional position.
APPENDIX E

Personal Data Form (PDF)

INSTRUCTIONS: Please complete this form by checking the appropriate boxes and filling in the blanks where indicated.

1. Sex:

   1  2
   ( ) Male          ( ) Female

2. Years of experience as a teacher (as of end of this year):

   ( ) 0 - 5 years
   ( ) 6 - 10 years
   ( ) 11 and over years

3. Educational level:

   ( ) Holder of bachelor's degree
   ( ) Holder of master's degree
   ( ) Holder of doctorate degree

4. Age:

   ( ) 21 - 30 years
   ( ) 31 - 40 years
   ( ) 51 and over years
APPENDIX F

Letter of Appreciation

April 22, 1982

Dr. Bob Browning
Assistant Superintendent
Division of Educational Operations
Tyler Independent School District
1319 West Eight Street
Tyler, Texas 75710

Dear Dr. Browning:

Thank you very much for allowing your high school teachers to participate in my research project. Most notable was the excellent way in which the questionnaires were administered to, and collected from the professional staff of the two high schools in your district.

On behalf of the North Texas State University, Division of Public School Administration and Supervision, I sincerely appreciate your kindness, the cooperation of your teachers, and the untiring work of your secretary. May I also request you to graciously communicate my sincere commendations to all those persons who helped make the administration of these instruments a successful venture.

I look forward to a continuous relationship between your District and the Division of Public School Administration and Supervision at the North Texas State University. The result of the study in which your teachers participated will be shared with you if you so desire.

Sincerely yours,

/s/

Macarton Ukpong
Doctoral Student

cc: Dr. Grace B. Chisolm
    Associate Professor
    North Texas State University

    Dr. David H. Johnson
    Academic Dean
    Texas College
BIBLIOGRAPHY

Books


**Articles**


Unpublished Materials


