The relationship of teacher cognitive style and teacher job satisfaction, moderated by administrator management style

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THE RELATIONSHIP OF TEACHER COGNITIVE STYLE
AND TEACHER JOB SATISFACTION, MODERATED BY
ADMINISTRATOR MANAGEMENT STYLE

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of

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Doctor of Education

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ABSTRACT

The Relationship of Teacher Cognitive Style and Teacher Job Satisfaction, Moderated by Administrator Management Style

by

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Success as a school administrator strongly depends upon the complex interplay of teacher cognitive style, teacher satisfaction on the job, and the effectiveness of the principal’s administrative management style. Nonetheless, the supervision of teachers within their cognitive style has had little research or attention given to it. According to the literature, administrative management style greatly influences teachers perceptions of satisfaction on the job. A wide variety of variables, directly impacted by administrative management style, influence a teachers degree of job satisfaction.

This study surveyed teacher’s cognitive style, as determined by Witkin’s Field Dependence, Field Independence model utilizing the Group Embedded Figures Test. Teachers were surveyed as to their feelings of job satisfaction in the areas of: supervision, colleagues, working conditions, pay, responsibility, work itself, advancement, security and recognition. Principals were surveyed as to their

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administrative management style using Dunn and Dunn's School Administrator’s Management Style Inventory.

This study sought additional information as to the relationship between rural and urban teachers job satisfaction. Teachers from the state of Nevada were surveyed, controlling for rural and urban environments.

Paula Lester’s Teacher Job Satisfaction Questionnaire was utilized and reliability coefficients for the state of Nevada were compared with the original samples done by the author.

This study sought to ascertain information that would be useful to administrators to utilize an individual teacher’s cognitive style to effectively supervise and motivate teachers in the workplace through both formative and summative supervision.
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"The path of educational progress more closely resembles the flight of a butterfly than the flight of a bullet." This saying by Jackson also describes the path of acquiring a doctorate in Education. This has been the most difficult undertaking I have ever undertaken. To be successful in this endeavor, while engaging in instructional leadership of an intermediate elementary school, has been one of the longest, most arduous tasks requiring perseverance on a day to day basis. I wish to thank the following individuals for their contributions toward completion of this study.

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I wish to acknowledge my brothers. John responded in his knowledge of computers and word processing programs by converting my dissertation from one word processing program to another. Jeff and I wrestled with the differences between statistics utilized for scientific endeavors and those used for studies in humanities. We both learned to appreciate each other's fields in ways never expected.

Last but by no means least, to Betsy, who continually proofed my editions, taught and retaught where the commas go, and put up with endless evenings of doubt, new computers, software lessons, and made me laugh.

As A. A. Milne stated in The House at Pooh Corner, "A trifling matter, and fussy of me, but we all have our little ways."
CHAPTER 1

INTRODUCTION

Success as a school administrator strongly depends upon the complex interplay of teacher cognitive style, teacher satisfaction on the job, and the effectiveness of management style (Guild & Garger, 1985). Cognitive style is the consistent means of functioning shown by teachers in their perceptual and intellectual activity. Teacher job satisfaction refers to the degree to which one has a positive attitude toward one's job (Lester, 1988). Management style can be defined as the way an administrator interacts with teachers and staff members in guiding them to successfully reach the educational goals of the school (Dunn & Dunn, 1977).

One of the foremost obstacles to an effective management style is the varied perceptions of the administrators and those with whom they work (Dunn et al. 1977). Steps must be taken by the administrator to identify the perceptions, goals, and values held by various staff members and to adapt personal managerial styles accordingly in order to effectively implement change when it is necessary. Additional knowledge and utilization of individual teachers' cognitive styles would enhance an administrator's ability to effectively initiate change (Gregorc, 1987). This change could take the form of increased instructional effectiveness by the teacher if the administrator is able to effectively identify and utilize teacher cognitive styles to motivate and satisfy the teacher.
Various management styles used by administrators elicit a multitude of reactions from different staff members (Blake & Mouton, 1964). For instance, if one individual needs an authoritarian approach from an administrator, but instead has an administrator with a laissez-faire style, that individual may feel unfulfilled with regard to basic psychological needs. This feeling could manifest itself into dissatisfaction with the job, resulting in a decrease in instructional effectiveness. On the other hand, if an administrator is dealing with a person who needs a laissez-faire approach, but instead provides an authoritarian approach, that teacher would probably lack the necessary motivation to perform as effectively as possible. If the administrator is able to identify the specific cognitive style, or needs of the teachers prior to supervisory interactions, the end result would most likely have a positive effect resulting in an increase in teacher effectiveness and job satisfaction (Rinehart & Short, 1994).

This study attempted to identify a relationship between teacher cognitive style and teacher job satisfaction, moderated by administrative management style. Cognitive style has been studied utilizing a variety of sort measures. According to Guild and Garger (1985) there are four different categories of style differences: 1) Style concerned with cognition: people perceiving and gaining knowledge differently; 2) Style concerned with conceptualization: people forming ideals and thinking differently; 3) Style concerned with affect: people feeling and forming values differently; and 4) Style concerned with behavior: people acting differently. The field dependence and field independence dimension is one measure of style in the area of cognition.

One measure used to study cognitive style is Witkin's studies on field dependence and field independence. Field dependence-independence influences perceptual and
intellectual domains, as well as the personality traits of the individual (Witkin, 1962).

The relationship between teacher cognitive style and teacher job satisfaction has not been previously researched.

Teacher job satisfaction refers to the extent to which the teacher receives and values various factors or job characteristics of the job situation (Lester, 1982). These characteristics vary from study to study (Rinehart et al, 1994; Buckhalt, Bearden & Marchetti, 1990; Ball & Stenlund, 1990; Billingsley & Cross, 1992), but might include: supervision, colleagues, working conditions, pay, responsibility, work itself, advancement, security, and recognition (Lester, 1984).

Management style has been studied by numerous researchers (Stogdill, 1948; Halpin, 1945; Blake et al, 1964; Sergiovanni, 1984; Bennis & Nanus, 1985). In this study, management style refers to the way in which an administrator works with teachers and staff members in assisting them to successfully reach the educational goals of the school (Dunn et al, 1977).

**Purpose of the Study**

The purpose of this study was to determine if there was a relationship between teacher cognitive style and teacher job satisfaction, as moderated by administrative management style.

**Subproblems**

1. What is the relationship between teacher job satisfaction and administrative management style?
2. What is the relationship between male and female teachers' cognitive style, teacher job satisfaction, and administrative management style?

3. What is the reliability of Lester's Teacher Job Satisfaction Questionnaire in the state of Nevada?

**Ancillary Problem**

What are the differences in teacher cognitive style and teacher job satisfaction, moderated by administrative management style between large urban Nevada school districts and rural Nevada school districts?

**Definition of Terms**

Cognitive style is defined as the consistent means of functioning shown by individuals in their perceptual and intellectual activity (Witkin, 1954). Cognitive style emphasizes the mode of intellectual activity, rather than the degree of intellectual activity (Korchin, 1986). The method an individual utilizes to process information, rather than the different levels of performance, is that person's cognitive style (Witkin, Dyk, Gaterson, Goodenough, & Karp, 1962).

The field dependence and field independence dimension is one way of measuring cognitive style. The terms field dependence and field independence refer to the way in which the personal characteristics of an individual influence his perception of the environment. The following terms and definitions are taken from Witkin and Goodenough's (1981), *Cognitive Styles: Essence and Origins of Field Dependence and Field Independence*. 

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Field dependence: is the reliance on perceptual field background or environment that influences an individual's perceptions. A field dependent person has personality traits that tend to make him suggestible and conforming as well as dependent in interpersonal relations. This variable is measured by the Embedded Figures Test or the Group Embedded Figures Test.

Field independence: is the ability of an individual to interpret his environment independent of context. A field independent person has personality traits that tend to make him active, initiating, and organized in his relationship towards the environment, as well as independent in his interpersonal relationships. This variable is measured by the Embedded Figures Test or the Group Embedded Figures Test.

School Administrator: is a principal in a kindergarten through sixth grade elementary school, as licensed by the state of Nevada Department of Education for the purposes of this study.

Teachers: are the state-licensed instructors found within designated kindergarten through sixth grade elementary schools for the purposes of this study.

Job satisfaction: refers to the extent to which the teacher receives and values various factors, and/or job characteristics of the work situation. This will be measured by the Teacher Job Satisfaction Questionnaire (TJSQ). The following factors will be utilized from the TJSQ: (Lester, 1982).

1. **Supervision:** The task-oriented and person-oriented behavior of the immediate supervisor.
2. **Colleagues**: The work group and social interaction among fellow teachers.

3. **Working Conditions**: The working environment and aspects of the physical environment.

4. **Pay**: The annual income of teachers.

5. **Responsibility**: The opportunity to be accountable for one's own work and the opportunity to take part in policy or decision-making activities.

6. **Work Itself**: The job of teaching or the tasks related to the job. The freedom to institute innovative materials and to utilize one's skills and abilities in designing one's work. The freedom to experiment and to influence or control what goes on in the job.

7. **Advancement**: The opportunity for promotion.

8. **Security**: The school's policies regarding tenure, seniority, layoffs, pension, retirement, and dismissal.

9. **Recognition**: Some act of notice, blame, praise, or criticism.

**Administrative Management Style**: Refers to an individual's way of working with teachers and staff members in aiding them to successfully reach the educational goals of the school. Definitions and terms are taken from Dunn and Dunn's (1977) book, *Administrator's Guide to New Programs for Faculty Management and Evaluation*:

1. **Collaborative**: Teachers and administrative management work together on objectives, plans, procedures, evaluations, and redesigns.
2. **Cooperative:** A share of administrative management situations are given to the staff. Those concerned staff members are consulted in situations or matters that the administrator believes are of interest to them. Committees are utilized to handle specific continuing administrative management responsibilities.

3. **Participative:** Administrative management allows for less participation and involves teacher suggestions and ideas. Ad hoc project committees are given problems and asked for recommendations. These recommendations are not implemented in every case, nor accepted without some modification. Final decisions are never delegated to the participating committee.

4. **Bureaucratic:** This style of administrative management stresses rank and hierarchy of command which is founded on written authority. The policy book, school manual, regulations, and other written rules are the basic source of administrative management. Tradition and stability prevail and change is rare, or almost never instituted from below.

5. **Laissez-faire:** The chaotic approach of the administrator who ignores the needs of his organization on a daily basis. This administrative management style ignores when something goes wrong and allows staff members to do their own thing without concern for either objective evaluation or consequences. This management style does not promote team decisions, or even assume responsibility in an emergency.
6. **Benevolent Despot:** Input or involvement in administrative management of the school are either accidental or a function of a predetermined decision by this type of administrator. All final decisions are made by the administration, even though staff members may be solicited for input.

7. **Autocratic:** This management style never shares in management analyses or decisions. This administrator is often aloof, businesslike in his outlook, highly directive, and intolerant of any deviation in plans. Power is used directly and arbitrarily to reach goals, implement decisions, and gain acceptance from the staff. This administrator knows what is "best" for students and staff.

**Urban Schools:** Urban schools will be defined in this study numerically in terms of population size of the community, consisting of a population of over 2,500 or more inhabitants, incorporated as cities (1980 Census of Population, 1983).

**Rural Schools:** Rural schools will be defined in this study numerically in terms of population size of the community, consisting of a population of less than 2,500 or fewer than 1,000 inhabitants, living outside of incorporated cities or townships (1980 Census of Population, 1983).

**Conceptual Rationale**

Effective formative supervision in schools has been found to motivate teachers and increase their perception of job satisfaction (Rinehart et al., 1994). Many theories and styles exist that attempt to address effective supervision (Acheson and Gall, 1987; Borich, 1977; Goldhammer, Anderson, & Krajewski, 1981, Weller, 1977; Worthen and Sanders, 1987). Few, if any, theories suggest utilizing differentiated supervision based
on the cognitive style of the individual teacher. Learning styles theorists have been adamant about teachers modifying instructional methodology for students (Dunn & Griggs, 1988; Keefe, 1987; Sternberg, 1990), but few theorists have taken learning styles or cognitive styles to the next level by incorporating knowledge of individual teacher styles in the supervisory process (Guild & Garger, 1985).

The purpose of this study is to identify whether there is a relationship between teacher cognitive style, specifically field dependence and field independence, and teachers self-reported perceptions of job satisfaction utilizing the nine subscales of the Teacher Job Satisfaction Questionnaire (TJSQ), moderated by administrative management style. Witkin's (1962) Field Dependence-Field Independence Theory provides the conceptual rationale for the cognitive style section of this study. The Teacher Job Satisfaction Questionnaire by Paula Lester (1984) provides the structure related to teacher job satisfaction. These factors will be moderated by the school administrator's management style, as determined by Dunn and Dunn's (1974) School Administrator's Management Style Inventory.

The results of this study provide information regarding the relationship between teacher cognitive style, teacher job satisfaction, moderated by the administrator's personal management style, which could be used to effectively supervise teachers in accordance with individual teacher's cognitive style.

Additional subproblems considered in this study were as follows: What is the relationship between teacher job satisfaction and administrative management style? The relationship between male and female teachers' cognitive style, teacher job satisfaction, and administrative management style is the second subproblem to be studied. The third
subproblem to be studied is the reliability and validity of Paula Lester's Teacher Job Satisfaction Questionnaire in the state of Nevada. An ancillary problem to be studied are the differences in teacher cognitive style, teacher job satisfaction, moderated by administrative management style between large urban and rural Nevada school districts.

Significance of the Study

This study is significant for individuals aspiring to be effective educational leaders, of kindergarten through sixth grade elementary schools, utilizing knowledge of teacher cognitive style, teacher job satisfaction, and administrative management style. The study hopes to isolate factors which would enhance an educational leader's effectiveness through knowledge of teacher cognitive style, teacher job satisfaction, and awareness of personal administrative management style during supervisory interactions. It also makes available, to those concerned administrators, a base of information to assist in interactions to increase teacher job satisfaction. The purpose of this study is to yield information to assist principals in effective supervision in order to maximize teacher effectiveness.

Delimitations

This study was conducted in various school districts within the state of Nevada. Washoe County School District was selected to represent the large urban school district in the state of Nevada. Schools were randomly selected to be representative of this large urban school district for the state of Nevada. Permission was sought from the Clark County School District, a large urban school district in Southern Nevada, to conduct the study in their elementary schools. Due to some logistical difficulties permission was
permission was denied on both requests. Rural schools were randomly selected from the following school districts: Carson City, Churchill, Douglas, Elko, Eureka, Humbolt, Lander, Lyon, Mineral, Nye, Pershing, and Storey County School Districts. All selected schools must have a full-time, Nevada licensed principal on site.

1. The elementary schools were chosen randomly, by school districts where the Superintendents of Instruction have agreed to allow their employees to participate.

2. Schools were chosen to control for school configuration, to include schools where kindergarten through third, kindergarten through fourth, kindergarten through fifth, or kindergarten through sixth grade student populations were present.

3. Only fully contracted teachers currently employed in the selected elementary schools were chosen to participate in the study. Teachers were randomly selected from the directory of licensed personnel, which lists licensed personnel for each school in the state of Nevada, and their current teaching assignment.

4. Assistant principals or vice principals were not surveyed.

5. Private or parochial schools within the state of Nevada did not participate in this study.

6. This study was limited to the state of Nevada, therefore, results may not be able to be generalized across the state of Nevada, nor other states due to the uniquenesses in the sampling procedures.

Limitations

Not all teachers working within the selected elementary schools were hired by the current school administrator. The number of years an administrator has served in his
current location could influence the teachers' perceptions of the effectiveness of the administration. This, in turn, could influence a teacher's job satisfaction.

1. The study was limited by the reliability of the teacher's responses on the TJSQ.

2. The study was limited by the reliability of the administrators' responses on the School Administrator's Management Style Inventory.

3. The factors of management style do not account for all the variances in observable management style.

4. This study was limited to the state of Nevada, therefore, results may not be able to be generalized to the entire state of Nevada, nor to other states due to the unique representation in the sampling procedures.
CHAPTER 2

REVIEW OF RELATED LITERATURE

The purpose of Chapter 2 is to review the literature related to the major areas studied: cognitive style, specifically, field dependence-field independence, job satisfaction, and administrative management style. While many references were available for each of these areas, only articles relevant to cognitive style, job satisfaction, and administrative management style were selected to be included in this chapter. As management style related to teacher cognitive style and job satisfaction is a new area of inquiry in educational administration.

Research on Cognitive Style

Cognitive styles are the unique characteristics, self-consistent modes of functioning which individuals show in their perceptual and intellectual activities (Witkin, 1954). The concept of cognitive style emphasizes the "how" of behavior rather than the "how much" of an individual's behavior (Witkin, 1964). Cognitive styles are manifestations in the cognitive sphere of still broader dimensions of personal functioning which cross into many diverse psychological areas (Quinlan & Blatt, 1972; Witkin, Moore, Goodenough, & Cox, 1977). The research on cognitive style has emphasized the adaptive functions served by cognitive processes in the psychological functioning of the
individual. This emphasis has led to clustering of similarities across psychological areas, which has resulted in a more integrated, holistic view of personality (Witkin et al., 1977).

Three major historical traditions provide the background for work on cognitive styles. The first tradition is the psychology of individual differences. This tradition has viewed field dependence and field independence in terms of consistent individual differences, whereas, Witkin (1978) viewed these as different individual consistencies. Field dependence was particularly viewed in terms of individual differences and intra-individual consistencies (Witkin & Goodenough, 1981).

The second major historical tradition in cognitive style was psychoanalytic ego psychology, where cognitive styles were viewed as organizing and regulating variables in ego adaptation to the environment. Witkin (1962) utilized this idea and related his theory of cognitive style, field dependence-field independence, to consistencies in the expression, control of impulses, and use of preferred defense mechanisms.

The third major historical tradition in cognitive style was experimental psychology of cognition. The Gestalt movement in particular influenced Witkin's (1962) theory of field dependence-field independence by its emphasis on individual consistencies in the manner or form of perceiving and thinking as a critical psychological phenomena. The concept of cognitive style added the dimension that the expression of needs and values in perception were moderated by stylistic regulatory aspects of personality (Bertini, Pizzamiglio, Wapner, 1986; Singer, 1984; Witkin, Goodenough 1981; Kogan, 1980).

Witkin (1981) was less concerned with the effect of personality on perception than with personality through perception. Field independence-field dependence are
process variables which describe an individual's way of orienting and functioning, rather than success in attainment goals. Field independence-field dependence are dimensions of individual functioning that account for self-consistency in behavior, which is predictable across situations. This orientation has proven to be stable over time and bipolar in nature (Witkin et al., 1981). Field dependent people have personality attributes which are distinct from those who are field independent (Korchin, 1986). Neither construct is value loaded; neither field independent nor field dependent personalities are better or worse than the other. Each pole has qualities that help people adapt under particular circumstances (Witkin, 1978). Field dependence-field independence has been most successfully measured by the Embedded Figures Test (Witkin, Dyk, Faterson, Goodenough & Karp, 1962).

**Embedded Figures Test**

The Embedded Figures Tests (EFT) is a perceptual test that is designed to have an individual locate a previously seen simple figure within a larger complex figure. The larger complex figure has been organized to obscure the sought-after figure (Jackson, 1956). The scores on the EFT reflect the extent of competence at perceptual disembedding. Research has shown that individual differences in EFT performance relate to more than differences in perceptual functioning (Bertini, 1986; Witkin, 1981). Other areas in a person's psychological activity are affected by his ability to differentiate and keep things separate in his personal experience (Witkin et al., 1981).

Psychological testing has a history of assessing perceptual and intellectual tasks to ascertain the salient dimensions of personal functioning (Sattler, 1974). Initially, with the introduction of intelligence tests, patterns of abilities revealed in test performance were
used to draw conclusions about ego functioning, personality, and intelligence. Perceptual tests have been utilized to determine the way in which individuals perceive particular stimuli and that stimuli's impact on their personality (Bailey, Hustmyer, & Kristofferson, 1961, Karp & Konstadt, 1965, Karp, Poster, & Goodman, 1963).

Extensive research in cognitive style theory has been conducted on the Embedded Figures Test in the area of personal functioning and has led to many personality correlates reported in literature (Bailey et al., 1961, Tyler, 1965, Witkin et al., 1962). Research articles that involve social-interpersonal behavior will be emphasized in this review of literature. Some specific findings were as follows: Field dependent people rely on other people to a greater extent than do field independent people (Witkin et al., 1962). Field dependent people are more socially oriented, pay greater attention to interpersonal cues, show a preference for being physically close to people, and have a greater emotional openness in communication with others as contrasted with field independent people who have a more abstract, impersonal orientation. Field dependent people favor working in the humanities, social sciences, and human services professions (Witkin, Moore, Oltman, Goodenough, Friedman, Owen & Raskin, 1977).

The field independent people as a group are usually not very interested in others, show greater physical and emotional distancing, and seem to function with a greater degree of individual autonomy in their social-interpersonal behavior (Goodenough, 1978). They are able to segregate and manipulate abstract situations. Field independent individuals tend to work in professions which stress mathematics and sciences (Witkin et al., 1977). One way of determining field dependence-field independence has been to utilize the Embedded-Figures Test.
The purpose of the Embedded-Figures Test is to disembed the simple figure from the complex pattern. The disembedding was shown to correlate to cognitive capacity or style of the individual (Witkin, et al., 1971). Field independence had been defined as the capacity to overcome, or analyze, an embedding context in perceptual functioning (Witkin et al., 1962). From an extensive research base (Oltman, Raskin & Witkin, 1971) came the Group Embedded-Figures test which became readily available for group testing as a tool for measuring the cognitive style of field dependence-field independence.

Research on Job Satisfaction

The second major area to be reviewed is teacher job satisfaction. Studies in job satisfaction have been influenced by the belief that satisfied employees perform at higher levels (Rinehart & Short, 1994). Job satisfaction has been defined and redefined to include dimensions of psychological, physiological, and environmental circumstances that lead people to say they are satisfied with their job. Locke (1976) defined job satisfaction as the "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300). Often in the literature review, motivation and job satisfaction are referred to in relation to personal motivation (Gibson, 1985; McClelland, 1985; Maslow, 1954). Maslow's (1954) theory of hierarchy of needs serves as the initial theoretical construct in relation to job satisfaction. Maslow (1954) believed the study of motivation to be a study of ultimate human goals, desires, or needs. Maslow's theory of motivation was based on a hierarchy of human needs and pulls, rather than pushes, of individuals in the pursuit of their needs (Maslow, 1954). It is the satiation of these needs which leads an individual to be self satisfied. Table 1 lists the hierarchy of needs.
Table 1
Maslow's Hierarchy of Needs

<table>
<thead>
<tr>
<th>Lower, or Deficit, Needs</th>
<th>Higher, or Growth, Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physiological needs (need for food, water, and sex).</td>
<td>5. Self-actualization needs (need for self-fulfillment, for realizing one's potential, for understanding and insight).</td>
</tr>
<tr>
<td>2. Safety needs (need for security and protection from paid, fear, anxiety, and disorder); need for order, lawfulness, and discipline.</td>
<td></td>
</tr>
<tr>
<td>3. Need for belongingness and love (need for love, tenderness, and togetherness).</td>
<td></td>
</tr>
<tr>
<td>4. Esteem needs (need for achievement, respect, and approval).</td>
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Maslow (1954) believed that the lower or basic needs were usually satisfied first; but occasionally individuals gave up everything for a specific idea or value. These self-actualized people had always had their basic needs satisfied, and as a result had strong individual personality characteristics, or ego formation. In this study, need satisfaction would be at the self-actualization level for teachers.

Maslow (1954) stated that not all needs are completely satisfied before the next set of needs emerged. When attempting to motivate individuals, the appropriate set of needs must be identified and satisfied. If a lower set of needs, such as safety, was not satisfied it would be senseless to address any of the higher needs. Unfulfilled needs drive and motivate individuals. Thus, teachers' needs, in order to be satisfied in their profession, are influenced by the necessity to initially meet and satisfy lower level needs.

David McClelland (1985) believed that needs were acquired through the culture in which one lived. McClelland focused on what motivated people and attempted to
ascertain why specific needs attracted people. He believed three needs were present in all individuals: power, affiliation, and achievement. These needs serve to motivate all individuals. He concludes, that by encouraging these three needs, motivation can be taught. These three needs and others are studied repeatedly by researchers in relation to teacher job satisfaction. It is important to identify factors that influence teacher job satisfaction in order to prevent attrition from the teaching profession (Billingsley & Cross, 1992). Job satisfaction is an important area of study because a moderate and consistent relationship has been found between job satisfaction and the propensity to remain with the organizations across various groups (Porter, Steers, Mowday & Boulian, 1974).

Many variables have been studied in the research on teacher job satisfaction. Job satisfaction is how a person feels about his work (Locke, 1983). Job satisfaction is often associated with extrinsic and intrinsic rewards. Extrinsic satisfaction comes from rewards dispensed by the organization, such as salary, promotion, status, a safe environment, and job security. Intrinsic sources of satisfaction reside within the individual and are connected to their performance (Lawler & Porter, 1967). Teachers are often unable to influence sources of extrinsic satisfaction and turn to intrinsic sources for satisfaction (Kaston, 1984). Dissatisfaction among teachers has been associated with higher levels of stress (Sutton & Huberty, 1984), turnover, teacher absenteeism, and illness (Culver, Wolfle & Cross, 1990). Job satisfaction increases with age and experience (Parasuraman, 1982), and is linked to the management behavior of the principal (Chapman & Hutcheson, 1982; Knoop, 1981). Lortie (1975) found that teacher stress and dissatisfaction stems from a lack of control in organizing student activities,
student lessons, hostile work environments, and lack of control over the total teaching environment.

In Watson and Hillison's (1991) study on job satisfaction and temperament type, they found that personal attributes in which teachers appeared to achieve the most satisfaction were creativity (trying their own methods), social service (doing for others), and independence (doing things differently). The areas that teachers found the least satisfaction were school policies and practices, advancement, compensation, and supervisor competence. Supervision was repeatedly mentioned throughout the literature as a main variable which influenced a teacher's job satisfaction with a variety of attributes.

Karen Seashore Louis and Betsann Smith (1990) state teachers' work lives have been affected by ongoing philosophical and political conflicts over where authority and decision making in education should be placed. Teachers have been consistently identified as key change agents in school reform and transformation (Carnegie Forum, 1986). It is assumed that the structure of schools' decision-making processes, which allow leadership and responsibilities to move fluidly between administrators and teachers, can improve teacher job satisfaction (Litwak, 1961). Paula Lester (1982) surveyed instruments on job satisfaction to ascertain their appropriateness to measure teachers job satisfaction.

Paula Lester wrote the Teacher Job Satisfaction Questionnaire which studied nine variables related to teacher job satisfaction (1984). These variables are: Supervision; Colleagues; Working Conditions; Pay; Responsibility; Work Itself; Advancement; Security; and Recognition. Following is a detailed discussion of these variables.
Supervision

Structures and systems need to be established in schools to provide teachers with adequate and regular feedback (Frase & Sorenson, 1992). Feedback, through formative supervision of teacher performance, can be rewarding and challenging or painful and disillusioning. Duke & Stiggins (1986) state that it is one of life's ironies that those experiences which can be most rewarding also have the potential to be most frustrating—and teacher evaluation is like that. Teacher supervision done well, can lead to improved personal growth and professional esteem. Done poorly, teacher supervision can produce anxiety and drive talented teachers away from the profession. Supervision is directly influenced by the immediate supervisor, the school principal.

Elementary school principals are key factors in successful schools (Krajewski, Martin & Walden, 1983). They must remember that an important determinant of an individual's performance is motivation or job satisfaction (Gibson, Ivancevich & Donnelly, 1985). Elementary school principals exert a direct influence on many of the variables found to be linked to teacher job satisfaction.

Elementary teachers have little time for adult interactions in the workplace (Lortie, 1975). With the proper blend of management, management skills, and feedback, a principal can eliminate teachers' personal apprehensions and defense mechanisms regarding their jobs. Principals serve as models, set the tone for the school, and teachers take their cues from the principal (Cheng, 1991). For example, if a principal trusts the teachers, the teachers will be more inclined to trust their peers and students. Instructional supervision consists of activities performed by the principal designed to improve instruction by changing teacher behavior (Guild & Garger, 1985). In order to accomplish
effective supervision, a rapport must be established between the principal and the teacher (Dichter, 1989).

Rapport means a harmonious relationship, based on mutual trust and nurturance that prompts development or growth (NEA, 1988). For principals to be effective, they must implement clinical supervision, command knowledge of instructional theory, and have skills in its practical application with teachers (Guild & Garger, 1985). Rapport and trust are vital to this process of providing feedback to teachers. It is through rapport that teacher anxiety is reduced and teachers are more open to personal feedback (Cheng, 1991).

Carl Glickman (1981) and Allan Glatthorn (1984) have suggested new models for supervising teachers. Their basic assumption is that teachers are adults, and the supervision of adults must acknowledge and incorporate the nature of their ongoing developmental process. In this assumption, Glickman recognizes the individual differences among those who are supervised. The two areas stressed by Glickman (1981) and Glatthorn (1984) are the supervisor's basic beliefs and teacher characteristics.

The first set of factors that Glickman (1981) felt that influenced supervision was the basic beliefs held by a supervisor when working with teachers. There are ten behaviors which are characteristic of these beliefs. These beliefs suggest three basic orientations towards supervision. The behaviors and their orientations are as follows:

**Orientation: Non-directive**

1. **Listening**-The supervisor listens without interruption of the teacher
2. **Clarifying**-The supervisor asks questions to gain a better understanding of the problem
3. **Encouraging**-The supervisor encourages the teacher to talk about the factors that may be a part of the problem

4. **Presenting**-The supervisor offers ideas and suggestions to the teacher about the problem

**Orientation: Collaborative**

5. **Problem Solving**-The supervisor initiates discussions and questions to explore possible solutions to the teacher's problems

6. **Negotiating**-The supervisor assists the teacher to resolve the problem immediately

7. **Demonstrating**-The supervisor physically demonstrates solutions to the problem

**Orientation: Directive**

8. **Directing**-The supervisor details exactly what the teacher must do to resolve the problem

9. **Standardizing**-The supervisor explains what must be done in order to have all behaviors similar in the school

10. **Reinforcing**-The supervisor specifically details conditions and consequences for teacher improvement

In directive supervision, the supervisor exercises extensive control over the relationship with the teacher. Precise standards are set, explanations made, and these standards are expected to be met (Glickman, 1981). In non-directive supervision, the supervisor assumes that teachers are capable of initiating their own improvement activities by analyzing their instructional methodology. Final determination for
instructional improvement is left up to the teacher. In collaborative supervision, a balance between the supervisor knowing everything and the teacher as the most knowledgeable person in his classroom is held in contention. In this approach, either the teacher or supervisor may initiate a meeting to discuss concerns. The central objective is to mutually negotiate a plan of action to remedy perceived problems and improve instructional effectiveness.

Two teacher characteristics which are emphasized by Glickman (1981) are the level of teacher commitment and the level of abstraction. The level of teacher commitment identifies specific states which teachers pass through in their professional lives (Gould, 1972; Levinson, 1978). Glickman's model recognizes a continuum of teacher commitment from low commitment, demonstrated by little concern for other teachers, little time or energy expended toward the job, to high professional commitment. High professional commitment stresses a high concern for students and other teachers, an interest and willingness to spend more time and energy on work-related activities, and a fundamental concern with being able to do more for others (Glickman, 1981).

The second teacher variable outlined by Glickman (1981) is the teacher's level of abstraction or abstract thinking ability. This variable is also measured on a continuum. Teachers with a lower level of abstraction are easily confused by professional problems and need specific instructions from others to resolve difficult situations. Teachers with a moderate level of abstraction can think of potential solutions to problems but have difficulties with detailing complex problems. Teachers with high levels of abstraction can look at a problem in a multifaceted manner and generate numerous alternative solutions to a complex problem.
Allan Glatthorn (1984) developed an approach to supervision based on differentiated supervision. Different circumstances require different approaches from supervisors. Glatthorn proposes four types of supervisory practices for schools:

1. Clinical supervision is an intensive process designed to improve instruction by conferring with a teacher on lesson planning, observing the lesson, analyzing the observational data, and giving the teacher feedback about the observation.

2. Cooperative professional development is a collegial process in which a small group of teachers agree to work together for their own professional growth.

3. Self-directed development enables the individual teacher to work independently on professional growth concerns.

4. Administrative monitoring is a process by which an administrator monitors the work of the staff, making brief and unannounced visits simply to ensure that staff are carrying out assignments and responsibilities in a professional manner. (Glatthorn, 1984, pp. 4-5)

Glatthorn (1984) states that different teachers need different supervision at various times in their professional lives. For example, clinical supervision might be needed for experienced teachers who have begun to teach at a new school and are unknown entities, or experienced teachers encountering serious problems in teaching or student learning. This method would not be suggested for known, experienced teachers who have demonstrated successful accomplishment of goals, unless they requested their supervisor to interact with them in this manner.

Various research articles have stressed the importance of communication between teachers and principals (Billingsley & Cross, 1992; Ball & Stenlund, 1990). Whaley and Hegstrom's (1992) research indicated that a teacher's job satisfaction appears to be most closely associated with the teacher's perceptions of the supervisor's communication
behavior. Specific communication behaviors included perceived listening, understanding, and quality of conversation. These patterns of communication were found in this study to be the best predictors of teacher job satisfaction.

Teacher feedback and evaluation provides an opportunity to channel energy and enthusiasm of teachers towards self-actualization. Katz & Kahn (1966) state that teachers want to know how well they are doing and really want to have their merits recognized. Professional teachers also want to know how to develop their own talents more fully.

David Dwyer (1984) examined factors related to principal effectiveness and found that all principals studied worked to improve climate and instructional organization in their schools, however, specific activities and strategies varied from principal to principal. His studies found that varied approaches to similar problems were successful.

The ability to elucidate goals and objectives, set appropriate standards and expectations, and provide continuous feedback regarding performance in relation to chosen goals and objectives has been established as an indicator of school’s effectiveness (Lonoff, 1971). The principal’s role in structuring climate to meet the professed goals and objectives of the school is paramount (Ruben, 1993).

Northwest Regional Education Laboratory (1984) did an exhaustive review of the literature related to effective schools and concluded: "The effective schooling research base identifies schooling practices and characteristics associated with measurable improvements in student achievement and excellence in student behavior" (p.6).

Effective schooling practices include elements of schooling associated with a clearly defined curriculum; focused classroom instruction and management; firm, consistent
discipline; close monitoring of student performance; and strong instructional
management. These practices, coupled with principal effectiveness, lead to increased
teacher job satisfaction (Northwest Laboratory. 1984).

Gellerman and Hodgson (1988) studied various corporations' evaluation systems
and concluded that workers who felt good about themselves would perform better, or at
least view their circumstances in a more favorable light than those who had to defend
themselves against what they might see as personal attacks. Supervision and feedback,
given correctly by a principal, would lead to teachers viewing themselves in a more
favorable light and thus increase teacher job satisfaction.

Billingsley and Cross (1992) found in their study, which compared job
satisfaction between general and special educators, that job satisfaction was associated
with greater leadership support and work involvement. The lower the levels of role
conflict and stress, the greater the job satisfaction of educators. Professional commitment
was negatively related to stress and positively related to job satisfaction. A commitment
to the school, and its mission was present in all teachers. The principal's behavior
patterns and modeling affect teacher motivation, involvement, morale, and job
satisfaction (Blase, 1987; Blase, Dedrick, & Strathe, 1986).

Rosenholtz (1989) stated that teachers who experience higher levels of principal
support are more likely to be committed to their school and be more satisfied with their
jobs than those receiving less support. Principals shape the organizational conditions and
culture in which teachers work. Principals influence the determinants of professional
commitment, such as providing support, clarifying staff roles, and reducing stress within
the organization. Specific behaviors found in principals that encouraged job satisfaction
were: the use of feedback, encouragement, acknowledgment, use of participative decision making, effective communication patterns, and collaborative problem solving (Rosenholtz, 1989).

Cheng (1991) found that the principals whose leadership style emphasizes initiating structures of leadership such as esprit, student achievement, and friendly social behavior had teachers who felt more satisfied with their jobs. Principals who do more observations of teachers in the classroom and discuss more work related problems with their staff have teachers with higher job satisfaction (Lipham, 1981, Harootunian & Yarger, 1981). In summary, principals who emphasize both task achievement and human relations in leading a school; who set a hard-working example to the organization, and who give teachers more consideration, have teachers who enjoy higher working morale, enjoy friendly social relations, and have higher job satisfaction in their teaching career (Cheng, 1991).

Colleagues

Teachers with high job satisfaction have the belief that the principal creates a good atmosphere for cooperation (Billingsley & Cross, 1992). Teachers who strive to extend themselves with their subject knowledge and share professional ideas with colleagues have higher job satisfaction (Johnson, 1990). The principal has been found to be instrumental in establishing a supportive, organizational climate or culture of high working morale and concern for others through his own performance (Sergiovanni, 1984; Dwyer, 1984). Highly effective schools appear to differ from less effective schools in terms of human relations, where the effective school’s principal develops and fosters high relationships (Cheng, 1991).
Successful teachers felt that support and additional contact with colleagues would lead to more success in teaching (Harootunian & Yarger, 1981). Socialization experiences and development of competence through interaction with colleagues are instrumental to the bonding of the profession (Becker & Carper, 1966). Literature on professional development in teaching stresses the strong role that collegial exchange and collaboration play in successful schools (Little, 1982).

**Working Conditions**

Teachers maintain that making their own decisions about how to do their work is important to their job satisfaction (Wisniewski, 1990). This autonomy in one's work is an important factor to teacher job satisfaction.

An additional factor found to correlate to teacher job satisfaction is the ability for teachers to experiment and try out various new methods and solutions in teaching (Ball & Stern, 1990; Wisniewski, 1990). Teachers in highly bureaucratic schools, which dictate instructional methodology, have been shown to have lower job satisfaction (Rastoy, 1973).

The ability to access good, appropriate educational equipment (books, instruments, etc) promotes high job satisfaction with teachers (Wisniewski, 1990). The National Education Association in their report titled Conditions & Resources of Teaching, found that teachers' lack of resources resulted in frustration and less job satisfaction.

Diane Reed's (1987) research on organizational characteristics and principal leadership found that teacher perceptions in schools with high student achievement
included comfortable working conditions and minimal need for the principal to reconcile conflict.

**Pay**

Salary is viewed as a hygiene factor that can not in and of itself motivate a teacher; it can only prevent dissatisfaction (Herzberg, 1966). For example, when a teacher's pay is low, he will probably be dissatisfied; raising the pay will not necessarily raise the teacher's job satisfaction. Pay and benefits influence workers' choices of positions within industries and business. Generous benefits and high pay can counteract disadvantageous factors such as low status (Johnson, 1990). Improving the circumstances of teachers must begin with improving the way teachers feel about themselves and what they do for a living. Money is mentioned frequently (Maeroff, 1988) as a significant factor in teachers feeling empowered. Empowerment is viewed as raising one's status and one element that our culture recognizes as a status symbol is money (Sizer, 1984). It is difficult to provide teachers with salaries the size that would guarantee greater respect (Maeroff, 1988). Researchers looking at employee turnover conclude that workplace conditions, including pay, act as an inducement for workers to stay (Yee, 1990).

Careers in elementary school teaching are generally flat, lacking economic advances beyond an early career stage (Talbert, 1986). Teachers who select teaching as a career can only anticipate small pay increments over the first quarter of their work lives (Talbert, 1986). Quaglia, Marion and McIntyre (1992) found in their study on teacher satisfaction, empowerment, work conditions, and community status that 52% of dissatisfied teachers felt that wages for teachers were too low, while only 39% of
satisfied teachers felt that teacher salaries were too low. Efforts to institute merit pay, or compensate for low pay, have encountered enormous opposition from teachers and achieved only short lived, modest success in schools (Johnson, 1990). Standardized salary scales that compensate teacher of equal longevity equally offer no rewards for extra effort or success (Johnson, 1990).

Salary scales in all public school teachers' contracts include raises for completed graduate school work (Johnson, 1990). Merit pay, another attempt to compensate teachers for low pay, has been viewed with skepticism (Johnson, 1986). There are unintended consequences of promoting competition among staff and concerns that higher pay might discourage cooperation among teachers. Teachers have viewed career ladders as more promising than merit pay (Johnson, 1990). The most academically talented candidates never enter the classroom, and the best leave after only a short tenure (Vance & Schlecty, 1982). Louis Harris (1985) asked former teachers why they had quit teaching and they stated that they were disappointed with working conditions, discouraged by low pay, and other factors.

Teacher satisfaction appears to depend less on money (Berman & McLaughlin, 1978), than by intrinsic motivation through self-efficacy and the feeling that teachers are valued in the development of students' lives (Pfeffer, 1981). Many individuals are drawn to teaching by a strong service ethic. The norms of the teaching profession place an emphasis on intrinsic rewards, the intangible benefits from making a difference in the classroom (Lortie, 1975). This perspective indicates that extrinsic rewards such as pay or advancement, will have a limited effect on teacher's decisions to stay in the profession (Johnson, 1986). Salary alone will probably never provide a sufficient incentive for
teaching. At their current levels, they serve as disincentives for a sustained commitment to the teaching profession (Johnson, 1986). Pay was one of three variables found by Derlin and Schneider (1994) to have the least influence on teacher job satisfaction.

Responsibility

Teacher involvement in educational decision making has been promoted by researchers because of a belief that those closest to existing problems have the expertise to solve them (Maeroff, 1988). The assumption being that participatory problem solving will improve outcomes or student learning (Rinehart & Short, 1994). Employee participation in decision making has been shown to increase organizational effectiveness (Lawler, 1986). Other researchers see empowered staff members as initiating and carrying out new ideas and creating enhanced learning opportunities for students (Short & Gree, 1989). Lightfoot (1986) states that teacher empowerment is the opportunity for an individual to have autonomy, choice, and responsibility.

Teachers' opportunities to exercise leadership within the school and participate in decisions that affect school life have been correlated with job satisfaction (Rauch, 1990; Rodgers-Jenkinson & Chapman, 1990). Six components that Short and Rinehart (1992) found to influence empowerment were: 1. Decision making; 2. Professional growth; 3. Status; 4. Self-efficacy; 5. Autonomy; and 6. Impact. These sources of empowerment influence a teacher's feelings of job satisfaction (Dichter, 1989; McNeil, 1986). Workplaces which provide opportunities for growth produce effective and satisfied teachers. These schools allow teachers to develop increasing degrees of professional competence and provide input venues which empower staff by allowing discretion and influence in working conditions (Yee, 1990; Kanter, 1983).
Research has repeatedly shown that in effective schools, decision making is a decentralized process (Taylor & Tashakkori, 1995; Frase & Sorenson, 1992; NEA, 1988). Highly participative decision-making processes gain more complete and accurate information for the foundations of decisions. Teacher participation gives principals access to critical information (Imber & Neidt, 1990). Participation gives employees the opportunity to be involved in problem solving, therefore, employees are more committed to the chosen solution and could work harder to achieve desired results (NEA, 1988).

**Work Itself**

Harootunian and Yargers (1981) found in their study on teachers' perceptions of their own success that teachers link personal variables such as their behavior in the classroom (process) to the production of gains in student learning (product). Thus, teachers define their successes as performing appropriately by producing student learning gains. Most teachers defined their successes in terms of their pupils' achievement rather than personal teaching behaviors they utilized.

Teachers are concerned about the stylistic qualities of their own performances, as in whether specific goals were reached and specific objectives obtained (Jackson, 1968). Teachers must experience personal responsibility for the outcome of their work, believing that their results are attributable directly to their own actions (NEA, 1988). The workplace needs to provide freedom, independence, and individual discretion in how to carry out tasks (Hackman & Oldham, 1980). When the results of work no longer become reflections of an individual's efforts, and people become alienated from them, they are no longer willing to accept personal responsibility for their outcome. This lack of responsibility, or ownership of the outcome, influences a teacher's job satisfaction.
(Chapman & Hutcheson, 1982). NEA (1988) found that other areas related to work that influenced a teacher's job satisfaction were participation in decisions regarding: 1. Textbooks; 2. How to teach; 3. What to teach; 4. Grading policies; and 5. Input on removing students from the classroom for special instruction and assistance.

Advancement

Workers are influenced by a variety of incentives and rewards. Security and predictability of a guaranteed paycheck enables some workers to be more fully satisfied with their jobs while other workers need to have the opportunity to earn more and thrive on opportunities for advancement (Johnson, 1990). Opportunities are few for promotion and advancement in the field of public teaching (Johnson, 1990). Positions of department chair or team leaders are the only perceived potential advancement steps within the teaching ranks. Becoming a principal or curriculum supervisor changes a teacher's classification to administrator and thus, no longer a teacher (Johnson, 1986). Only a small percentage of teachers are promoted to administrative positions (Talbert, 1986), which is a change in career paths. In Walson and Hillison's (1991) study on teacher job satisfaction, the one factor which teachers seemed to be least satisfied with was advancement. Teachers felt the field of teaching provided few opportunities for advancement, while remaining a teacher.

Potential for advancement within the organizational context is highly limited. Teachers often speak of their work as being a calling or a mission, and report that they attach little importance to advancement or extrinsic rewards (Quaglia, Marion & McIntire, 1992). The extrinsic reward of promotion has little effect on teachers, who strive for intrinsic rewards in their profession (Lortie, 1975). In Derlin and Schneider's
A comparative study between Canadian and Michigan teachers, found that teachers were content that advancement opportunities were handled fairly, but they felt that the opportunities for advancement were not adequate (Ball & Stenlund, 1990). Reasons for attrition from the teaching profession for educators have been attributed to problems such as the lack of upward mobility compared to other professions (Chapman, 1983; Grissmer & Kirby, 1987). Career ladders have been one proposal to address the need for advancement in teaching, but these ladders have been viewed with great skepticism (Johnson, 1986).

Security

Teachers differentially weigh inducements to remain in education and can be satisfied with a combination of job rewards. The key factor is how teachers weigh the work inducements in order to feel satisfied on the job (Yee, 1990). Sources of job satisfaction have implications on performance. Various researchers who have studied employee turnover state that workplace conditions, such as security, serve as an incentive for workers to remain on their present jobs (Barnard, 1962). If Herzberg's (1966) theory is correct, then it implies that concepts such as job security must not be ignored, but that in and of itself will not motivate employees to excel in their work or to be more satisfied. The continued certainty of employment enhances teachers' satisfaction and confidence in carrying out their responsibilities (Johnson, 1990). In Canada, researchers (Ball &
Stenlund, 1990) on teacher job satisfaction found that teachers were content with their view of job security. Teacher job satisfaction was not influenced by a need for job security according to Derlin and Schneider (1994).

During the 1970's there was a decline in job security in the field of education. With the reduction in force that some school districts had experienced in the past, teachers felt less secure in their positions (Maeoff, 1988). Currently, many people who enter teaching do not expect to make it their lifelong career (Mason, Dressel, & Bain, 1959). Teachers often resign after only a few years in the classroom. Schlechty and Vance (1981) estimate that 50% of all teachers leave between their seventh and ninth year of teaching. Other studies indicate even higher rates of attrition within the first five years of teaching (Charters, 1965, Talbert, 1986).

**Recognition**

Research in the area of job satisfaction has found a positive relationship between recognition and approval from supervisors, family, and friends (Chapman & Hutcheson, 1982). Satisfied elementary school teachers assign more importance to recognition by administrators and supervisors and less to recognition by their peers (Chapman, 1983). Harootunian (1981) found that teachers need opportunities to experience, recognize, and share more short term successes in their classrooms. Teachers define their primary task as successful when other people smile, praise, or reward them in some way (Harootunian, 1981). Herzberg, Mausner and Snyderman (1959) stated that the supervisor's main role was to learn to discriminately recognize and reward good work.

The level of community recognition for the efforts of the school and individual teachers has been correlated to teacher job satisfaction in numerous studies (Ball &
Stenlund, 1990; Harootunian & Yarger, 1981; and Billingsley & Cross; 1992). In Ball & Stenlund's research (1990), the community viewed the school with little respect and many teachers felt powerless to change the views of the public. This lack of parental respect impacted teachers' feelings of job satisfaction.

Research on Management Style

The third major area to be reviewed is administrative management style. The nature of management and its impact on employee job satisfaction has been studied extensively since the turn of the century. The earliest attempts at defining the characteristics of effective leaders centered upon the identification of individual personality traits that made the leaders successful (Owens, 1991). It was thought that potential administrators could be identified and cultivated by their inherent personality traits.

Scientific management theory evolved at the turn of the century and focused on efficiency experts such as Henri Fayol and Frederick Taylor. Effective leaders were believed to have personality traits which emphasized the creation of task efficiency through the organization of worker tasks (Griffith, 1979). The principle object of management was to secure the maximum prosperity for the employer, coupled with the maximum prosperity for each worker (Taylor, 1947). Management assumed the responsibility of assisting the worker to become more productive for the company.

The scientific and human relations movements, which began at the early part of the century, still dominate the literature on management today. The two areas of emphasis that came from these movements are concern for tasks and concern for relationships.
Chester Barnard, in his book *The Functions of the Executive*, (1938) utilized the ideas of concern for both tasks and relationships within an organization. He stated that an executive must maintain a spirit of cooperation and must influence the workers to attain the specific goals of the organization.

Frederick Herzberg (1959) developed a theory based upon the motivation and hygiene factors of the work environment. Like Argyris' (1962) concept of moving people towards more mature behavior, Herzberg concentrated on factors responsible for job satisfaction (motivation) and job dissatisfaction. Herzberg (1982) developed the Motivation-Hygiene Theory from the premise that employees today are different from employees of previous eras. In *The Managerial Choice*, Herzberg (1982) discussed the change in society where employees became more aware of the value of life. Employees have come to expect more from their working hours than just a paycheck. National interviews conducted with employees found that typical working middle-class males must have a sense of purpose, a sense of accomplishment, and a chance for self expression in order to feel personal satisfaction on their jobs (Vroom & Deci. 1974).

Fredrick Herzberg (1959) identified several factors that are responsible for an individual's feeling of job satisfaction or dissatisfaction. Factors have been divided into two categories called motivation and hygiene factors. The attributes that influence this study are both motivation and hygiene factors. The motivational attributes include: achievement, work itself, recognition, responsibility, and advancement. The hygiene factors include: supervision, salary, and job security. The motivational factors lead to job satisfaction because they satisfy the individual's need for self-actualization in his
work. It is in the performance of the task that individuals receive rewards that reinforce personal aspirations.

Herzberg (1959) states that the effective leader understands the different factors associated with motivation and job satisfaction and dissatisfaction. When these factors are utilized appropriately, (responsibility, recognition, achievement, and learning) an effective workplace is characterized where employees are satisfied with their jobs. Herzberg (1982) attempted to differentiate what types of activities resulted in satisfaction of the worker and what types of activities resulted in worker dissatisfaction. These factors associated with job satisfaction or job satisfaction are separate continuums, not opposite ends of the same continuum (Herzberg, 1968).

Robert Blake and Jane Mouton, in their books *The Managerial Grid*, (1964) and *The Academic Administrator Grid*, (1981) identified management styles that result from the degree of concern for initiating structure (where the supervisor organizes and defines group activities and their relationship to the group) and consideration of staff (where the behaviors which indicate mutual trust, respect, and rapport are emphasized between the group and the supervisor). Hersey and Blanchard (1977) expanded on Blake and Mouton's work by stating that management styles are a result of concern for tasks and concern for relationships. They developed a theory called Situational Management Theory. This theory expanded upon the idea that in any given situation, depending on intervening variables, one style of management will be more effective than another. The task of the leader is to ascertain which style, or mixture of styles, best meets the situational variables present.
In essence, the managerial grid has provided a starting point for identification of managerial style. The five points found within the four quadrants postulated an attitudinal model that measured the managerial style predisposition of a leader (Flores, 1986). The Ohio State Leadership studies (as cited by Flores, 1986) concluded that high initiating structure (behavior in which the supervisor organized and defined group activities and their relation to the group) and high consideration (behaviors indicating mutual trust, respect, warmth, and rapport between supervisor and their group) were theoretically the best management style. Additional factors of management style have been researched extensively and began to include a broader range of leader behaviors including personality (Hersey & Blanchard, 1977).

A person's management style reflects that individual's basic motivation and need structures (Fiedler, 1967). Keirsey and Bates (1978) indicate that people are different from each other and that no amount of persuasion for them to change can effect a lasting change. They stated that:

People are different in fundamental ways. They want different things: they have different motives, purpose, aims, values, needs, drives, impulses, and urges. Nothing is more fundamental than that. They believe differently; they think, cognize, conceptualize, perceive, understand, comprehend and cogitate differently. And of course, manners of acting and emoting, governed as they are by wants and beliefs, follow suit and differ radically among people. (p. 2)

The ability to work with, and the manner in which a leader relates to others when handling conflicts and ambiguity, as well as the ability to work closely with others on a face-to-face basis, relates directly to one's style and personality (Keirsey & Bates, 1978).

Goodlad (1984) states that the guiding principle for effective schools is that the school must become largely self-directing. The people connected with the school must develop a capacity for effecting renewal and establish mechanisms for creating and
monitoring change. The principal's responsibility is to steer the course of renewal for all staff members within the school. Personal management style can influence the principal's ability to do this.

Motivation, as defined by Steers and Porter (1975), is a complex theoretical construct that includes: what energizes human behavior; what directs or channels such behavior; and how this behavior is maintained or sustained. Marshall Jones (1955) supports this by stating that motivation has to do with how behavior gets started, is energized, sustained, and directed. The various theories give a different perspective to potential implementation by an administrator at his site.

The past three decades have had an abundance of research related to effectiveness and successful schools. One recurring theme in effective schools is the role of the principal as the determiner of school success (Little, 1982; Leithwood & Montgomery, 1982). Principal effectiveness has been studied in great depth.

Neal Gross and Robert Herriott attempted to identify quantifiable measures of principal effectiveness as early as 1965. Data was gathered from principals, teachers, and higher education administrators and analyzed to determine whether the principal can have a significant effect on the school, and to determine the successful characteristics of management. Administrative management style was determined by Gross and Herriott (1965) to directly affect teacher morale and performance within a school.

Specific factors found by Gross and Herriott (1965) to influence management effectiveness were participative decision making, the level of support offered, and the principal-teacher relationships. Principal-teacher relationships were more positive in effective schools than in less effective schools. This stresses the importance of school
climate, staff relationships, and staff attitude at the building level (Austin, 1978; Brandt, 1981; Lonoff, 1971).

Presently, much of the literature on leader behavior in the schools can be classified as either effecting school climate or instructional organization (Leithwood and Montgomery, 1982; Brookover & Lezotte, 1979; and Edmonds, 1979). Both variables influence an effective principal and are influenced by an effective principal. There is a complex relationship between an effective principal, management style, school climate, and effective instructional programs (Stockard & Mayberry, 1992).

Effective principals work toward their goals by influencing classroom-based and school-wide factors. Effective principals work closely and regularly with teachers to identify instructional priorities. Outside of the classroom, an effective principal establishes a support system that reinforces positive classroom activities (Leithwood & Montgomery, 1982).

Motivation theories represent a variety of philosophies regarding the most effective process to encourage employees to work to their utmost potential. Theories on work have evolved from originally being a necessary act to earn money in order to survive, to a manner in which we define our uniqueness and self-worth as an individual (Herzberg, 1982).

Snyder and Anderson (1986) discuss, in their book Managing Productive Schools, the importance of an outsider manipulating events in such a way as to trigger, inspire, and stimulate behavior in a certain direction. Administrators must understand motivational constructs, ascertain situational applications, and utilize the knowledge in all facets of teacher-administrator interactions. Rosenbaum (1981) stated that the bottom line for
anyone managing people is knowing how to discourage undesirable behavior and encourage desirable behavior. He believed if a manager built up workers’ belief in themselves, the workers would be more productive. A school administrator must utilize these constructs to create an effective relationship with their teachers and to motivate the teachers to achieve their potential.

Dunn and Dunn (1977) utilized Blake and Mouton’s Managerial Grid as a basis to develop the School Administrator’s Management Style Inventory. The two primary variables that influence managerial styles were people and production (Blake & Mouton, 1964). Their grid was used to assess operational patterns and managerial styles of administrators. Administrative style can be measured on a continuous scale from collaboration to autocratic (Dunn & Dunn, 1977). Although individual administrators may utilize more than one style over a period of time, one administrative management style will prevail over time.

Summary of the Review of Literature

Cognitive Style

Everyone has a cognitive style. Cognitive styles are the unique characteristics of an individual’s functioning that are consistent across his perceptual and intellectual activities. Our style of learning, if accommodated, can result in improved attitudes toward learning and an increase in productivity, academic achievement, creativity, and job satisfaction (Griggs, 1991). One theoretical framework for accessing cognitive style on a personality dimension of acquiring and integrating information is Witkin’s (1954) construct of field dependence-field independence. Field dependence-field independence are variables which describe an individual’s way of functioning. Field dependent
individuals are reliant upon the perceptual field background or environment for their perceptions. A field dependent person has personality traits that make him dependent in interpersonal relationships. Field independent individuals are able to interpret their environment independent of context. A field independent personal has personality traits that are initiating, active, and independent in his interpersonal relationships.

One measure of cognitive style is the Group Embedded Figures Test by Witkin.

Job Satisfaction

Various studies of job satisfaction have found that satisfied employees perform at higher levels (Rinehart & Short, 1994). Job satisfaction has been defined to include a variety of factors which include psychological, physiological, and environmental characteristics. Maslow (1954) stated that lower needs of individuals must be met prior to the higher or growth needs. Locke (1983) found that both extrinsic and intrinsic sources of satisfaction influence an individual’s job satisfaction. Teachers are primarily motivated by intrinsic rewards such as self-respect, responsibility, and a sense of accomplishment. Administrators can boost morale and increase teacher’s job satisfaction by use of participatory governance, inservice education, supportive communication, feedback, and evaluations (Ellis, 1984). High internal motivation and job satisfaction occur when teachers experience meaningfulness, responsibility for outcomes, and student achievement (Sergiovanni, 1984).

Studies conducted by Metropolitan Life Insurance Company found that 96% of former teachers were satisfied with their new professions, while only 47% were satisfied with teaching. This research also found that 58% claimed that they missed teaching, but 83% said it is unlikely that they would ever return (Fisher, 1986).
Teachers strive for a sense of efficacy of psychological success in their work. By doing so, teachers gain self-esteem, a feeling that they have performed competently in a worthwhile endeavor. Teachers seek a satisfying career and want to experience a sense of achievement and accomplishment during the course of their work (McLaughlin & Yee, 1988). The benchmarks of a satisfying career are high professional involvement and a sense of success (Yee, 1990). Paula Lester surveyed the various job satisfaction instruments and created the Teacher Job Satisfaction Inventory to assess nine variables related to job satisfaction.

Management Style

Many management theorists have hypothesized that there are at least two fundamental and distinct categories of management behaviors. One is concerned with people and interpersonal relations and the other is concerned with production and task achievement (Cheng, 1991). Different degrees of emphasis on the dimensions of management form different management styles. If principals emphasize task achievement and neglect human relations, their management style is described as mainly task oriented. Task management style stresses things such as task completion, finances, student achievement, and programs. If principals emphasize human relations, their management style is described as predominantly relationship oriented. Relationship management style stresses mutual trust, respect, warmth, and interest in the relationships between the leader and members of the group, as well as perceptions of friendship. Dunn and Dunn, (1977) utilized information from various management theories and devised the School Administrators Management Style Inventory to ascertain a predominate administrative management style over time.
Summary

In summary, the complex interplay between an individual teacher's cognitive style and job satisfaction and a school administrator's management style have been hypothesized, but not studied. This study attempted to identify the relationship between the variables of teacher cognitive style and teacher job satisfaction, moderated by administrator management style. This information would be useful to current and future administrators in order to maximize supervisory interactions to reach common goals of student achievement, as well as teacher job satisfaction.
CHAPTER 3
RESEARCH METHODOLOGY

Introduction

The purpose of this study was to examine the relationship between teacher cognitive style and teacher job satisfaction, moderated by administrative management style for the state of Nevada. The relationships were measured using Group Embedded Figures Test (Oltman, Raskin, Witkin, 1971), the Teacher Job Satisfaction Questionnaire (Lester, 1982) (See Appendix 1) and the School Administrator's Management Style Inventory (Dunn and Dunn, 1971) (See Appendix 1).

Selection of Subjects

The subjects in this study were full contract teachers from kindergarten through sixth grade elementary schools in the state of Nevada. The elementary schools were randomly selected from schools which have a full-time, Nevada-licensed, principal on site. The principals of the elementary schools were given the School Administrator's Management Style Inventory by Rita Dunn and Kenneth Dunn (1971). This instrument identified an administrator's management style as one of the following: collaborative, cooperative, participative, bureaucratic, laissez-faire, benevolent despot, or autocratic. The schools in the study were selected by their administrator's response to the initial survey on administrative management style, to ensure representation of various administrative management styles within the study.
survey on administrative management style, to ensure representation of various administrative management styles within the study.

The number of identified subjects was dependent on the final selection of principals with varied administrative management styles from the different elementary schools. The group of teachers consisted of a cross section of elementary school teachers from kindergarten through sixth grade within the state of Nevada. Of the targeted 119 elementary school teachers surveyed, 19 (16%) of the teachers were male and 100 (84%) of the teachers were female. The grade level gender breakdowns match what is common in the state of Nevada. The higher the grade level, moving from primary to intermediate, the greater the number of male teachers. Additionally, a cross section of both rural and urban schools was selected to ensure representation within the study. Of the respondents, 61 (51%) were from rural schools and 58 (49%) were from urban schools.

Data Collection Procedures

Instrumentation

The purpose of the research was to examine the relationship between teacher cognitive style and teacher job satisfaction, moderated by administrative management style. Prior to the onset of the study, the questionnaires were submitted to the Social Behavioral Committee of the Institutional Review Board at the University of Nevada, Las Vegas. Additionally, phone calls and follow-up letters soliciting cooperation from the school superintendents of the various school districts within the state of Nevada were sent out. After the study was approved by this committee, a cover letter was sent along with the initial questionnaire, the School Administrators Management Style Inventory, to the selected Nevada elementary schools. After these have been returned and scored, the
elementary schools were selected. Teachers were then randomly selected from the individual school's staff lists, taken from the Nevada Directory of Licensed Personnel. They were asked to complete the Group Embedded Figures Test and the Teacher Job Satisfaction Questionnaire. A short inquiry concerning demographics of the teacher and self-addressed, stamped, return envelopes was included.

**Group Embedded Figures Test**

A variety of assessment instruments are available to determine cognitive style in the area of field dependence and field independence. The Group Embedded Figures Test (GEFT) was selected because it allows for ease of testing in either a group or individual situation. It is a non-language based test that is modeled after the individually administered Embedded Figures Test.

The Group Embedded Figures Test (GEFT) has been used in a variety of studies (Witkin et al. 1962, Witkin et al. 1977, Witkin et al., 1981, Goodenough, 1978). It was constructed to emulate the Embedded Figures Test, but it allows for group testing to take place. The instrument was developed by Philip Oltman, Evelyn Raskin, and Herman Witkin (1971). The GEFT contains three sections. The first section contains seven very simple items and is primarily for practice. The second and third sections each contain nine items of more difficulty.

Items selected for the GEFT were based on an item-analysis study done by Witkin (Witkin et al., 1971). The following steps were taken: Items were prepared, 75% came from the original full-length Embedded Figures Test and eight were from other Gottschaldt figures. Light shading was used in the GEFT to replace colored sections in
the original Embedded Figures Test designs and shading was added to parts of the Gottschaldt figures.

Reliability

Correlation coefficients were obtained for each of the 16 items of each form of the GEFT against: 1) total score on the form; 2) scores on the individual Embedded Figures Test counterpart; and 3) scores on the Rod and Frame Test (RFT) and portable RFT. On the basis of the item analyses, 20 items were selected which yielded positive correlations with all three of the criterion measures. Items that were confusing or difficult to score were eliminated from the tests (Witkin et al., 1971).

The norms available for the Group Embedded Figures Tests are based on men and women college students from an eastern college and are listed below in Table 2.

<table>
<thead>
<tr>
<th>Quartiles</th>
<th>Number Correct: Group Embedded Figures Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Men: 0-9; Women: 0-8</td>
</tr>
<tr>
<td>2</td>
<td>Men: 10-12; Women: 9-11</td>
</tr>
<tr>
<td>3</td>
<td>Men: 13-15; Women: 12-14</td>
</tr>
<tr>
<td>4</td>
<td>Men: 16-18; Women: 15-18</td>
</tr>
</tbody>
</table>

| N         | Men: 155; Women: 242                      |
| Mean      | Men: 12.0; Women: 10.8                    |
| S.D.      | Men: 4.1; Women: 4.2                      |

Note: Men performed slightly but significantly better than women (p<.005).

Several measures of validity on the GEFT have been completed (Witkin et al., 1971). The test was originally intended as a group form of the Embedded Figures Tests, and the most direct criterion measure is from this form of the test. The correlations are reported in Table 3.
Another measure for evaluating GEFT validity is the Rod-and-Frame Test (Witkin et al., 1981). A group of subjects taking the GEFT was subsequently tested on the RFT and administered with a portable Rod-and-Frame Test (PRFT). Each subject's score was the absolute size of the errors summed over eight trials. The correlations are reported in Table 3.

<table>
<thead>
<tr>
<th>Population</th>
<th>N</th>
<th>Criterion Variable</th>
<th>r with GEFT Score*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Undergraduates</td>
<td>73</td>
<td>Individual EFT, solution time</td>
<td>-0.82</td>
</tr>
<tr>
<td>Female Undergraduates</td>
<td>68</td>
<td>Individual EFT, solution time</td>
<td>-0.63</td>
</tr>
<tr>
<td>Male Undergraduates</td>
<td>55</td>
<td>PRFT, error</td>
<td>-0.39</td>
</tr>
<tr>
<td>Female Undergraduates</td>
<td>69</td>
<td>PRFT, error</td>
<td>-0.34</td>
</tr>
</tbody>
</table>

Note: * r's with the EFT or the PRFT should be negative because the tests are scored in reverse fashion.


Scoring for the Group Embedded Figures Test is the total number for simple forms correctly traced in the Second and Third Sections combined. Any items incomplete or not attempted are scored as incorrect.

Teacher Job Satisfaction Questionnaire

For the purpose of this study, various job satisfaction instruments were examined for format, style, and content. The Teacher Job Satisfaction Questionnaire (TJSQ) was best suited for the variables in this study. The TJSQ is a survey divided into nine subscales, all of which will be utilized in the study. The nine subscales are: supervision, colleagues, working conditions, pay, responsibility, work itself, advancement, security,
and recognition. The TJSQ utilizes a five point Likert scale with 1 as Strongly Disagree and 5 as Strongly Agree. The range for each individual item is one to five and the potential range for the entire TJSQ would be 50 to 250. (see Appendix 1).

The TJSQ has been utilized in a variety of studies (Coates, 1992; Ford, 1987; Raisnai, 1988; & Rauch, 1990). It was constructed to fulfill a need for a job satisfaction instrument that was developed specifically for use in various education settings. After reviewing a number of instruments used in the private business sector, Paula Lester developed this instrument for her doctoral dissertation in 1982. The full TJSQ consists of 66 items: 14 items on supervision; 10 items on colleagues; 7 items on working conditions; 7 items on pay; 8 items on responsibility; 9 items on work itself; 5 items on advancement; 3 items on security; and 3 items on recognition. Items were selected, worded, and edited to utilize language that was familiar and appropriate to teachers in an educational setting. After form and content were decided, one specific piece of information was requested in each statement. Words that had double meanings, were emotionally loaded, or vaguely defined were eliminated, resulting in clear, concise statements of no more that 20 words. Approximately 50% of the items were written in a positive form and 50% of the items were written in a negative form to eliminate response-set bias.

Reliability

Tests of reliability were run for the total TJSQ test and for each of the nine subscales (Lester, 1982). The internal consistency of TJSQ was determined through computation of an Alpha coefficient by Dr. Lester. The total scale Alpha for the original
sample was .93. The original scale coefficients range from .74 (recognition) to .92 (supervision) (See Appendix 1) (Lester, 1982).

Reliability was run for the Teacher Job Satisfaction Questionnaire with in the state of Nevada. Table 4 indicates the coefficients of Internal Consistency of the Teacher Job Satisfaction Questionnaire for the state of Nevada in this study.

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Raw Score Range</th>
<th>Number Of Items</th>
<th>Mean</th>
<th>SD</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td>14-70</td>
<td>14</td>
<td>51.58</td>
<td>10.93</td>
<td>.93</td>
</tr>
<tr>
<td>Colleagues</td>
<td>10-50</td>
<td>10</td>
<td>38.90</td>
<td>5.71</td>
<td>.83</td>
</tr>
<tr>
<td>Work Cond.</td>
<td>7-35</td>
<td>7</td>
<td>25.05</td>
<td>4.63</td>
<td>.74</td>
</tr>
<tr>
<td>Pay</td>
<td>7-35</td>
<td>7</td>
<td>21.98</td>
<td>4.61</td>
<td>.79</td>
</tr>
<tr>
<td>Respons.</td>
<td>8-40</td>
<td>8</td>
<td>35.79</td>
<td>3.28</td>
<td>.64</td>
</tr>
<tr>
<td>Work Itself</td>
<td>9-45</td>
<td>9</td>
<td>37.37</td>
<td>4.69</td>
<td>.73</td>
</tr>
<tr>
<td>Advance</td>
<td>5-25</td>
<td>5</td>
<td>16.16</td>
<td>3.93</td>
<td>.83</td>
</tr>
<tr>
<td>Security</td>
<td>3-15</td>
<td>3</td>
<td>12.66</td>
<td>1.96</td>
<td>.54</td>
</tr>
<tr>
<td>Recognition</td>
<td>3-15</td>
<td>3</td>
<td>10.23</td>
<td>2.56</td>
<td>.73</td>
</tr>
</tbody>
</table>

Note: SD=Standard Deviation  Work Cond.=Working Conditions  Respons.=Responsibility  Advance=Advancement  N=119

The majority of the subscales had almost identical alphas in the state of Nevada with Dr. Lester’s original subscale scores with the exception of the following subscales: Working conditions originally had .83 and currently has .74; responsibility originally had .73 and currently has .64; work itself originally had .82 and currently has .73; and security originally had .71 and currently has .54.
Validity

Content Validity. A representational sample of items was generated from the literature on job satisfaction by Paula Lester (1982). The content of the instrument was examined by several experts in the field and the instrument was evaluated in terms of instructions, ordering of items, and the selection of items (Lester, 1982).

Dr. Lester accomplished initial content validation through a modified Q sort by faculty and graduate students, items with less than 80% agreement were either rewritten or rejected. Items were evaluated by length, intelligibility, and content specificity in an educational setting (Lester, 1982).

Criterion Validity. Criterion validity was not obtained, as there were no pre-existing instruments to measure teacher job satisfaction in education. A known groups technique was utilized on preexisting instruments on job satisfaction (Lester, 1982).

Construct Validity. Factor analysis was utilized to discover clusters of related variables and determine construct validity. The final questionnaire is composed of 66 items.

The scoring of the Teacher Job Satisfaction Questionnaire requires recoding of selected answers and then a mean score and standard deviations calculated for each of the nine factors on the TJSQ.

Administrative Management Style

There has been no formal research done on the School Administrator's Management Style Inventory by Dunn and Dunn (1977). This inventory has been designed based on the theoretically constructs from Blake-Mouton's Managerial Grid (Blake & Mouton, 1964). Blake and Mouton's Managerial Grid was designed to assess operational patterns and managerial styles of administrators. An analysis of leadership
behavior was undertaken by Blake and Mouton (1964) which emphasized concern for people and concern for product. Blake and Mouton (1981) make it clear that a high concern for people and a high concern for production is the leadership behavior pattern likely to be the most effective, in most organizations, in order to achieve the best results. Owens (1987) states that an optimum leader demonstrates the effectiveness of an organization when achieving the organization's goals while maintaining a high level of morale.

Dunn and Dunn (1977) took statements from Blake and Mouton's work and utilized them to develop the School Administrator’s Management Style Inventory. They utilized descriptive statements for each managerial style, from Blake and Mouton's research in order to categorize and quantify an administrator’s predominate managerial style.

No empirical research had been completed regarding the validity or reliability of the instrument prior to this study. A test of reliability was run for the School Administrator’s Management Style Inventory. The internal consistency of the School Administrator’s Management Style Inventory was determined through computation of an Alpha coefficient. The total scale Alpha for the sample was -.10.32.

Using the School Administrator's Management Style Inventory Scoring Key, answers will be placed in the appropriate spaces and columns totaled. The lowest score is the one the represents the primary administrative style.

**Administration of the Instruments**

Approval for this study was obtained from the Office of Research Administration on January 23, 1997 (See Appendix 3). In the spring of 1997, each selected elementary
administrator was sent a packet that contained a cover letter which asked for the completion of the enclosed School Administrator's Management Style Inventory and included a self-addressed and stamped return envelope. After three weeks and six weeks, a postcard reminder was sent to all subjects (See Appendix 2). By the end of six weeks, 37 surveys were returned for a return response rate of 50%. Of the 37 surveys returned, 29 or 39% were completed correctly and were able to be used for purposes of this study.

In the spring of 1997, each teacher in the selected elementary schools was sent a packet which contained a cover letter explaining the study, a copy of the Group Embedded Figures Test, a copy of the Teacher Job Satisfaction Questionnaire, a short demographics questionnaire, and a stamped return envelope addressed to the researcher. Packets were coded to staff lists to assist in monitoring the return of all instruments.

It was expected that a percentage of the elementary school teachers' initial surveys would not be returned, and a follow-up mailing was sent three weeks later. A final mailing occurred three weeks after the second mailing.

Respondents were assured of confidentiality on the Teacher Job Satisfaction Questionnaire in the cover letter. Upon completion of the dissertation, results will be sent to all participants who requested a copy.

Analysis of Collected Data

The purpose of this study was to determine whether a relationship existed between teacher cognitive style and teacher job satisfaction, as moderated by administrative management style. The study utilized an ex-post-facto design, defined by Kerlinger (1973) as:

Ex-post-facto research is systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have
already occurred or they are inherently not manipulable. Inferences among variables are made, without direct intervention from concomitant variation of independent and dependent variables (p. 379).

The statistical analyses being utilized in this study included:

1. Field dependence-field independence was correlated with teacher job satisfaction subscale scores, administrative management style, rural/urban location, and gender. Pearson product-moment correlations were used to determine if significant relationships existed regarding these variables.

2. A multiple regression analysis was utilized to demonstrate how the analysis would have been conducted if significant relationships existed between teachers cognitive style (field dependence-field independence), the teacher job satisfaction subscales, administrative management style, rural/urban location and gender.

3. The reliability and validity of Lester's Teacher Job Satisfaction Questionnaire was studied for the state of Nevada.

The criterion of significance was set at a .05 level.
CHAPTER 4

RESULTS

The results of the data analyses are presented in this chapter. The first section describes the study sample. The second section presents the findings related to the research questions. The third section investigates other variables and their relationships to teacher job satisfaction. The chapter concludes with a summary of the findings.

The Sample

Of the 289 teachers surveyed in the state of Nevada, 129 (44%) of the questionnaires were returned, 10 were unusable, leaving 119 (41%) usable surveys. A demographic analysis of the group of teachers can be found in Table 4. Of the initial 74 principals surveyed in the state of Nevada, 37 (50%) of the questionnaires were returned, 8 were unusable, leaving 29 (39%) usable surveys. A demographic analysis of the group of principals can be found in Table 6. These return rates were the result of initial mailings, follow-up postcards sent out two weeks later, and a second follow-up postcard sent six weeks after the initial mailing. All mailings were sent to the teachers' school and confidentiality was strictly maintained.

Description of the Teachers

There were 119 total teachers in the final analysis. There were 100 female teachers (84%) and 19 male teachers (16%). The rural schools (51%) were represented
Description of the Teachers

There were 119 total teachers in the final analysis. There were 100 female teachers (84%) and 19 male teachers (16%). The rural schools (51%) were represented by 49 female teachers (41%) and 12 male teachers (10%). The urban schools (49%) were represented by 51 female teachers (43%) and 7 male teachers (6%). (See Table 4)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>49</td>
<td>12</td>
<td>61</td>
</tr>
<tr>
<td>Urban</td>
<td>51</td>
<td>7</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>19</td>
<td>119</td>
</tr>
</tbody>
</table>

The teachers ranged in experience from 1 year to 38 years, with an average of 14 years of experience. (See Table 14) The average number of students per school was 519, with a range of 130-900 students in the elementary schools surveyed. (See Table 15) Teacher’s educational background in this study ranged from a Bachelor’s Degree to a Doctorate, with the average degree being a Bachelor’s Degree plus 32 credits. (See Table 16)

Description of the Principals

There were 29 elementary school principals in the final analysis. There were 15 (52%) rural elementary school principals and 14 (48%) urban elementary school principals. No additional demographic information was requested of the principals.
Research Questions

The primary research question was, "Is there a relationship between teacher cognitive style and teacher job satisfaction?" The primary research question was moderated by the administrator’s management style. Additional research questions were:

1. What is the relationship between teacher job satisfaction and administrative management style?
2. What is the relationship between male and female teachers’ cognitive style, teacher job satisfaction, and administrative management style?
3. What is the relationship between teacher cognitive style and teacher job satisfaction, moderated by administrative management style between a large urban Nevada school district and rural Nevada school districts?

Statistical Analyses

Analysis of Research Questions

Upon the return of the data, the Group Embedded Figures test was scored for each individual. Each teacher received a score between 0 and 18, with 0 indicating a field dependent person and 18 indicating a field independent person. For the purposes of this study, scores were used in their raw form in order to capture all of the variance in the data. See Table 5 for the frequencies of teacher responses to the Group Embedded Figures Test.
Table 5
Frequency Responses by Teachers
On the Group Embedded Figures Test

<table>
<thead>
<tr>
<th>Number Correct</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>5.9</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>12</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
<td>10.1</td>
</tr>
<tr>
<td>14</td>
<td>11</td>
<td>9.2</td>
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<td>15</td>
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<td>10.9</td>
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<td>16</td>
<td>12</td>
<td>10.1</td>
</tr>
<tr>
<td>17</td>
<td>20</td>
<td>16.8</td>
</tr>
<tr>
<td>18</td>
<td>13</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Note: N=119
Note: Field Dependent =0, Field Independent =18

As can be seen in Table 5, the teacher scores on the Group Embedded Figures are not normally distributed. The scores indicate a predominately homogeneous group of field independent teachers. Witkin’s study (1971) indicated that male college students averaged 12 correct answers and female college students averaged 11 correct answers on the Group Embedded Figures Test. Any answer of 11 or greater indicated a Field Independent person on Witkin’s 1971 study. In this study, if the variables had been
scored categorically. 27 individuals (22.6%) would be considered Field Dependent and 92 individuals (77.3%) would be considered Field Independent.

Prior to the statistical analysis, a number of the questions on the Teacher Job Satisfaction Inventory were recoded. Those items were recoded to eliminate negatively worded questions. Those items were 4, 5, 6, 7, 8, 9, 11, 16, 21, 23, 24, 26, 27, 29, 30, 35, 37, 41, 43, 44, 45, 47, 48, 49, 52, 56, 57, 63, and 66. Items that were recoded were originally scored 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree, and 5 = strongly agree. The recoding process changed the meaning of the responses given to indicate 1 = strongly agree; 2 = agree; 3 = neutral; 4 = disagree, and 5 = strongly disagree. As a result of the recoding, all items were coded to show that a low score on the Likert scale indicated dissatisfaction on a specific variable on the job satisfaction category being measured, while a high score indicated satisfaction regarding the job satisfaction category being measured.

Prior to the initial teacher mailings of the Group Embedded Figures Test and the Teacher Job Satisfaction Questionnaire to teachers, the principals surveyed were mailed a copy of the School Administrators Management Style Inventory. Initially all of the returned surveys were scored to determine individual administrator's management style. Administrators were asked to rate seven statements within a group, in rank order, to ascertain which statements represented their management style the most. Statements were written by Dunn and Dunn (1977) to determine a principals' ranking in the following four areas: 1) Operation, Management and Control; 2) Handbooks and Written Regulations; 3) Crisis Reaction; and 4) Planning. One statement was written in each of these areas to correspond to the various administrative leadership styles.
Collaboration; Cooperative; Participative; Bureaucratic; Laissez-Faire; Benevolent Despot; and Autocratic. Of the surveys received from the principals, only four leadership styles were represented. The four styles were Collaboration: Cooperative; Bureaucratic; and Benevolent Despot. Administrator’s management styles were grouped according to rural and urban schools.

Of the 119 usable responses from teachers on the Teacher Job Satisfaction Questionnaire, 76 (64%) teacher responses had Collaborative principals; 11 (9%) teacher responses had Cooperative principals; 6 (5%) teacher responses had Bureaucratic principals; and 26 (21%) teacher responses had Benevolent Despot principals (See Table 6).

<table>
<thead>
<tr>
<th>Administrative Management Style</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative</td>
<td>76</td>
<td>63.9</td>
</tr>
<tr>
<td>Cooperative</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>Bureaucratic</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td>Benevolent-Despot</td>
<td>26</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Note: N=119

There has been no previous research conducted utilizing the Administrative Management Style Survey. The results of this study indicate that the majority of principals responding to this study in the state of Nevada are Collaborative (63.9%). The second most frequently occurring administrative management style in Nevada was the Benevolent Despot (21.8%). The third most frequently occurring administrative
management style in Nevada was the Cooperative style (9.2%). The least frequent administrative management style occurring in this study was the Bureaucratic (5.0%). There were three types of administrative management style that were not represented in the data for the state of Nevada. These administrative management styles were Participative, Laissez-Faire, and Autocratic.

One interesting finding in this study was the representation of administrative management styles in the rural versus urban setting. The rural schools were only represented by two administrative management styles. The Benevolent Despot administrative management style had 17 teacher responses (14.3%) and the Collaborative administrative management style had 44 teacher responses (36.9%). The urban schools were represented by four administrative management styles. The Benevolent Despot administrative management style had 9 teacher responses (7.56%). Collaborative administrative management style had 32 teacher responses (26.9%), Bureaucratic administrative management style had 6 teacher responses (5.0%), and the Cooperative administrative management style had 11 teacher responses (9.2%).

If the answers were sorted by gender and administrative style, an interesting pattern appears. Female teachers had administrators who represented three administrative management styles. The first, Benevolent Despot administrative management style had 20 teacher responses (16.8%), the Collaborative administrative management style had 64 teacher responses (53.8%), the Bureaucratic administrative management style had 5 teacher responses (4.2%), and the Cooperative administrative management style had 11 teacher responses (9.24%). The male teachers had only three administrative management styles represented. The Benevolent Despot administrative
management style had 6 teacher responses (5.04%). The Collaborative administrative management style had 12 teacher responses (10.1%) and the Bureaucratic administrative management style had 1 teacher response (.84%).

As can be seen in Table 7, if the data was further sorted by rural and urban locations, administrative style, cognitive style (field dependent and field independent), and gender, the data were attenuated.
<table>
<thead>
<tr>
<th>Rural/Urban Location</th>
<th>Admin. Management Style</th>
<th>Cognitive Style</th>
<th>Gender</th>
<th>N=</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>Benevolent Despot</td>
<td>Field Dependent</td>
<td>Female</td>
<td>6</td>
<td>5.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>1</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>7</td>
<td>5.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Field Independent</td>
<td>Male</td>
<td>3</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Field Independent</td>
<td>Female</td>
<td>27</td>
<td>22.68</td>
</tr>
<tr>
<td></td>
<td>Collabor.</td>
<td>Field Dependent</td>
<td>Female</td>
<td>9</td>
<td>7.56</td>
</tr>
<tr>
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<td></td>
<td>Male</td>
<td>2</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Field Independent</td>
<td>Female</td>
<td>27</td>
<td>22.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>6</td>
<td>5.04</td>
</tr>
<tr>
<td>Urban</td>
<td>Benevolent Despot</td>
<td>Field Dependent</td>
<td>Female</td>
<td>1</td>
<td>.84</td>
</tr>
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<td></td>
<td></td>
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<td>.84</td>
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<td>.84</td>
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<td>3.36</td>
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<tr>
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<td></td>
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<td>2.52</td>
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<tr>
<td></td>
<td>Bureaucratic</td>
<td>Field Dependent</td>
<td>Female</td>
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<td>2.52</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>1.68</td>
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</table>

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Table 7 cont.

Teacher Count by Rural/Urban, Administrative Management Style, Cognitive Style, and Gender

<table>
<thead>
<tr>
<th>Rural/Urban Location</th>
<th>Admin. Management Style</th>
<th>Cognitive Style</th>
<th>Gender</th>
<th>N=</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>Bureaucratic</td>
<td>Field Independent</td>
<td>Male</td>
<td>1</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>Cooperative</td>
<td>Field Independent</td>
<td>Female</td>
<td>2</td>
<td>1.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Field Dependent</td>
<td>Female</td>
<td>9</td>
<td>7.56</td>
</tr>
</tbody>
</table>

Note: Total N=119  Collabor.=Collaborative

As can be seen from Table 7, the majority of responses were homogeneous in nature. Predominately female teachers, from both the rural and urban locations, who were field independent responded to the surveys. This group constituted 42.88% of the total responses received.

The data analyzed for this study were primarily in the form of correlation coefficients. The size of the correlation coefficient indicated the degree of relationship between the variables (Borg & Gall, 1979). A low correlation indicates a low relationship regardless of the level of significance used. Since the purpose of a relationship study is to gain a better understanding of the complex interplay of behavior patterns or skills being studied, low correlation coefficients gave useful information in addition to high correlation coefficients. Low correlational coefficients indicate a negligible, or low relationship between the variables being studied.

The following rules outlined by Borg and Gall (1979) are appropriate for most types of educational research to provide guidelines for interpreting correlation coefficients obtained in relationship and prediction research.
Correlations ranging from 0.20 to 0.35, or with a variance ranging from 0.004 to 0.1225 would indicate a very slight relationship between the variables. Correlations in this range are of limited meaning in exploratory research, but are of little value in prediction.

Correlations ranging from 0.35 to 0.65 or with a variance ranging from 0.1225 to 0.4225 would be statistically significant beyond the one percent level. With correlations around 0.50, or variance around 0.250, crude group predictions were possible. Correlations within this range were useful when combined with other correlations in a multiple-regression equation.

Correlations ranging from 0.65 to 0.85, or with a variance ranging from 0.4225 to 0.7225, group predictions would be possible that were accurate enough for most educational purposes.

Correlations ranging from 0.85 to 1.00, or with a variance ranging from 0.7225 to 1.00 indicate a very close relationship between the variables studied. Prediction studies in education very rarely obtain correlations this high.

The magnitude or level of practical significance needed to determine if a substantial relationship existed between the variables in this study was 0.60 or variance of 0.36.

An additional statistical analysis used on the returned data was multiple regression.

The first research question was: "Is there a relationship between teacher cognitive style and teacher job satisfaction?" When comparing the correlation's between teacher cognitive style and subscales of teacher job satisfaction, a relationship does not seem to be apparent, as shown in Table 8, thereby indicating no relationship in this study.
Table 8  
Correlations between Teacher Cognitive Style, Teacher Job Satisfaction, and Administrative Management Style

<table>
<thead>
<tr>
<th></th>
<th>ADVAN</th>
<th>COLL</th>
<th>COND</th>
<th>PAY</th>
<th>RECOG</th>
<th>RESP</th>
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</thead>
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<td>.173</td>
<td>.345</td>
<td>.413</td>
<td>.266</td>
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<td></td>
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<td>P=.060</td>
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<td>.516</td>
<td>.427</td>
</tr>
<tr>
<td></td>
<td>P=.002</td>
<td></td>
<td>P=.000</td>
<td></td>
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<td>P=.000</td>
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<td>.411</td>
<td>.282</td>
</tr>
<tr>
<td></td>
<td>P=.060</td>
<td>P=.000</td>
<td></td>
<td>P=.012</td>
<td>P=.000</td>
<td>P=.002</td>
</tr>
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<td>1.00</td>
<td>.146</td>
<td>.227</td>
</tr>
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<td></td>
<td>P=.000</td>
<td>P=.042</td>
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<td></td>
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<td>P=.013</td>
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</tr>
<tr>
<td>RESP</td>
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<td>.282</td>
<td>.227</td>
<td>.185</td>
<td>1.00</td>
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<tr>
<td></td>
<td>P=.003</td>
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<tr>
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<td>.499</td>
</tr>
<tr>
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<td>P=.000</td>
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<td>.711</td>
<td>.202</td>
<td>.678</td>
<td>.250</td>
</tr>
<tr>
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<td>P=.006</td>
<td>P=.000</td>
<td>P=.000</td>
<td>P=.028</td>
<td>P=.000</td>
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<tr>
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<td>.637</td>
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<tr>
<td></td>
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<td>P=.000</td>
<td>P=.173</td>
<td>P=.000</td>
<td>P=.000</td>
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<td>STYLE</td>
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<td>.026</td>
<td>.038</td>
<td>.031</td>
<td>.049</td>
<td>.059</td>
</tr>
<tr>
<td></td>
<td>P=.055</td>
<td>P=.779</td>
<td>P=.678</td>
<td>P=.734</td>
<td>P=.597</td>
<td>P=.525</td>
</tr>
</tbody>
</table>

Note: Advan=Advancement  Coll=Colleagues  Cond=Working Conditions  
Recog=Recognition  Resp=Responsibility  Secur=Security  Work=Work Itself  
Style=Cognitive Style

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Table 8 cont.
Correlations between Teacher Cognitive Style, Teacher Job Satisfaction, and Administrative Management Style

<table>
<thead>
<tr>
<th></th>
<th>SECUR</th>
<th>SUPER</th>
<th>WORK</th>
<th>STYLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVAN</td>
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<td>P=.029</td>
<td>P=.006</td>
<td>P=.001</td>
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<tr>
<td>COLL</td>
<td>.329</td>
<td>.450</td>
<td>.534</td>
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<tr>
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<td>P=.779</td>
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<tr>
<td>COND</td>
<td>.417</td>
<td>.711</td>
<td>.500</td>
<td>.038</td>
</tr>
<tr>
<td></td>
<td>P=.000</td>
<td>P=.000</td>
<td>P=.000</td>
<td>P=.678</td>
</tr>
<tr>
<td>PAY</td>
<td>.153</td>
<td>.202</td>
<td>.126</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>P=.096</td>
<td>P=.028</td>
<td>P=.173</td>
<td>P=.734</td>
</tr>
<tr>
<td>RECOG</td>
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<td>.678</td>
<td>.371</td>
<td>.049</td>
</tr>
<tr>
<td></td>
<td>P=.030</td>
<td>P=.000</td>
<td>P=.000</td>
<td>P=.597</td>
</tr>
<tr>
<td>RESP</td>
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<td>.250</td>
<td>.637</td>
<td>.059</td>
</tr>
<tr>
<td></td>
<td>P=.000</td>
<td>P=.006</td>
<td>P=.000</td>
<td>P=.525</td>
</tr>
<tr>
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<td>.072</td>
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<tr>
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<td>1.00</td>
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<td>.022</td>
</tr>
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<td></td>
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<td>P=.809</td>
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<tr>
<td>WORK</td>
<td>.470</td>
<td>.455</td>
<td>1.00</td>
<td>.173</td>
</tr>
<tr>
<td></td>
<td>P=.000</td>
<td>P=.000</td>
<td>P=.000</td>
<td>P=.060</td>
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<tr>
<td>STYLE</td>
<td>.072</td>
<td>.022</td>
<td>.173</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>P=.439</td>
<td>P=.809</td>
<td>P=.060</td>
<td></td>
</tr>
</tbody>
</table>

Note: Advan=Advancement Coll=Colleagues Cond=Working Conditions Recog=Recognition Resp=Responsibility Secur=Security Work=Work Itself Style=Cognitive Style

There was a positive relationship between the dependent variables of job satisfaction. Some of the positive relationships were seen between: advancement and colleagues (.287); advancement and pay (.345); advancement and recognition (.413); and advancement and work (.299). Positive relationships were seen between colleagues and
working conditions (.492); colleagues and recognition (.516); colleagues and responsibility (.427); colleagues and security (.329); colleagues and supervision (.450); colleagues and work itself (.534); working conditions and recognition (.411); working conditions and responsibility (.282); working conditions and security (.417); working conditions and supervision (.711); working conditions and work itself (.500); recognition and supervision (.678); recognition and work itself (.371); responsibility and security (.499); responsibility and work itself (.637); security and work itself (.470); and supervision and work itself (.455). In each of these dependent variables, as one characteristic of job satisfaction increased, the other characteristic of job satisfaction also increased. For example, as teachers became more satisfied with their relationship with their supervisor, an increase was seen in their satisfaction and feelings of job security.

There were no significant relationships between the dependent variables and the independent variables. There was a relationship between the independent variables of administrative management style and rural or urban location (.379) which accounted for 14% of the variance.

The data clearly indicate that the only relationship which could require a detailed analysis would be between administrative management style and rural or urban location, due to the amount of variance accounted for. All other dependent and independent variables account for only minor variances in the data.

Multiple Regression

If the results had contained a heterogeneous set of data, separate multiple regressions would have been run for each of the research questions. In each case, the teacher job satisfaction subscale would have been the dependent variable and the
independent variables entered would have been teacher cognitive style, rural or urban location, teacher gender, and administrative management style. Based on the results of the correlation coefficient, the dependent variables of advancement, colleagues, working conditions, pay, recognition, security supervision, and work were not entered into the multiple regression. The variables would have been entered in the multiple regression using a stepwise method.

If the data had shown significant correlations and the variances between the dependent variables and the independent variables were significant, an analysis using multiple regression would have been used. On Table 9, an example of multiple regression, using the dependent variable of responsibility was run. This variable accounted for the largest amount of variance. Entered into the multiple regression formula were the independent variables of cognitive style, rural or urban location, gender and administrative style. The following result would have been obtained:

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE</th>
<th>MULT R</th>
<th>R SQUARE</th>
<th>SIGNIF F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cognitive Style</td>
<td>.059</td>
<td>.003</td>
<td>.407</td>
</tr>
<tr>
<td>2</td>
<td>Rural/Urban</td>
<td>.010</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
<td>-.224</td>
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</tr>
<tr>
<td>4</td>
<td>Adm. Style</td>
<td>-.003</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: Mult R=Multiple R. Signif F=Significant F Adm. Style= Administrative Management Style

Cognitive style, the first variable entered (See Table 9), accounted for none of the total variance on the teacher job satisfaction dependent variable of responsibility. The
other variables of rural or urban location, and administrative management style accounted for none of the variance. The variable of gender accounted for 5% of the variance.

The first research question on the dependent variable of responsibility on the teacher job satisfaction questionnaire, teacher cognitive style, teacher location, nor administrative management style accounted for any of the variance. The variable of teacher gender accounted for 5% of the total variance.

The results of the correlation coefficient and multiple regression were used to address the research questions. The second research question was: “What is the relationship between teacher cognitive style and teacher job satisfaction, moderated by the administrator’s management style?” Based on the results, there was no relationship found between teacher cognitive style and teacher job satisfaction. There was no relationship found between teacher cognitive style and teacher job satisfaction, as moderated by administrative management style due to the homogeneous nature of the data set.

The third research question was: “What is the relationship between male and female teachers’ cognitive style, teacher job satisfaction, and administrative management style?” As shown in Table 9, there were no significant relationships between male and female teachers’ cognitive style, teacher job satisfaction, and administrative management style due to the attenuation of the data set.

The fourth research question was: “What are the differences in teacher cognitive style and teacher job satisfaction, moderated by administrative management style between a large urban Nevada school district and rural Nevada school districts?” As seen in Table 9, there were no significant differences between teacher cognitive style and
teacher job satisfaction, moderated by administrative management style between a large urban Nevada school district and rural Nevada school districts on most of the subscales.

Discussion of Variables

Teacher Cognitive Style

Results from the analysis of Teacher Cognitive Style, utilizing the Group Embedded Figures Test, show a skewed distribution. The majority of teachers were able to answer 12 to 18 figures correctly. This accounted for 74.7% of the population surveyed. These were the field independent individuals. The other 25.3% were the field independent individuals. The group embedded figures test is designed to go from recognition of simple embedded figures to the last figures embedded being the most difficult. The majority of teacher’s surveyed were able to correctly identify the embedded figures.

Teacher Job Satisfaction Questionnaire

Supervision: There was no correlation seen between supervision and cognitive style. In a detailed analysis of the individual items that made up the variable supervision, it was seen that most of the teachers responded to the questions by either “agree” or “strongly agree”. There were questions where the answers indicated a lack of satisfaction with administrators. For example, item 59, “When I teach a good lesson, my immediate supervisor notices” was answered “strongly disagree” or “disagree” by 41.9% of the respondents. Item 31, “My immediate supervisor treats everyone equitably” was answered “strongly disagree” or “disagree” by 26.2% of the respondents, and on item
number 12. "My immediate supervisor offers suggestions to improve my teaching". Respondents answered "strongly disagree" or "disagree" 25.9% of the time.

**Colleagues:** There was no correlation seen between colleagues and cognitive style. When looking at the individual items that made up the variable colleagues, it was seen that most of the teachers responded to the questions by either "agree" or "strongly agree". The teachers surveyed appeared to like the people they work with as seen in the majority of their responses. There was one question that indicated a degree of diversity with colleagues; item 51, "My interests are similar to my colleagues" had 99.1% respondents stating that they "strongly disagree" indicating a diverse set of interests in the teaching professionals who responded.

**Working Conditions:** Working conditions addressed the teachers perceptions of their work environments. A number of the questions that were asked were similar in content, but were asked differently. In item 9. "Working conditions at my school can be improved", 67.1% of the respondents answered "strongly agree" or "agree", indicating a dissatisfaction with the workplace. The responses to item 16, "The administration in my school does not clearly define its policies", 28.5% of the teachers surveyed agreed that the policies were clearly defined. It is interesting to note that 84% of teachers "agree" or "strongly agree" that working conditions in the school were good, as seen on item 55.

**Pay:** The questions in "pay" discuss how teachers feel about the remuneration they receive for being teachers. When looking at the individual items that made up the variable "pay", it was seen that respondents were either satisfied or dissatisfied with their pay. For example, item 2, "Teacher income is adequate for normal expenses", 35% of the teachers answered "strongly disagree" or "disagree". "I am well paid in proportion to
my ability”, item 36, indicates that 46.1% of the teachers felt underpaid for their ability.
On item number 4, “insufficient income keeps me from living the way I want to live”.
33.3% of the teachers stated that they “agree” or “strongly agree”. Item 57. “Teacher income is less than I deserve” 47.8% of the teachers “agree” or “strongly agree”.

**Responsibility:** This variable was the one where teachers felt on all items the most satisfied. All questions in this category had responses that were “agree” or “strongly agree” at a minimum of 92.2% to 98.8% agreement. The teachers believe they have the opportunity to help their students learn (item 19), respect from the students for their profession (item 22), responsibility for their lesson planning (item 34), and responsibility for their teaching (item 38). Additionally, teachers agreed or strongly agreed that they get along well with their students (item 64).

**Work Itself:** The items covered in this category address how teachers specifically viewed their jobs. The majority of the teachers were satisfied with their jobs. Item number 3, “Teaching provides an opportunity to use a variety of skills”, and item 42, “teaching encourages me to be creative” indicates that 94% of teachers were satisfied in these areas. Opposite results were seen in item 7, “The work of a teacher consists of routine activities”, where 37.7% of the teachers “agree” or “agree strongly.”

**Advancement:** Advancement addressed the issues of the teacher’s perception of their ability to advance in the field of education. A number of the questions in advancement asked the same question in a variety of ways. The teachers felt the field of teaching provided a chance for advancement. In items number 1, “Teaching provides me with an opportunity to advance professionally”, and item 8, “I am not getting ahead in my present teaching position”, teachers responded 64% “disagree” or “strongly
disagree" (item 1) and 52.8% “agree” or “strongly agree” on item 8. Similar results were seen on the rest of the advancement category questions.

**Security:** Security indicates how confident teachers are about keeping their jobs. All questions indicated that teachers felt secure in their teaching jobs. On item number 13, “Teaching provides for a secure future”. 94.1% indicated that they “agree” or “strongly agree.”

**Recognition:** The questions in this area deal with how teachers received recognition on the job. Teachers have mixed feelings about how they receive recognition on the job. In item 6, “No one tells me that I am a good teacher”, 74.7% of the respondents “disagree” or “strongly disagree”. On item 14. “I receive full recognition for my successful teaching”, 42.8% disagreed, feeling that their efforts are not fully recognized. Item 49, “I receive too little recognition”. had 51.2% of the teachers disagreeing or strongly disagreeing.

**Administrative Management Style**

The majority of the principals surveyed (63.9%) responded in the collaborative style. Examples of questions asked in this management style are as follows. The operations, management and control statement that was ranked highest was: “Try to encourage decisions and procedures that are the direct result of interaction and deliberation by the staff members and administrators who are most knowledgeable.” The handbooks, written regulations statement was: “Rely on them as flexible and useful tools in meeting the school’s objectives and the needs of students and staff.” The crisis reaction statement was: “Bring together all the key people who are most able and most knowledgeable about the problem and who are likely to recommend and carry out a
successful response.” The planning statement was: “The best people most directly concerned with the consequences of the planning should have substantial responsibility and authority to plan change and to carry out those changes.”

The second most common administrative management style found in the state of Nevada for the principals surveyed was the Benevolent-Despot style. 21.8% of the principals responding to the survey were categorized in this manner. The statement that was ranked in operations, management and controls was: “Listen carefully to staff input. After giving their thoughts some consideration, I decide how the building should be operated.” The use of handbooks, teacher contracts, school board policies and administrative regulations statement was: “Use them to support my goals in maintaining harmony among the staff and firm leadership from my office.” The reaction in a crisis or emergency statement was: “Take over, but keep anxiety and distress in individuals to a minimum level.” The statement that administrators who showed a Benevolent Despot style for successful planning, innovation, and creativity was: “A leader should listen to any professional who has an idea. After hearing people it’s easier to pursue the proper goals for the school.”

The other two administrative management styles, Cooperative and Bureaucratic, only accounted for 14.2% of the administrators surveyed. Of the seven potential administrative management styles, three did not occur at all in the responses of the principals in the state of Nevada. These styles, Participative, Bureaucratic and Laissez-Faire were not represented in the study.
Summary of Analysis of Research Questions

The results of the correlation coefficients indicate that there is no significant relationship between teacher cognitive style and any of the dependent variables for teacher job satisfaction. There was no significant relationship found between teacher cognitive styles of field dependence or field independence and teacher job satisfaction. There was no significant correlation between teacher cognitive style and teacher job satisfaction, as moderated by administrative management style.

There were no significant relationships between male and female teachers' job satisfaction and administrative management style as asked in the second research question.

The third research question focused on the relationship between rural and urban teachers' job satisfaction, as moderated by administrative management style. Although there were no substantial relationships found between rural and urban teachers' job satisfaction, as moderated by administrative management style, there was a low relationship found between rural and urban teachers' job satisfaction and administrative management style (.379) which accounted for 14.3% of the total variance.

Had the data been more heterogeneous in nature, a multiple regression analysis utilizing all nine dependent variables on the Teacher Job Satisfaction Questionnaire would have been run utilizing cognitive style, gender, administrative management style, and rural or urban location as the independent variables. The correlation matrix indicated that this was not necessary due to the small amount of variance accounted for (4-5%) between the independent variables and the dependent variables. The regression analysis
would have been done using a stepwise regression. It was agreed that no further analysis would be warranted due to the restricted nature of the data.

General Comments by Teachers on the Surveys

Many of the teachers who participated in the survey included comments regarding aspects of their job that were not covered within the questions provided. Those comments were grouped by urban and rural location.

Rural:

"I feel that I have a very pleasant atmosphere to work in at my school. It is a supportive, helpful and entertaining staff. The staff has a lot of input in major decisions and policy making. The staff has the freedom to be creative as long as we show we are meeting expectancies for our grade level."

"It is a very satisfying profession. I get to be creative and see the satisfaction and excitement in my students' faces when they understand. I think a teachers' salary is good, but I wish we had more financial support in purchasing supplies for students and our classrooms."

"I personally get along well with others. I am usually critical of myself and not of others. So I don't dwell on the faults of my fellow teachers or administration. I am usually frustrated with working with the extreme children (usually 3) in my class. I also work outside of teaching and find it exhausting to do great, wonderful, and creative things with my class."

"Teachers need a buy-in as to school policies, committee, etc. It cannot come from the administration down, dictating what each teacher must do."
"In today's world there is no such thing as a "secure" future. Today's successful teacher works hard, believes in the value of education and hopes."

"First year teachers need a mentor to help them through grades, lesson plans, policies, etc."

"While we are encouraged to give input, reaction, suggestions we often receive feedback that our ideas are "wrong." I have a good relationship with this principal but others at my school would strongly disagree with my answers concerning supervisor/teacher and positive reinforcement. Some feel alienated and that this has been a combative year on several teaching, as well as on philosophical issues. On positive feedback, we only receive it on evaluations, but not verbally or on a more frequent basis."

"Principals and higher level administration do not seem to be aware of the methods of teaching currently being taught to the upcoming teachers just coming into the profession. Total control by teacher and conformity of students seem to be the characteristics held in high esteem. Creativity and individualism are definitely considered inappropriate if not consistent with expected productive behavior."

I'm not sure this has to do with cognitive style and teacher job satisfaction, but sometimes I do resent how much I need to support public education with my own funds. I spend several hundred dollars each year on my students. Most other teachers do the same. There seems to be a lack of funds to provide what I feel are necessary teaching materials."

"My immediate supervisor has "power" attitude. He "knows" he is the "boss" and he is "above" everyone else. He wants to control every move and know all things going on in his school. He has no experience in elementary education. He used to be a
wrestling coach for only three years before being advanced to administrative positions. He has no children of his own. He has no idea how to be a principal. Duties are beneath him. He twists information between students and parents and teacher to teacher. He takes credit for what others do. He also "rides" teachers to get them to either quit or retire."

"I believe that it is up to a teacher to stay creative and to keep the students interested. We as professionals need to keep current on new methods and actually put them to use in our classroom. It is also up to us to support our co-workers and keep moral high."

"I teach utilizing a Socratic, experience based, discovery method using manipulatives. I am fortunate to have an administrator who lets true learning flourish at school."

"Teaching in Nevada is better than in South Dakota 18 years. I feel education is stressed in South Dakota for basics more than Nevada."

"I have worked under principals ranging from great to just "nothing." The present one has time to check out new computer games. The vice principal hardly has time for lunch."

"I feel my principal is very good—but our district sometimes asks us to do things which are meaningless. I also feel that our superintendent doesn’t want to advance our pay, education, or conditions- Why in the world not?? This disturbs me."
Urban:

"It is not necessarily the immediate supervisor’s management style, but the overall district, i.e.: the superintendent that has impact on teacher satisfaction or the implementation of style."

"It seems to me that teacher job satisfaction, as it is affected by how much one is paid, is a variable that is very relative (or maybe the correct word is subjective.) A teacher with six kids (not me!) and divorced may find a teacher’s salary hardly enough to live on, while a married teacher in a two-income family and one child may feel quite satisfied with her salary. I struggle to make ends meet in my particular situation, but I love my job and I love my school and I especially love my students. Dedication can’t be measured, can it?"

"I believe the less an administrator gives meaningful tasks and the more they respect us as professionals the more satisfied one feels as professionals. I would appreciate more praise for a job well done though and more visits in the classroom to see what we’re doing. Questions regarding income are ambiguous. I feel I earn a decent salary, yet I do not think I could raise my kids on a teacher’s salary if just my husband worked. He is also a teacher for 24 years now."

"Administrator gossips, very unprofessional. Not malicious, but certainly petty."

"Some problems at my school that have causes discord this year is that a new school opens next September that directly affects our school, staff and lives. So there is discomfort that may not otherwise be here. In general, colleagues are great...administrator is less than adequate. He does some things well, but his "style" is not professional."

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“This is such a complex issue within a school staff. I enjoy teaching but I often don’t enjoy the group dynamics in a school. I am not anti-social, but I tend to mind my own business and just teach. It’s a little bit isolating, but I’m happier not being “in the thick” of the school talk.”

“Class size makes my ability to be a good teacher very difficult.”

“I feel our staff is mostly competent but there are a few “difficult” staff members. They gossip and backstab.”

“Dictatorial, power-hungry principals create an uncomfortable (to say the least) working environment”

“It has been my experience that most compliments come from students and parents rather than administrators. I find this more meaningful in the long run.”
CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is organized into four sections. The first section provides a summary of the study. The second section presents the major findings in relationship to the research questions. The third section presents the conclusions. The concluding section presents recommendations in implications for practice and implications for further research.

Summary

This purpose of this study was to answer the question, “Is there a relationship between teacher cognitive style and teacher job satisfaction, as moderated by administrative management style?” The type of cognitive style that was chosen to be studied was field dependence and field independence. The questionnaire that was chosen for teacher job satisfaction contained nine subscale variables. The nine subscale variables of teacher job satisfaction were: supervision, colleagues, working conditions, pay, responsibility, work itself, advancement, security; and recognition. Administrative management style was assessed using the Administrators School Management Style Inventory. Management style was categorized in the following seven areas: collaborative, cooperative, participative, bureaucratic, laissez-faire, benevolent despot, and autocratic. The following four areas were represented in this
study: collaborative, cooperative, bureaucratic, and benevolent despot. The study provided a framework for analyzing the relationships of cognitive style, teacher job satisfaction, and administrative management style.

This study examined the relationships of teacher cognitive style, teacher job satisfaction, as moderated by administrative management style. The teacher subjects surveyed were randomly selected kindergarten through sixth grade teachers, employed with full time contracts within the state of Nevada. Administrators surveyed were selected from elementary schools within the state of Nevada who were assigned to work full time at their elementary schools. Teachers and administrators were chosen to represent both urban and rural schools from within the state of Nevada. The sample consisted of 119 teachers representing 29 elementary schools. Of these 29 elementary schools, 14 were urban schools and 15 were rural schools.

The first research question asked: Is there was a relationship between teacher cognitive style and the variables of teacher job satisfaction. There was no significant relationship between teacher cognitive style and the variables of teacher job satisfaction. The results indicate that field dependence or field independence does not significantly influence teacher job satisfaction.

The second research question asked: What is the relationship between teacher cognitive style and teacher job satisfaction, moderated by the administrator’s management style. There were no significant relationships found between the teacher job satisfaction and administrative management style.

The third research question asked: What was the relationship between teacher cognitive style, teacher job satisfaction, as moderated by administrative management
style. Since there was no relationship between cognitive style and the variables of teacher job satisfaction, there was no identified relationship between teacher cognitive style, teacher job satisfaction and administrative management style.

The fourth research question was: What is the relationship between male and female teachers' cognitive style, teacher job satisfaction, and administrative management style. There was not significant relationship between male and female teachers' job satisfaction and administrative management style.

The last ancillary research question studied the relationship of teacher cognitive style, teacher job satisfaction, moderated by administrative management style between a large urban Nevada school district and rural Nevada school district. There were no significant relationships found between teacher cognitive style, teacher job satisfaction, moderated by administrative management style between a large urban and rural Nevada school districts.

Conclusion

It appeared that teacher cognitive style had no influence on teacher job satisfaction for either field dependent teachers or field independent teachers for the purposes of this study. Teacher job satisfaction was not significantly influenced by the factors of teacher cognitive style, as assessed using field dependence and field independence. It also appeared that teacher job satisfaction was not significantly influenced by administrative management style. Teachers seem to be satisfied in their job regardless of external management factors, or location of their schools.
Implications

In all of the subscales of the teacher job satisfaction questionnaire, teachers indicated a feeling of satisfaction on their jobs. The area of supervision addressed teacher's concerns about administrators task and people orientations. Overall, teachers were satisfied with the type of supervision that they were receiving.

In the area of colleagues, teachers recognize the diversity within the field of education. For the most part, teachers feel supported by the people that they immediately work with, and enjoy teaching together, although a portion of the teachers feel that their colleagues are highly critical of them.

Working conditions and aspects of the physical environment were seen predominately in a positive manner. Teachers felt working conditions were comfortable in the school, but could be improved.

The annual income, or remuneration that the teachers received had a variety of responses from teachers. Teachers do not feel they are well paid in proportion to their ability, nor what they deserve. Teaching was seen to provide financial security, but teachers felt they were underpaid.

Teachers overwhelming felt that teaching provided the opportunity to be accountable for one's own work, and the opportunity to take part in the policy and decision making activities within the school. This category had the most internal agreement between the questions, with all questions being responded to with over 90% on agree or strongly agree.
Teachers believe that the work itself is pleasant and provides an opportunity to utilize a variety of skills. Teachers felt the job of teaching, or the tasks related to the job of teaching, allowed for freedom in the use innovative and creative materials. An interesting finding was the contradictory belief by teachers about the routiness of their job. Some teachers believe that teaching consists of routine activities, while others believe that teaching provides a venue for creativity in the elementary schools.

Teachers had mixed feelings about the opportunity for promotion. Most teachers felt that teaching provided an opportunity for promotion, while others felt they were not getting ahead in their current teaching position. Some saw limited opportunities for promotion in the field of teaching.

The school's policies regarding tenure, seniority, layoffs, pension, retirement and dismissal were seen as providing a secure job environment for teachers. Teachers felt they had a secure future, without being afraid of losing their teaching positions.

Teachers had some conflicting feelings about the recognition that they received on their jobs. Some felt they received enough recognition from their administrators as being good teachers, and others felt that they were never recognized for teaching outstanding lessons.

Recommendations

While the teachers who participated in the study generally indicated job satisfaction, the comments of the teachers indicate that there are aspects of their jobs that caused concerns for them. Some of these areas include: pay, extreme behavior problems by students, need for mentoring of first year teachers, lack of administrative knowledge of current teaching practices, use of personal funds to supplement
classroom instructional materials, administrators with a "power " attitude, gossip at
school by staff members, and class sizes.

Additional areas emphasized by individual teachers that expressed satisfaction
for the teaching vocation were: input in decision making, freedom to be creative
within their classroom, given areas of responsibility and being given positive
feedback on a regular basis outside of the formal evaluation process.

The following recommendations are based on the concerns expressed by the
teachers:

1. A detailed analysis of how to assist teachers in dealing with the extreme
behavior and discipline problems by students would be useful.

2. Setting up a formalized mentoring program for first year teachers or
teachers that are new to their schools. This would assist them in their
ability to utilize procedures previously established and currently being
used on the work site location.

3. Develop a system for fund raising that would allow classroom teachers
access to money to supplement instructional supplies for the classroom.

4. Provide ongoing feedback, both positive and critical, to allow the teacher
to improve their instructional techniques outside of the formal supervisory
process.

5. A time management analysis should be performed to ascertain the amount
of time elementary school principals spend in direct supervision of
teachers within the classroom.
6. Specific ongoing inservice training should be provided to elementary school administrators regarding varied techniques for supervision of marginal, average, and exceptional teachers.

Recommendations for Further Study

Further study would enhance the information base as to the nature of job satisfaction for teachers and the complex relationship between administrative management style. After reviewing the results, several studies would appear to be indicated.

1. Conduct the study, as currently designed, utilizing a larger teacher response base in an urban school district. Administer the tests in the schools, in person, to ensure cross representation of cognitive styles of the teachers.

2. A study reviewing the relationship between teacher job satisfaction and administrative management style would enhance the information base for effective school management. The use of a different administrative management style inventory, that has established previous research on the reliability and validity of the instrument would assist in determining the complex interrelationship of these two variables. A larger database of administrators and teachers would allow for a solid research base.

3. A study reviewing the relationship between teacher job satisfaction and the number of years teaching would assist administrators in planning for staff development training opportunities. Studies on adult learning
indicate varied needs at different critical stages for teachers, which are
directly related to the number of years teaching.

4. A study reviewing the relationship between teacher job satisfaction and
the number of students within each individual classroom or the number of
total students in the school would allow for research based legislation to
be passed to maximize optimal classroom sizes.

5. A study reviewing the relationship between teacher job satisfaction and
the level of education obtained by individual teachers would allow
administrators to address specific staff development needs within groups
on staff.

6. A study reviewing the relationship between overall student socio­
economic status of the school and teacher job satisfaction would allow for
specific information on addressing the specific needs of teachers who
work in varying socio-economic areas within the public school systems.

7. A study ascertaining principal job satisfaction would enrich staff
development areas to target for the entire state of Nevada or specific
districts within the state of Nevada.

8. A study that would compare the differences between teacher job
satisfaction and principal job satisfaction within the same school would
give insight to the uniqueness of each given role.

9. A study that compared teachers’ assessment of administrative
management style to the individual principal’s personal assessment of
administrative management style could allow for districts to ascertain how to target assistance to an individual principal.

10. A study that compared the differences between the teacher job satisfaction questionnaire variables of urban and rural locations, male and female gender and varied management styles.

11. A study that utilized more than one large urban school district for a comparison of Field Dependent and Field Independent teachers responses on the Teacher Job Satisfaction Questionnaire.
APPENDIX I
COVER LETTER AND QUESTIONNAIRE
SECTION I

Directions: The following statements refer to organizational factors that can influence the way a teacher feels about his/her job. These factors are related to teaching and to the individual’s perception of the job situation. When answering the following statements, circle the numeral which represents the degree to which you agree or disagree with the statement. Please DO NOT identify yourself on this instrument.

KEY: 1 Strongly Disagree
     2 Disagree
     3 Neutral (neither agree or disagree)
     4 Agree
     5 Strongly Agree

1. Teaching provides me with an opportunity to advance professionally. 1 2 3 4 5
2. Teacher income is adequate for normal expenses. 1 2 3 4 5
3. Teaching provides an opportunity to use a variety of skills. 1 2 3 4 5
4. Insufficient income keeps me from living the way I want to live. 1 2 3 4 5
5. My immediate supervisor turns one teacher against another. 1 2 3 4 5
6. No one tells me that I am a good teacher. 1 2 3 4 5
7. The work of a teacher consists of routine activities. 1 2 3 4 5
8. I am not getting ahead in my present teaching position. 1 2 3 4 5
9. Working conditions in my school can be improved. 1 2 3 4 5
10. I receive recognition from my immediate supervisor. 1 2 3 4 5
11. I do not have the freedom to make my own decisions. 1 2 3 4 5
12. My immediate supervisor offers suggestions to improve my teaching. 1 2 3 4 5
13. Teaching provides for a secure future. 1 2 3 4 5
14. I receive full recognition for my successful teaching. 1 2 3 4 5
15. I get along well with my colleagues. 1 2 3 4 5
16. The administration in my school does not clearly define its policies. 1 2 3 4 5

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Section I (cont.)

17. Working conditions in my school are comfortable. 1 2 3 4 5
18. Working conditions in my school are comfortable. 1 2 3 4 5
19. Teaching provides me with the opportunity to help my students learn. 1 2 3 4 5
20. I like the people with whom I work. 1 2 3 4 5
21. Teaching provides limited opportunities for advancement. 1 2 3 4 5
22. My students respect me as a teacher. 1 2 3 4 5
23. I am afraid of losing my teaching job. 1 2 3 4 5
24. My immediate supervisor does not back me up. 1 2 3 4 5
25. Teaching is very interesting work. 1 2 3 4 5
26. Working conditions in my school could not be worse. 1 2 3 4 5
27. Teaching discourages originality. 1 2 3 4 5
28. The administration in my school communicates its policies well. 1 2 3 4 5
29. I never feel secure in my teaching job. 1 2 3 4 5
30. Teaching does not provide me the chance to develop new methods. 1 2 3 4 5
31. My immediate supervisor treats everyone equitably. 1 2 3 4 5
32. My colleagues stimulate me to do better work. 1 2 3 4 5
33. Teaching provides an opportunity for promotion. 1 2 3 4 5
34. I am responsible for planning my daily lessons. 1 2 3 4 5
35. Physical surroundings in my school are unpleasant. 1 2 3 4 5
36. I am well paid in proportion to my ability. 1 2 3 4 5
37. My colleagues are highly critical of one another. 1 2 3 4 5
38. I do have responsibility for my teaching. 1 2 3 4 5
Section I (cont.)

39. My colleagues provide me with suggestions or feedback about my teaching.  
   1 2 3 4 5

40. My immediate supervisor provides me with assistance for improving instruction.  
   1 2 3 4 5

41. I do not get cooperation from the people with whom I work.  
   1 2 3 4 5

42. Teaching encourages me to be creative.  
   1 2 3 4 5

43. My immediate supervisor is not willing to listen to suggestions.  
   1 2 3 4 5

44. Teacher income is barely enough to live on.  
   1 2 3 4 5

45. I am indifferent toward teaching.  
   1 2 3 4 5

46. The work of a teacher is very pleasant.  
   1 2 3 4 5

47. I receive too many meaningless instructions from my immediate supervisor.  
   1 2 3 4 5

48. I dislike the people with whom I work.  
   1 2 3 4 5

49. I receive too little recognition.  
   1 2 3 4 5

50. Teaching provides a good opportunity for advancement.  
   1 2 3 4 5

51. My interests are similar to those of my colleagues.  
   1 2 3 4 5

52. I am not responsible for my actions.  
   1 2 3 4 5

53. My immediate supervisor makes available the materials I need to do my best  
   1 2 3 4 5

54. I have made lasting friendships among my colleagues.  
   1 2 3 4 5

55. Working conditions in my school are good.  
   1 2 3 4 5

56. My immediate supervisor makes me feel uncomfortable.  
   1 2 3 4 5

57. Teacher income is less than I deserve.  
   1 2 3 4 5

58. I try to be aware of the policies at my school.  
   1 2 3 4 5
Section I (cont.)

59. When I teach a good lesson, my immediate supervisor notices. 1 2 3 4 5

60. My immediate supervisor explains what is expected of me. 1 2 3 4 5

61. Teaching provides me with financial security. 1 2 3 4 5

62. My immediate supervisor praises good teaching. 1 2 3 4 5

63. I am not interested in the policies of my school. 1 2 3 4 5

64. I get along well with my students. 1 2 3 4 5

65. Pay compares with similar jobs in other districts. 1 2 3 4 5

66. My colleagues seem unreasonable to me. 1 2 3 4 5

Next, we would like to ask several questions about your professional background.

Sex: _____Male _____Female

Age: __________ Number of years teaching experience: __________

Number of years working under the current administrator: __________

Number of students in your school: __________

Highest academic degree you have attained:

B.A./B.S. _____ B.A./B.S. + 16 _____ B.A./B.S. + 32 _____

M.A./M.S. _____ M.A./M.S. + 16 _____ M.A./M.S. + 32 _____

Doctorate _____ Other (specify): ________________________________

Is there anything else, or any additional comments that may help us in our future efforts to understand the relationship between cognitive style and teacher job satisfaction, as moderated by administrative management style?

Thank you for taking time to answer these questions. If you would like a summary of results, please print your name and address on the back of the return envelope. We will see that you get it.
SECTION II

SCHOOL ADMINISTRATOR'S MANAGEMENT STYLE INVENTORY

Directions:
Rank the alternatives for each of the statements or questions listed below (I-IV) according to the way you would actually respond to that situation or issue. Place a “1” next to the alternative that would be most characteristic of your attitudes or actions for that statement, then place a “2” next to the attitude or action second most characteristic of you, and continue until you have numbered alternatives A-G from 1 through 7 for all four administrative areas. Administrative style will be measuring the following areas:

1. How I operate, manage, or control.
2. My attitude toward handbooks and written regulations.
3. How I respond during a crisis.
4. My attitude toward planning.

I. In the day-to-day operation of my building, I mainly:

_____ A. Rely on my own ability, knowledge, and experience. I am, after all, the one who is held accountable.

_____ B. Try to encourage decisions and procedures that are the direct result of interaction and deliberation by the staff members and administrators who are most knowledgeable.

_____ C. Refer problems and tasks to other administrators for decisions and actions.

_____ D. Let the staff members most directly concerned determine what they would do in given situations. It is really best to allow professionals to be autonomous and responsible for their decisions.

_____ E. Establish committees to help run the building. We build a strong sense of cooperation in that way.

_____ F. Listen carefully to staff input. After giving their thoughts some consideration, I decide how the building should be operated.

_____ G. Like to involve the staff in some discussions by appointing ad-hoc committees and groups to study certain problems and to report their findings. I often accept their recommendations.
II. In the use of handbooks, teacher contracts, school board policies, and administrative regulations, my attitude usually is to:

A. Distribute all written handbooks and procedures to all staff members and rely on staff and standing committees to use them in the proper management of the building and to suggest improvements.

B. Establish study groups, when needed, to examine written rules and procedures and to recommend changes which I often adopt.

C. File them and let the people who work for me function according to their personal and professional judgements.

D. Rely on them as flexible and useful tools in meting the school’s objectives and the needs of students and staff.

E. Use them to support my goals in maintaining harmony among the staff and firm leadership from my office.

F. Refer to them often for valuable guidance in many types of situations. To go by the book can prevent all sorts of problems.

G. Use them when appropriate in the positive and firm direction of my building. It’s pretty obvious when a staff member can’t follow instructions.

III. In a crisis or emergency I usually tend to:

A. Take Charge!

B. Take over but keep anxiety and distress in individuals to a minimum level.

C. Let individuals cope in whatever fashion they can. The overall objectives of my school demand my attention.

D. Play it by the rules. Experienced people codified the regulations based on sound practices.

E. Speak to a few wise heads before I take the final action.

F. Call a meeting of the committees I have established for just this kind of situation.

G. Bring together all the key people who are most able and most knowledgeable about the problem and who are likely to recommend and carry out a successful response.
IV. As far as successful planning, innovation, and creativity are concerned, I believe that:

   A. Professionals should join established committees that are given some firm responsibility for planning and change.

   B. The district's long-established policies and procedures provide an orderly method of planning the proper maintenance or modifications of existing procedures.

   C. A small staff group should be assigned the task of studying proposed changes. Its recommendations will be considered, but not necessarily enacted, of course.

   D. A leader should listen to any professional who has an idea. After hearing people it's easier to pursue the proper goals for the school.

   E. The best people most directly concerned with the consequences of the planning should have substantial responsibility and authority to plan change and to carry out those changes.

   F. Planning and change are the ultimate responsibility of the person chosen to lead the school.

   G. The staff itself decides its goals and directions on a daily basis. A leader must allow professionals the opportunity to follow their inclination.
April 28, 1997

I am currently a Doctoral candidate at the University of Nevada, Las Vegas, working on my doctoral dissertation. The proposed study is on the relationship between teacher cognitive style, teacher job satisfaction, as moderated by administrative management style. I need a short demographic profile of the teachers, in order to learn about the cognitive styles and job satisfaction of various teachers throughout the state of Nevada. This information, once complied, will provide guidance and support to aspiring principals who might find themselves interested in increasing the effectiveness of their supervision of teachers.

For the results to accurately represent the experience of the various Nevada teachers, it is important each questionnaire be completed and returned; it should take about 20 minutes of your time. Your response is important to our study since your uniquely personal experiences cannot be substituted. However, participation is voluntary and you may withdraw at any time.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we may check your name off the mailing list as soon as your questionnaire is returned. Your name will never be placed on the questionnaire.

The results of this research will be made available to all interested parties. You can receive a summary of results by simply writing “Copy of Results Requested” on the back of the return envelope and printing your name and address below it. Please do not put this information on the questionnaire itself.

Thank you for your anticipated cooperation. Should you have any other questions, or if I might be of assistance, please feel free to contact me at (702) 897-9715. For questions regarding the rights of research subjects, please contact the UNLV Office of Sponsored Programs at 895-1357.

Sincerely,

Holly S. Jaacks
March 31, 1997

I am currently a Doctoral candidate at the University of Nevada, Las Vegas, working on my doctoral dissertation. The proposed study is on the relationship between teacher cognitive style, teacher job satisfaction, as moderated by administrative management style. I need a short administrative profile of the principal to learn about the administrative management styles of various principals throughout the state of Nevada. This information, once compiled, will provide guidance and support to aspiring principals who might find themselves interested in increasing the effectiveness of their supervision of teachers.

For the results to accurately represent the experience of the various Nevada principals, it is important each questionnaire be completed and returned; it should take about 10 minutes of your time. Your response is important to our study since your uniquely personal experiences cannot be substituted. However, participation is voluntary and you may withdraw at any time.

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Sincerely,

Holly S. Jaacks
This is a reminder to those teachers who have not returned the survey mailed to them in the past two weeks. If you have already completed and returned it to me, please accept my sincere thanks. If not, please do so today.

If by chance you did not receive the survey, or it was misplaced, please call Holly Jaacks, and leave a message at (702) 897-9715.

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APPENDIX 2

FREQUENCIES AND PERCENTAGES
Table 10. Cognitive Style Frequencies and Percentages – Section 1

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Table 11  Teacher Job Satisfaction Questionnaire Frequencies and Percentages - Section 2

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Table 11. Teacher Jobs Satisfaction Frequencies and Percentages -Section 2 (cont.)

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Note: "*" indicates items that were recoded for statistical analysis.
Table 12. Administrator's Management Style Frequencies and Percentages – Section 3

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<td>24.1%</td>
<td>20.6%</td>
<td>6.8%</td>
<td>3.4%</td>
<td>6.8%</td>
</tr>
<tr>
<td>4E</td>
<td>12</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>41.3%</td>
<td>24.1%</td>
<td>17.2%</td>
<td>10.3%</td>
<td>0.0%</td>
<td>3.4%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

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Table 12. Administrator’s Management Style Frequencies and Percentages – Section 3 (cont.)

<table>
<thead>
<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>4F</td>
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<td>0.0%</td>
<td>1</td>
<td>3.4%</td>
<td>13</td>
<td>17.2%</td>
<td>10.3%</td>
</tr>
<tr>
<td>4G</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

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Table 13. Number of Years Teaching Experience—Section 4

<table>
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<tr>
<th>NUMBER YEARS TEACHING</th>
<th>COUNT</th>
<th>PERCENT</th>
</tr>
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<tbody>
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<td>1</td>
<td>.84</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>5.04</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2.52</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>3.36</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>5.88</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>10</td>
<td>12</td>
<td>10.08</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>.84</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
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<td>7</td>
<td>5.88</td>
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<tr>
<td>15</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>1.68</td>
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<tr>
<td>17</td>
<td>3</td>
<td>2.52</td>
</tr>
<tr>
<td>18</td>
<td>2</td>
<td>1.68</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>3.36</td>
</tr>
<tr>
<td>20</td>
<td>7</td>
<td>5.88</td>
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<tr>
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<td>2.52</td>
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<td>23</td>
<td>1</td>
<td>.84</td>
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<tr>
<td>24</td>
<td>1</td>
<td>.84</td>
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<td>.84</td>
</tr>
<tr>
<td>29</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>30</td>
<td>4</td>
<td>3.36</td>
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<tr>
<td>31</td>
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<td>.84</td>
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<td><strong>X=14</strong></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: n=119

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### Table 14. Number of Students in Each School-Section 5

<table>
<thead>
<tr>
<th>NUMBER OF STUDENTS</th>
<th>COUNT</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>5</td>
<td>4.20</td>
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<tr>
<td>160</td>
<td>1</td>
<td>.84</td>
</tr>
<tr>
<td>275</td>
<td>2</td>
<td>1.68</td>
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<tr>
<td>300</td>
<td>3</td>
<td>2.52</td>
</tr>
<tr>
<td>370</td>
<td>5</td>
<td>4.20</td>
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<td>400</td>
<td>16</td>
<td>13.44</td>
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<td>410</td>
<td>4</td>
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</tr>
<tr>
<td>425</td>
<td>10</td>
<td>8.40</td>
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<tr>
<td>450</td>
<td>5</td>
<td>4.20</td>
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<tr>
<td>465</td>
<td>2</td>
<td>1.68</td>
</tr>
<tr>
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<td>3</td>
<td>2.52</td>
</tr>
<tr>
<td>500</td>
<td>8</td>
<td>6.72</td>
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<tr>
<td>520</td>
<td>8</td>
<td>6.72</td>
</tr>
<tr>
<td>592</td>
<td>6</td>
<td>5.04</td>
</tr>
<tr>
<td>600</td>
<td>11</td>
<td>9.24</td>
</tr>
<tr>
<td>610</td>
<td>4</td>
<td>3.36</td>
</tr>
<tr>
<td>675</td>
<td>3</td>
<td>2.52</td>
</tr>
<tr>
<td>700</td>
<td>13</td>
<td>10.92</td>
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<tr>
<td>870</td>
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<td>900</td>
<td>5</td>
<td>4.20</td>
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</table>

**X=519** 100%

**Note:** n=119
Table 15. Highest College Degree Held by Teachers-Section 6

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>COUNT</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA</td>
<td>10</td>
<td>8.40</td>
</tr>
<tr>
<td>BS</td>
<td>1</td>
<td>.84</td>
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<tr>
<td>BA+16</td>
<td>19</td>
<td>15.97</td>
</tr>
<tr>
<td>BS+16</td>
<td>1</td>
<td>.84</td>
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<tr>
<td>BA+32</td>
<td>39</td>
<td>32.77</td>
</tr>
<tr>
<td>BS+32</td>
<td>1</td>
<td>.84</td>
</tr>
<tr>
<td>MA</td>
<td>13</td>
<td>10.92</td>
</tr>
<tr>
<td>MA+16</td>
<td>5</td>
<td>4.20</td>
</tr>
<tr>
<td>MA+32</td>
<td>30</td>
<td>25.21</td>
</tr>
<tr>
<td>X=Bachelors +32</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: n=119
APPENDIX 3

APPROVAL OF HUMAN SUBJECTS USE
DATE: January 23, 1997

TO: Holly S. Jaacks (EAHE)
    M/S 3002

FROM: Dr. William E. Schulze, Director
      Office of Sponsored Programs (X1357)

RE: Status of Human Subject Protocol Entitled:
    "The Relationship of Teacher Cognitive Style and
    Teacher Job Satisfaction, Moderated by Administrators
    Management Style"
    OSP #303s0197-197e

The protocol for the project referenced above has been reviewed
by the Office of Sponsored Programs and it has been determined
that it meets the criteria for exemption from full review by the
UNLV human subjects Institutional Review Board. This protocol is
approved for a period of one year from the date of this
notification and work on the project may proceed.

Should the use of human subjects described in this protocol
continue beyond a year from the date of this notification, it
will be necessary to request an extension.

cc: C. Steinhoff
    OSP File
BIBLIOGRAPHY


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Herzberg, F. (1982). *The managerial choice: To be efficient and to be human*. Salt Lake City: Olympus.


VITA

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University of Nevada, Las Vegas

Holly S. Jaacks

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Las Vegas, Nevada  89154

Home Address:
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Las Vegas, Nevada  89180-0625

Degrees:
Bachelor of Science, Psychology, 1978
California Lutheran University, Thousand Oaks

Master of Science, School Psychology, 1981
California State University, Sacramento

Dissertation Title: The Relationship of Teacher Cognitive Style and Teacher Job Satisfaction, Moderated by Administrator Management Style

Dissertation Examination Committee:
Chairperson, Dr. Carl Steinhoff
Committee Member, Dr. Lloyd Bishop
Committee Member, Dr. Teresa Jordan
Graduate Faculty Representative, Dr. David Christianson