Elementary principal leadership styles : some factors related to job satisfaction of teachers in randomly selected Montana elementary schools
by Robert Eugene Windel

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education
Montana State University

Abstract:
This study investigated the relationship between elementary principal leadership styles identified by the Leadership Behavior Description Questionnaire-Form XII, and elementary teacher job satisfaction as measured by the Overall Job Satisfaction Questionnaire.

A total of 255 elementary teachers in 15 randomly selected public school districts in Montana participated in the study during the fall of 1990. Two questionnaires were administered to the teachers. The first instrument, the Leadership Behavior Description Questionnaire-Form XII, consisted of 100 questions concerning the teacher's principal. The second instrument, the Overall Job Satisfaction Questionnaire, consisted of seven questions related to the teacher's job satisfaction.

Nine null hypotheses were tested in this study to determine if a particular principal leadership style resulted in a higher level of job satisfaction as identified by the teachers in the study. The independent variables of teacher gender, years of teaching experience, and teacher degree were integral to the study.

The major conclusions drawn from the study were: (1) Leadership style of the principal does influence the way teachers feel about their degree of job satisfaction; (2) teaching experience in relationship to leader style is not a significant factor in job satisfaction; (3) level of education obtained by the teacher, as it relates to leadership style of the principal, has no significant influence on job satisfaction; (4) the leader characteristics of role assumption, consideration, and tolerance of freedom, collectively, enhance teacher job satisfaction; and (5) there is no significant difference in job satisfaction between male and female teachers as it relates to principal's leadership style.

ELEMENTARY PRINCIPAL LEADERSHIP STYLES: SOME FACTORS RELATED TO JOB SATISFACTION OF TEACHERS IN RANDOMLY SELECTED MONTANA ELEMENTARY SCHOOLS

by

Robert Eugene Windel

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

of

Doctor of Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

April 1991

APPROVAL

of a thesis submitted by

Robert Eugene Windel

This thesis has been read by each member of the graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

April 24, 1991 — Donald Robson
Date — Chairperson, Graduate Committee

Approved for the Major Department

April 24, 1991 — Donald Robson
Date — Head, Major Department

Approved for the College of Graduate Studies

April 26, 1991 — Henry J Parsons
Date — Graduate Dean

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a doctoral degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. I further agree that copying of this thesis is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for extensive copying or reproduction of this thesis should be referred to University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106, to whom I have granted "the exclusive right to reproduce and distribute copies of the dissertation in and from microfilm and the right to reproduce and distribute by abstract in any format."

Signature Robert Eugene Waidel

Date April 12, 1991

This thesis is dedicated to the Alpha and Omega,
the Mighty God. For without Him, there is
no beginning nor end. And through Him,
all things, including this thesis,
are made possible.

VITA

Robert Eugene Windel was born on March 2, 1944, in New York Mills, Minnesota. He attended public schools in New York Mills and then went on to complete a Bachelor of Science degree in Elementary Education at Concordia College, Moorhead, Minnesota, in 1966. In 1973, he was awarded a Master's degree in School Administration at Mankato State University, Mankato, Minnesota, and subsequently met the requirements for a Specialist degree at Tri-College University, Moorhead, Minnesota, in 1981.

Mr. Windel was an elementary teacher for 11 years in several Minnesota school districts. He served as an assistant principal, an elementary principal, an assistant superintendent, and currently holds the position of superintendent of schools in Havre, Montana.

Mr. Windel is married to Patricia Tschetter Cook. He has a son, Jonathan, and a daughter, Jill, from a previous marriage, two stepchildren, Pamela and Timothy, and a son, Robert John, from his present marriage.

ACKNOWLEDGEMENTS

This study was possible due to continued support and assistance from many people. In particular, I express sincere gratitude to Dr. Donald L. Robson, my advisor, who provided constructive criticism, guidance, and encouragement on a continual basis. I also offer sincere thanks to Dr. John Kohl, Dr. Gerald Sullivan, Dr. Leroy Casagranda, and Dr. William Hall for their recommendations and support.

I wish to thank the elementary teachers who completed the survey instruments and their principals for cooperating with the field study. Thanks also go to the superintendents who granted permission for the research study in their districts.

Special thanks are extended to others who assisted me with this arduous task: Dr. Gerald Bekker, who contributed valuable assistance with the analysis of data; Vicke Larson, who contributed many hours of key-boarding and gave her meticulous attention to each detail of suggested revision and ultimately to the final product. Finally, my gratitude is extended to Dr. Rich Shaffer, who not only edited, but encouraged.

A very special thanks goes to my wife and children, who sacrificed both time and finances while offering support, encouragement, and love. Without their dedication, this study would not have been possible.

TABLE OF CONTENTS

	Page
APPROVAL	ii
STATEMENT OF PERMISSION TO USE	iii
VITA	v
ACKNOWLEDGEMENTS	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xii
ABSTRACT	xiii
CHAPTER:	
1. INTRODUCTION AND REVIEW OF THE LITERATURE	1
Introduction	1
Leadership Styles	2
Teacher Job Satisfaction	12
Leadership Style and Job Satisfaction	17
Statement of the Problem	23
Importance of the Study	23
Definition of Terms	26
General Procedures	28
Limitations of the Study	30
2. METHODOLOGY	31
Introduction	31
Population Description and Sampling Procedure	32

TABLE OF CONTENTS--Continued

	Page
Sources of Evidence and Authority	35
Statistical Hypotheses	38
Analytical Techniques and Research Design	39
3. DATA ANALYSIS AND RESULTS	43
Introduction	43
Relevant Data and Findings	46
Null Hypotheses	46
Hypothesis 1	46
Hypothesis 2	48
Hypothesis 3	49
Hypothesis 4	49
Hypothesis 5	51
Hypothesis 6	52
Hypothesis 7	53
Hypothesis 8	54
Hypothesis 9	55
Summary	56
4. CONCLUSIONS AND RECOMMENDATIONS	58
Conclusions	58
Recommendations for School Improvement	62
Significance of Findings	65
Recommendations for Further Research	68
BIBLIOGRAPHY	71
APPENDICES:	
A. LETTER TO SUPERINTENDENTS REQUESTING DISTRICT PARTICIPATION AND RANDOM SAMPLE RECORD SHEET	79
B. SUBSCALE DEFINITIONS FOR LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE-FORM XII	82

TABLE OF CONTENTS--Continued

Page

C. LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE-FORM XII AND LBDQ-XII RECORD SHEET 84

D. OVERALL JOB SATISFACTION QUESTIONNAIRE 92

E. LETTERS GRANTING PERMISSION FOR USE OF QUESTIONNAIRES 95

LIST OF TABLES

Table		Page
1.	Overall Job Satisfaction Questionnaire	37
2.	Job satisfaction mean scores for leadership style groups	47
3.	One-way analysis of variance: Job satisfaction by leadership style	47
4.	Job satisfaction mean scores by gender for the four leadership styles	48
5.	Two-way analysis of variance: Leadership style by gender for job satisfaction	48
6.	Job satisfaction mean scores by gender	49
7.	One-way analysis of variance: Job satisfaction by gender	49
8.	Job satisfaction mean scores by years of experience for the four leadership styles	50
9.	Two-way analysis of variance: Leadership style by years of teaching for job satisfaction	50
10.	Job satisfaction mean scores for number of years of teaching experience	51
11.	One-way analysis of variance: Job satisfaction by teaching experience	51
12.	Job satisfaction mean scores by level of teaching degree for the four leadership styles	52

LIST OF TABLES--Continued

Table		Page
13.	Two-way analysis of variance: Leadership style by level of teaching degree for job satisfaction	53
14.	Job satisfaction mean scores for level of education	53
15.	One-way analysis of variance: Job satisfaction by level of education	54
16.	LBDQ-XII subscale scores	55
17.	Variables remaining in the equation and scores for each	56
18.	Summary of status of retention or rejection of null hypotheses	57
19.	Leadership dimensions and descriptions, LBDQ-XII: System-oriented vs. person-oriented	83

LIST OF FIGURES

Figure		Page
1.	Quadrants formed by using the LBDQ-XII dimensions	35
2.	Cells for two-way ANOVA (leadership style x gender)	40
3.	Cells for two-way ANOVA (years of teaching experience x leadership style)	40
4.	Cells for two-way ANOVA (teacher education level x leadership style)	41
5.	Leadership style definitions identified by quadrant	46

ABSTRACT

This study investigated the relationship between elementary principal leadership styles identified by the Leadership Behavior Description Questionnaire-Form XII, and elementary teacher job satisfaction as measured by the Overall Job Satisfaction Questionnaire.

A total of 255 elementary teachers in 15 randomly selected public school districts in Montana participated in the study during the fall of 1990. Two questionnaires were administered to the teachers. The first instrument, the Leadership Behavior Description Questionnaire-Form XII, consisted of 100 questions concerning the teacher's principal. The second instrument, the Overall Job Satisfaction Questionnaire, consisted of seven questions related to the teacher's job satisfaction.

Nine null hypotheses were tested in this study to determine if a particular principal leadership style resulted in a higher level of job satisfaction as identified by the teachers in the study. The independent variables of teacher gender, years of teaching experience, and teacher degree were integral to the study.

The major conclusions drawn from the study were: (1) Leadership style of the principal does influence the way teachers feel about their degree of job satisfaction; (2) teaching experience in relationship to leader style is not a significant factor in job satisfaction; (3) level of education obtained by the teacher, as it relates to leadership style of the principal, has no significant influence on job satisfaction; (4) the leader characteristics of role assumption, consideration, and tolerance of freedom, collectively, enhance teacher job satisfaction; and (5) there is no significant difference in job satisfaction between male and female teachers as it relates to principal's leadership style.

CHAPTER 1

INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

Implications of leadership style have long been a topic of researchers and currently they maintain a high-interest profile in most school organizations. Hartzell and Winger (1989) discussed the need for principals to adapt their leadership styles to the situational demands of the school. In an interesting and candidly written article, Cohen (1989) discussed effective leadership and its effect on people. Hoy and Miskel (1987) cited certain leader behavior characteristics. The United States Department of Education (1987) offered information on selection of school principals and important research-based leader traits. Brandt (1987) discussed the practical application of principal leadership style to teacher morale and job satisfaction attitudes. The Carnegie Forum Task Force on Teaching as a Profession (1986) prepared a nationally publicized report that predicted a teacher shortage during the 1990's and suggested that a contributing factor to that shortage would be teacher job dissatisfaction. Goodlad (1984) concluded

that in those schools rated as satisfying by teachers, the teachers had a positive view of the principal's leadership.

Leadership Styles

Reduced to its simplest terms, a leadership style is the manner in which a leader leads. In a chapter on the principal's leadership behavior, Sergiovanni (1967) spoke of the "ways in which the principal expresses leadership, uses power and authority, arrives at decisions, and in general interacts with teachers and others" (p. 67). Those functions, some of the most important activities that school leaders perform on a daily basis, have far-reaching implications. If principals choose inappropriate ways of leading, they often fail to accomplish the task at hand, reach long-range school district goals, or maintain positive relationships with subordinates. That type of failure can ultimately lead to loss of position or loss of peace of mind; in addition, the lack of rapport the principal has with the teaching staff manifests itself through poor morale and attitudes of action towards the job of teaching. In the end, the students are the ones who lose the most as the qualitative educational program is jeopardized.

Hanson (1973) noted that leadership style might be thought of as a particular behavior emphasized by the leader to motivate his or her group to accomplish some end. For most of those who have studied leadership, motivation is an important component of leadership style. Effective leadership

means that others are influenced to accomplish something. In this age of educational accountability, it is imperative that school programs and goals are easily identifiable and, of course, that goals/objectives are measurable. Anything less is subject to criticism, and the building leader (i.e., the principal) must be held accountable for failing to meet the educational goals and objectives that, if met, would mean higher educational standards and accomplishments.

The study of leadership styles is not new. Yet it is apparent that the enigma of intrigue concerning leadership styles and their corresponding effects have perpetuated the interest of researchers and will continue to do so.

While the research conducted on leadership has yielded inconsistent results in relation to the effects of leader behavior, perhaps that is due to the diversity of purpose employed by the researchers. For example, in several studies the question of productivity was examined.

One of the earliest and most notable studies of leadership style was conducted by Lewin, Lippitt, and White (1939). These researchers formed a number of sponsored clubs among elementary school age boys. The leaders of these clubs were adult male graduate students in social psychology. Each leader was trained to behave toward the boys in his group utilizing one of three leadership styles: (1) democratic, in which group decisions were made by majority vote, equal participation was encouraged,

and criticism and punishment were minimal; (2) autocratic, in which all decisions were made by the leader, and the boys were required to follow prescribed procedures under strict discipline; and (3) laissez-faire, in which the actual leadership activity of the group leader was kept at a minimum, allowing the boys to work and play essentially without supervision.

Lewin et al., (1939) found that the groups with democratic leaders were the most satisfied and functioned in the most orderly and positive manner. The number and degree of aggressive acts were greatest in the autocratically led groups. The findings on group productivity were less clear. Lippitt and White (1943) reported that the autocratically led groups spent more time in productive work activity than did other groups, but only when the leader was present. When the leader left the room, the amount of work-related activity dropped dramatically. Further, all measures of productivity in the studies by Lewin and his associates referred to process variables, e.g., work-related conversation. No objective measures of productivity were ever assessed.

Experimental studies were conducted by Campion (1968) and Morse and Reimer (1956) comparing a hierarchial supervision concept (directive, structuring) with an autonomous program (democratic, participative). Although the differences between those approaches were insignificant, the hierarchial program did clearly result in higher profits due to lower labor costs.

Style of leadership has also been shown to be related to employee characteristics. Studies by Vroom (1959, 1960) indicated that employee characteristics determine, in part, which managerial style may be most effective. From his research, Vroom concluded that employees high in authoritarianism and low in the need for independence were found to perform best under directive supervisors, while employees high in the need for independence but low in authoritarianism performed better under democratic leaders. Likewise, a study by Haythorn, Couch, Haefner, Langhan, and Carter (1956) suggested that individuals who were themselves somewhat authoritarian were less satisfied with authoritarian leadership than were individuals who were not authoritarian. Perhaps these findings should not have been too surprising; certainly there are people who function better and are happier when they know exactly what is expected of them, and when they have clear and precise instructions.

Several studies in the 1980's examined the school principal as a person in leadership styles and staff relationships. One such study, conducted by Blumberg and Greenfield (1980), concluded that not everyone can assume the role of leading an organization in the direction of making itself better. Further, the researchers determined that the character of the person involved is important and listed the following as needed characteristics of effective leaders:

(1) A propensity to set clear goals and to have these goals serve as a continuous source of motivation.
(2) A high degree of self-confidence and openness to others.
(3) A tolerance for ambiguity.
(4) A tendency to test the limits of interpersonal and organizational systems.
(5) A sensitivity to the dynamics of power.
(6) An analytic perspective.
(7) The ability to be in charge of their jobs. (p. 216)

Unfortunately, this list neither lends itself to translation into programs of professional development nor to hiring new principals.

Blumberg and Greenfield (1980), in the same study, described utilizing eight different labels: (1) the problem solver, (2) the value-based juggler, (3) the authentic helper, (4) the broker, (5) the humanist, (6) the catalyst, (7) the rationalist, and (8) the politician. Based upon their research, the authors concluded that, although the approaches or styles of the principals were different, all of them were effective in their schools and shared the common basic elements of vision, initiative, and resources.

The Florida School Study Council (1981) commissioned a study to identify the competencies that characterized outstanding elementary and secondary school principals. The results of that study complemented those of Blumberg and Greenfield (1980) and added several characteristics of effective leaders beyond the basic seven. It included a clear sense of mission and control, an ability to test the limits in providing needed resources, the possession of the art of persuasion, a commitment to

high standards, the use of a participating style, and, as previously identified by Blumberg and Greenfield, a discontent for maintaining the status quo.

Research conducted by Leithwood and Montgomery (1982) classified principals into two groups: effective and typical. They found that effective principals were proactive, particularly in regard to instruction and the welfare of students. The typical principal, however, tended to be primarily responsive. Typical principals responded more to district demands and the demands from other sources of problems that were encountered on a daily basis.

Based on its own research, field experiences, and the literature, the Research and Development Center for Teacher Education (RDCTE), University of Texas at Austin (1982) developed descriptions of contrasting change facilitator styles that are composite, multi-dimensional, stereotypical descriptions of how some principals provide leadership. One of the primary objectives of the RDCTE studies was to identify the discrete behaviors and combinations of behaviors that appear to be related to successful implementation of improvement efforts. These studies focused on principals' general leadership styles and principal-teacher interactions.

Subsequent studies identified some trait commonalities within the leadership ranks. Hall and Rutherford (1983) concluded from their research that leadership styles, although diverse, nonetheless had some common

characteristics. The confluence of those characteristics resulted in three descriptions:

> *Responders* place heavy emphasis on allowing teachers and others the opportunity to take the lead. They believe their primary role is to maintain a smooth running school by focusing on traditional administrative tasks, keeping teachers content and treating students well. Teachers are viewed as strong professionals who are able to carry out their instructional role with little guidance. Responders emphasize the personal side of their relationships with teachers and others. Before they make decisions they often give everyone an opportunity to have input so as to weigh their feelings or to allow others to make the decision. A related characteristic is the tendency toward making decisions in terms of immediate circumstances rather than in terms of longer range instructional or school goals. This seems to be due in part to their desire to please others and in part to their limited vision of how their school and staff should change in the future.
>
> *Managers* represent a broader range of behaviors. They demonstrate both responsive behaviors in answer to situations or people and they also initiate actions in support of the change effort. The variations in their behavior seem to be linked to their rapport with teachers and central office staff as well as how well they understand and buy into a particular change effort. Managers work without fanfare to provide basic support to facilitate teachers' use of the innovation. They keep teachers informed about decisions and are sensitive to teachers' needs. They will defend their teachers from what they perceive as excessive demands. When they learn that the central office wants something to happen in their school, they become very much involved with their teachers in making it happen. Yet, they do not typically initiate attempts to move beyond the basics of what is imposed.
>
> *Initiators* have clear, decisive long-range policies and goals that transcend but include implementation of the current innovation. They tend to have very strong beliefs about what good schools and teaching should be like and work intensely to attain this vision. Decisions are made in relation to their goals for the school and what they believe to be best for students, which is based on current knowledge of classroom practice. Initiators have strong expectations for students,

> teachers and themselves. They convey and monitor these expectations through frequent contacts with teachers and clear explication of how the school is to operate and how teachers are to teach. (Hall & Rutherford, 1983, pp. 116-117).

Further research of the literature revealed quite clearly that when one examines outcomes (Hord, Hubing, & Stieglbauer, 1983), initiators and managers are more successful in change implementation. Hord et al. concluded that programs were better implemented, according to school district expectations, in schools where there were initiators and managers present.

When they feel it is in the best interest of their school, particularly the students, initiators will seek changes in district programs or policies or they will reinterpret them to suit the needs of the school. Initiators will be adamant but not unkind; they solicit input from staff, and then decisions are made about the goal of the school even if some are ruffled by their directness and high expectations (Hall & Rutherford, 1983).

Hall and Rutherford (1983) were quick to point out that no principal fully fits into any one style, nor do the three styles (responders, managers, and initiators) represent the entire universe of possibilities. They are, instead, three distinguishable styles that can more easily be described and found in school principals.

An extensive study conducted at Ohio State University (Stogdill & Coons, 1957) resulted in the development of the Leader Behavior Description Questionnaire (LBDQ), which is now the most widely used method for

describing leader behaviors. Based on statistical analysis of over 1500 behavior descriptions, two major factors, or interrelated sets of items, were identified. These have been labelled "consideration" and "initiation of structure" (Fiedler & Clemens, 1974).

Consideration was described as the degree to which a supervisor shows concern, understanding, warmth, and sympathy for the feelings and opinions of subordinates, the degree to which he/she is considerate of their needs and welfare, and the degree to which he/she demonstrates a willingness to explain decisive actions. Initiation of structure subsumed behaviors which were related to the assignment of roles and tasks within the group, scheduling work assignments, defining goals, setting work procedures and standards, and evaluating the work of subordinates.

In their 1957 study, Stogdill and Coons found that a relatively low correlation existed between consideration and initiation of structure in the typical group, although under some conditions high positive and negative correlations were found (Fiedler & Clemens, 1974).

Those two behavior categories, i.e., consideration and initiation of structure, have some relationship to the "employee-centered" and "job-centered" behaviors which were identified by Likert (1961), as well as such other formulations as the Bales and Slater (1955) concepts of the socio-emotional and task-specialist in small groups. Taking the research on leader behavior as a whole, it is reasonable to state that these two supervisory and

managerial behaviors, concern for the task and concern for the interpersonal relationship, appear to be solidly grounded in empirical evidence. Therefore, perhaps the next obvious question is: How do these two types of behavior relate to managerial performance?

The findings concerning the relationship of initiation of structure to productivity are quite complicated. While there were some studies indicating that effective leaders are both considerate and structuring (Fleishman, Harris, & Burtt, 1955), others provided inconsistent results (Korman, 1966). Vroom (1960) cited eight studies reporting a positive relationship between considerate behavior and productivity, two with a negative relationship, and one with no relationship. A study by Nealy and Blood (1968) concluded that the effective head nurses of a psychiatric hospital were described by their subordinates as high in structuring behavior; however, effective unit supervisors, the second-level managers, were described by the head nurses as low in structuring behavior. The effective first-level supervisor in this setting gave clear instructions on how to do the job and set clear standards for subordinates. The effective second-level manager, who supervised fellow professionals, did not.

One might readily conclude that there is no "universally perfect" leadership style; instead, different types of situations dictate different leader behaviors. Yet, failure to continuously re-examine the various styles and their relationship to organizational impact results in a complacency that

yields nothing more than the status quo. Organizations, including public education, cannot afford that dormancy. Public education must seek to become better in all respects. Hersey and Blanchard (1965) suggested that knowledge about leadership style will continue to be of great concern to administrators for several reasons: "(1) it can help improve the effective use of human resources, (2) it can help prevent resistance to change, (3) it can help reduce employee disputes, and (4) it can lead to a more productive organization" (p. 261). According to Cohen (1989), leadership bestows power, commands respect, and, most importantly, fosters achievement. Student performance is what our public schools are ultimately all about. Because the studies of leadership indicate that those in leadership positions will have an impact on the organization, leadership styles must be examined for better understanding if achievement in public schools is to improve beyond the status quo.

Teacher Job Satisfaction

If improved student academic performance remains as a challenge for public education, what role does teacher job satisfaction play? Does a "satisfied" teacher equate to better performance that manifests itself with improved student test scores? And does the leadership style of the principal impact on the teachers' job satisfaction that ultimately affects student achievement?

The question of job satisfaction is a broad one. It is so broad that innumerable studies have dealt with the teacher-job satisfaction question as well as the issue of job satisfaction in general. Robert Hoppock conducted one of the first "formal" studies concerning teacher job satisfaction in 1935. Since that early study, there has been a volume of research related to that question. Many of the studies dealt with how satisfied particular groups were at a point in time. Others sought to determine which elements comprised what is termed "job satisfaction." Another facet of the satisfaction question was motivation. What caused individuals in the same profession doing comparable work to perform better than others? Was the motivation to do better related to the amount of satisfaction individuals received from their work? Sergiovanni and Carver (1973) discussed a position developed by Herzberg, Mausner, and Snyderman (1959) that the factors which caused job satisfaction were not the same as the factors which caused job dissatisfaction. The factors Herzberg et al. examined were rather broad categories which could be postulated as being present in most work situations within many, if not most, organizations.

The Carnegie Forum (1986) suggested that following many years of teacher surpluses, the tide has turned and for the coming 10 years, at least, the demand for teachers will outstrip the supply. Much of the blame for the teacher shortage can be laid on the "baby boom" which followed World War II. The multitude of teachers needed as the children of war veterans moved

through school are at or approaching retirement age. Veterans of the Korean conflict and even World War II, who earned their teaching credentials with the aid of the GI Bill, also have reached senior status and now, just when retirement is piercing the ranks, the offspring of the baby boom children are starting school.

As if that were not sufficient burden, the sexual revolution has presented women, traditionally the major elementary school teaching source, with the opportunity to choose from an unlimited number of careers previously closed to them. Members of minorities are afforded many of the same choices. Often, the "new" jobs, such as those in the computer industry, offer salaries and perquisites representing a quantum leap from those in the education field, and bond-floating school districts find little room in the budget for faculty hot tubs and handball courts.

Concurrently, because the number of exceptional and disadvantaged students is growing, the teacher-student time/attention ratio is decreasing. Not to be ignored is increasing interest in adult education and the potential need for more teachers in non-traditional settings. The Carnegie report, *A Nation Prepared: Teachers for the 21st Century* (Carnegie Forum, 1986) estimated that 23% of each college graduating class will be required to meet the need for teachers in the early 1990's. Clearly, the recent gains of approximately one-half of one percent a year will be staggeringly insufficient.

With the free market system likely to be the deciding force, teachers would appear to be in a stronger bargaining position. If this is so, then the question of job satisfaction, as important to educators as it is to computer analysis, is of more than abstract interest -- not only to teachers but also to their principals and to the school districts that hire teachers.

Job satisfaction issues have become even more critical during these past two years when school economics have allowed little more than sub-standard salary increases for public school teachers. While salary is included on the list of factors contributing to job satisfaction, there are other conditions that contribute as well.

In a study conducted by Herzberg et al. (1959), a number of job-related satisfiers and dissatisfiers were identified. Those most often cited as factors causing dissatisfaction were: organizational policy and administration, technical supervision, salary, working conditions, status, job security, effects of job on personal life, and interpersonal relations. Those factors identified as promoting satisfaction at the job site were: work, achievement, possibility of growth, and responsibility.

Herzberg et al. (1959) found that elimination of job dissatisfiers did not necessarily improve an individual's job performance. For example, a teacher may be dissatisfied because there are too few teaching supplies. According to the conclusions of Herzberg et al., if that is a "major dissatisfier," the teacher will probably work less hard. When an employee found the work

exciting and there was a definite sense of achievement when responsibility was delegated, and when there was an apparent chance for advancement, performance improved. If a teacher was given increased responsibility for making decisions about materials to use in the classroom and was encouraged to supplement teaching lessons with topics or projects he/she believed to be exciting and valuable, then more time and energy were directed into changing and improving performance.

Sergiovanni (1966) replicated the research of Herzberg et al. He found the same negative and positive factors except that work itself and advancement were less often cited by teachers as motivation.

The subject of teacher job satisfaction has been explored for years as concerned social scientists and school leaders, among others, have relentlessly sought to identify factors that allow teachers to enjoy their work. One reason for this protracted study is that factors of job satisfaction shift with the times and fluctuate with the mores, in effect reflecting facets of the changing culture. The gratifications of yesterday may be standard equipment today and obsolete baggage tomorrow. Another reason is that opinions, theories, and survey results vary as much as the personalities, places, and instruments involved.

Leadership Style and Job Satisfaction

What makes a school a satisfying workplace for teachers, and why is work satisfaction important? Sociological and social-psychological studies of work settings have suggested that the structures and organization of the workplace affect the satisfaction and effectiveness of the worker in many ways. Stressful conditions may adversely affect workers' health, either physically or psychologically; staff turnover, one indicator of dissatisfaction, has high costs for employers (Argyris, 1964; Bentzen, Williams, & Heckman, 1980; Braude, 1975; French et al., 1958; Kenter, 1977; Morton, 1967; Rosow, 1974; Tausky, 1970; Institute for Social Research, 1975; N.E.W. Task Force, 1972).

School effectiveness criteria, according to Miskel, McDonald, and Bloom (1983), includes such variables as quantity and quality of achievement scores, adaptability, and "participant attitudes such as job satisfaction" (p. 50). In this same study, conducted to investigate indicators of school effectiveness, the Overall Job Satisfaction Questionnaire (OJSQ) was administered in 89 elementary schools to determine teachers' job satisfaction. Reliability data yielded an internal consistency range of .80 to .86, with a test/retest factor of .81 (Miskel et al., 1983, p. 63).

The OJSQ has been used to measure teacher job satisfaction in numerous studies, including research conducted by Miskel and Gerhardt;

Miskel, Glanapp, and Hatley; and Miskel, DeFrain, and Wilcox (Hoy & Miskel, 1987).

A study performed by Morris (1981) indicated that teachers were more satisfied with their places of work when their schools were administered by principals who had a firm sense of professional autonomy and who also regarded their staff members as competent, independent professionals. While strong leadership appeared to be of major importance to teachers' work satisfaction, other factors, including school size, expenditure per pupil, and the ratio of teachers to pupils, were also important indicators of teacher satisfaction.

An earlier study (Evans & Maas, 1969) concluded that a good working relationship with the principal was considered an important source of satisfaction by 74% of the elementary teachers surveyed, and a poor working relationship with the principal an important source of dissatisfaction by 45% of those surveyed.

The issue of teacher job satisfaction is gaining importance for school administrators during the 1990's, a decade of projected teacher shortages, according to the Carnegie Forum (1986). The recruitment and retention of highly qualified educators can no longer be treated as an academic question, but must be resolved in the practical realm of America's free market system. Without a doubt, economic factors such as salaries, benefits, and educational funding play significant roles when an individual is deciding whether

or not to teach (Carnegie Forum, 1986). Public recognition (or lack of it), according to the Carnegie Forum, has also been identified as an important factor affecting educational career decisions.

Another factor related to job satisfaction, and thus the decision to join or remain among the teaching ranks, concerns opportunities for participatory management within the school setting. Brodinsky (1984) suggested that participatory management practices, which he defined as the meaningful involvement in a school's decision-making process, build teacher morale. In an article appearing in *Instructor and Teacher,* Brodinsky stated, "The more opportunity and power you give employees, the more effective they will become and the more satisfaction they will get from their jobs" (p. 39).

John Goodlad (1984), in his book, *A Place Called School: Prospects for the Future,* remarked about the lack of studies drawing a clear connection between teacher satisfaction and student achievement. He noted:

> More common are studies showing that supportive conditions such as sensitive leadership by the principal, availability of help, and involvement in school-wide decisions, tend to be associated with greater enthusiasm, professionalism and career fulfillment on the part of teachers. (p. 216)

Goodlad further asserted, "It should not be necessary to establish these relationships scientifically in order to accept the proposition that teachers, like other humans, are entitled to a satisfying workplace" (p. 251).

Glickman (1985) pointed out the need for teachers to have the opportunity to "find their niche," enabling them to perform in an acceptable manner

that is sanctioned by their supervisor. Once given that latitude, a teacher can grow in confidence and expertise and will "view the classroom with greater satisfaction" (p. 165). It becomes imperative, then, that the building principal recognize those needs and encourage the development of teacher performance. When there is encouragement to go beyond competence by providing a sense of achievement, responsibility, and recognition, teachers will choose to improve their instructional performance and be more satisfied with their jobs. Glickman concluded, "The administrative function of a school should provide for the factors that enable teachers to reach the plateau from which supervision for improvement of instruction can proceed in a work atmosphere that is more personally satisfying" (p. 165).

Halpin and Winer (1957) identified two major independent dimensions of leadership behavior that they concluded were most relevant to teacher job satisfaction. According to their conclusions, consideration included supervisory behavior "indicative of friendship, mutual trust, respect, and warmth" (p. 42). The other dimension, initiating structure, included behavior in which the building principal "organizes and defines group activities and his relation to his group" (p. 109).

Most of the research examined in the review of literature indicated that where considerate leader behavior prevails, subordinates' job satisfaction exists. Likewise, the degree to which the manager allows participative decision-making is generally, although not universally, correlated with employee satisfaction. Fleishman and Harris (1962) found that as the

supervisor's consideration behavior increased, both turnover and grievance rates decreased, and that increases in initiation-of-structure behavior resulted in more grievances and higher turnover. Other studies have shown, however, that this relationship may not be general over other organizations. Thus, House, Filley, and Kerr (1971) concluded that the much-quoted interaction between consideration and structure, as it affects employee satisfaction, does not appear to hold in research and development organizations in which the job is already very low in structure. In such organizations, additional structure by the manager is more likely to help than hinder the work.

Argyris (1972), in researching the job satisfaction issue as it relates to administrative style, stated that "facets such as leadership style of supervisors and administrative controls can be sufficiently powerful to cause an employee to leave an organization even though he is intrinsically satisfied" (p. 113).

While Oborne and Gruneberg (1972) agreed with other researchers that "increased satisfaction does not always mean increased productivity" (p. 16), they concluded that there is an economic impact. Their contention was that worker satisfaction does have a direct influence on organization costs as they relate to worker turnover. Further, they suggested that dissatisfied workers may perform at the same level as satisfied ones when they get to work, but whether they report for work or not will be a direct reflection of

how happy they are in the working situation. Oborne and Gruneberg pointed out that since the costs to organizations related to absenteeism and training workers are very considerable, turnover is a significant factor.

According to Blocker and Richardson (1963), "Leadership, decision-making, and communication processes also influence job satisfaction. The effects of the leadership styles of school administrators have long been recognized" (p. 203).

Perhaps Lawler (1973), and Smith, Kendall, and Hulin (1969) summarized the issue impact most practically. Smith et al. wrote, "What happens to people during the work day has profound effects both on the individual employee's life and on the society as a whole, and thus these events cannot be ignored if the quality of life in a society is to be high" (p. 63). Job satisfaction was seen by Lawler to be "one measure of the quality of life in organizations" (p. 113). Smith et al. stated, "The improvement of satisfaction is of humanitarian value . . . satisfaction is a legitimate goal in itself" (p. 3).

In spite of all the research that has been done in the area of leadership and job satisfaction, there are few studies which have directly examined the impact of the elementary school principal on outcomes such as teacher job satisfaction. The general paucity of such studies has prompted several authors to assert that research has yet to determine the specific effect of leadership on the organization (Coleman, 1981; Pitner & Charter, 1984). It

is therefore time to focus on the direct relationship that an elementary school principal's leadership style has on the job satisfaction of teachers.

Statement of the Problem

It has generally been established that leadership characteristics are important for success in educational settings. There is also a great deal of anecdotal and research information about successful approaches. However, there are no final answers about what characteristics are most important, what the relative impact of the leadership is when compared to other school factors, or how the most effective leadership might vary between situations. These are sources of continuing research, and this study is an essential aspect that is intended to contribute to that body of research revolving around the implications of leadership style and teacher job satisfaction. It is the purpose of this study to draw inferences related to the following question: Is the leadership style of the elementary school principal related to the job satisfaction of elementary teachers? The independent variables of teacher gender, teacher's level of education, and teaching experience, as each relates to leadership style of the principal, will be given consideration.

Importance of the Study

A long history of research on leadership styles has resulted in many theories as to what leadership style is and what characteristics, traits, and

behaviors are associated with effective leadership style. It has also demonstrated the general effect of leadership style on the success of organizations. However, this body of research has also established that leadership style is a complex and ambiguous phenomenon and does not lend itself to simple definitions or statements concerning what conception of leadership style is best. This complexity is reflected in research on leadership style in educational settings.

One problem in trying to prove the effect that principals have on teacher job satisfaction is that what may constitute effective leadership style in one situation may not be effective in another. This situational nature of leadership style has made it very difficult to identify any single profile of skills, traits, and style that is best at all times (Coleman, 1981; Duke, 1982; Pitner, 1986; Pitner & Hocevar, 1987).

Some examples of situational features that could affect the effectiveness of leadership style are the educational background and professional orientation of subordinates, how much control administrators have over reward structures, how intrinsically satisfying the job is, and how flexible the organization is (Yukl, 1981). Since principals do not typically have control over such things as monetary rewards to teachers, since school organizations are not flexible, and since the teaching task (for example, watching students learn) seems to be intrinsically motivating to teachers, there are

some authors who feel that even the potential effect of principals is greatly reduced (Pitner, 1986).

Yet, irrespective of the diverse leadership style theories and characteristics that have been presented in previous studies, the conclusion that school leadership style is related to teacher productivity which manifests itself in student achievement has yet to be proven. Researchers and, more importantly, school leaders who are interested in school improvement, cannot capitulate on that important quest. Further research therefore becomes imperative.

A closer examination of the relationship of leader behaviors to teacher job satisfaction will assist in answering important questions that will enhance a positive teacher/administrator relationship. Learning more about that relationship will assist principals in becoming better supervisors, will assist them in instituting needed changes with little, if any, resistance, and should inspire subordinates to be happier and more productive in meeting school goals, and teachers in general would become more satisfied with their jobs.

Obviously, this study will not answer all the unknowns, all the enigmas of leadership style, but it will attempt to reveal an important aspect of the "big question." The study will offer, especially to practicing administrators, some clear information about leadership styles and the effect a style may have on job satisfaction among male and female elementary school teachers.

Definition of Terms

The following terms are defined for the purpose of this study:

(1) Consideration. The degree to which the supervisor shows concern, understanding, warmth, and sympathy for the feelings and opinions of his/her subordinates, and the degree to which he/she is considerate of their needs and welfare and willing to explain his/her actions (Stodgill & Coons, 1957), as measured by the Leader Behavior Description Questionnaire-Form XII (LBDQ-XII).

(2) Elementary principal. The head or leader; the person, irrespective of FTE, who is in charge of the elementary school building, including its curriculum and personnel.

(3) Elementary school. A public school in Montana inclusive of grades K through 8, or any combination of those grades. Generally the school is accredited by the Montana State Department of Education and has a certificated teaching staff.

(4) Elementary teacher. An individual who has met all requirements of a state-accredited teacher education institution, has graduated and been certified and credentialed by the state wherein he/she teaches; a person in charge of instruction in an elementary classroom.

(5) Initiation of structure. Refers to behaviors which are related to the assignment of roles and tasks within the group, such as scheduling work

assignments, defining goals, setting work procedures and standards, and evaluating the work of subordinates (Stogdill & Coons, 1957), as measured by the LBDQ-XII.

(6) Job satisfaction. For the purpose of this study, "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating one's values" (Locke, 1969, p. 310), as measured by the Overall Job Satisfaction Questionnaire (OJSQ).

(7) Leadership style. For the purpose of this study, the behaviors of consideration and initiation of structure, as measured by the LBDQ-XII, will be assessed to classify leadership style. Hersey and Blanchard (1965) described the four leadership styles as follows: (a) integrated style, characterized by high consideration and high initiation of structure; (b) dedicated style, characterized by low consideration and high initiation of structure; (c) separated style, characterized by low consideration and low initiation of structure; and (d) related style, characterized by high consideration and low initiation of structure.

(8) Role assumption. For the purpose of this study, refers to a leader who actively exercises the leadership role rather than surrendering leadership to others (Stogdill, 1963).

(9) Tolerance of freedom. For the purpose of this study, refers to a leader who allows staff members scope for initiative, decision, and action (Stogdill, 1963).

General Procedures

The general procedures that were followed in this study are described below.

(1) An extensive review of the literature was completed. Specifically, the review concentrated on literature that was related to elementary principal leadership styles and school working climate as they pertained to teacher job satisfaction. The literature review addressed research and reports in the following two subcategories: (a) literature related to principal leadership styles, and (b) literature related to teacher job satisfaction.

(2) ERIC searches were conducted on elementary principal leadership styles. Descriptors used included: leadership styles, elementary principals, leadership styles and elementary principals, elementary principal leadership styles and job satisfaction of teachers, morale vs. leader style, and teacher-administrator relationships. Another more general ERIC search was conducted under the statement request of "administrative leadership styles primarily in public schools." Although consideration was given to historical references, emphasis was primarily on current research concerning leader behavior.

(3) An ERIC search was conducted on job satisfaction using descriptors including: elementary school teachers, job satisfaction, job satisfaction

and elementary school teachers, elementary principals and teacher morale, job satisfaction and elementary principals.

(4) Elementary principals in school districts in Montana with a student population of at least 100 were asked to allow their staff's participation in responding to the Leader Behavior Description Questionnaire-Form XII.

(5) Elementary teachers in randomly sampled school districts with a student population of at least 100 (according to the *1989-90 Directory of Montana Schools*) were requested to complete the Leader Behavior Description Questionnaire-Form XII.

(6) Elementary teachers in the above-mentioned schools were requested to complete the Overall Job Satisfaction Questionnaire.

(7) The questionnaires were collected and the data were analyzed and recorded on a contingency table.

(8) A two-way analysis of variance (ANOVA) procedure was utilized for the statistical evaluation. The analysis was performed at the Montana State University Computer Services Center using the Statistical Package for Social Sciences (SPSS, revised 1990).

(9) A multiple linear regression procedure was utilized to evaluate Null Hypothesis 8, and a stepwise procedure with backward selection was used to examine Null Hypothesis 9.

Limitations of the Study

(1) Some of the elementary school principals did not grant permission for their teachers to participate in completion of the questionnaires.

(2) Some teachers did not wish to respond to the questionnaires.

(3) The study was limited to elementary schools that had a student population of at least 100.

(4) The study was limited to a random sample of elementary schools in Montana.

CHAPTER 2

METHODOLOGY

Introduction

This study focused on the effect that leadership style of the elementary building principal may have on job satisfaction attitudes of male and female elementary teachers. Leadership styles have been identified by other researchers in numerous previous studies. It was the intent of this study to identify those elementary principals who ranked high on the leadership dimensions of consideration and initiation of structure as measured by the Leader Behavior Description Questionnaire-Form XII (LBDQ-XII), and then to examine how job-satisfied their respective male and female teaching faculties are. Permission to use the LBDQ-XII was granted by the College of Business, Ohio State University, Columbus, Ohio (Appendix E).

The procedures used for conducting this study are presented under the following categories: (1) population description and sampling procedure, and (2) sources of evidence and authority.

Population Description and Sampling Procedure

The population was randomly selected from elementary principals and elementary teachers in 15 of Montana's elementary schools that had a student population of at least 100 students. Non-public schools and public schools with less than 100 students were not included in the study because of the following reasons:

(1) Some non-public schools in Montana are not accredited by the state; thus, both teachers and principals in those institutions may assume roles that are inconsistent with their counterparts in the accredited public schools.

(2) Oftentimes, job responsibilities of the principal of a non-public school vary from those of a public school principal.

(3) With the emergence of home schools, Christian schools, and other private entities, characteristics of one type may be unique to that school only.

(4) Not all non-public schools in Montana have principals.

(5) The principal may be a teaching principal in some of the smaller public and non-public schools.

Montana school districts with size-appropriate elementary schools were randomly selected to become the sample for this study by using the following procedures:

(1) Size-appropriate school districts, as listed in the *1989-90 Directory of Montana Schools*, were assigned numbers based on alphabetical order of Montana counties. In a district with more than one size-appropriate elementary school, staff of a volunteer school were asked to complete the two survey instruments.

(2) Using the first two digits of the researcher's social security number (i.e., 47), a Table of Random Numbers was accessed (e.g., four squares of numbers across and seven squares down). Thus, the numbers from the table were 53, 45, 50, 01, 48, 21, 47, 25, 56, 92, 96, 61, 76, 52, and 16. Substitutes (in the event any of the 15 districts disallowed participation in the research) were selected from the table going up from number 53. Therefore, the substitute numbers were 33, 91, 30, 76, 90, 65, 94, 58, 42, 69, 68 and 60.

(3) The numbers from the Table of Random Numbers were reconciled with the numbers assigned to the school districts in the *1989-90 Directory of Montana Schools*. The first 15 numbered school districts comprised the sample.

Once schools had agreed to participate in the study, a copy of each of the two questionnaire instruments (i.e., the LBDQ-XII and OJSQ) were advanced to the appropriate administrator for his/her perusal. A follow-up telephone call was made by the researcher to clarify any questions and to determine the number of questionnaires needed. (Copies of the LBDQ-XII

and OJSQ survey instruments are found in Appendices C and D, respectively.)

Protocol was ensured in the following manner. Superintendents of sample school districts were sent a letter explaining the research project (Appendix A). They were asked to support the study by selecting a district elementary school to participate. That building principal's name and telephone number were then provided to the researcher. The principal was contacted personally by telephone, and the purpose of the study, along with participant requirements, were explained. An appropriate number of questionnaires was then sent to the principal, accompanied by a stamped, self-addressed envelope for ease of returning the completed questionnaires. A follow-up telephone call was made to the principal approximately one week after the questionnaires were sent to inquire about any questions the principal might have regarding administration of the instruments. An administration and return timeline was established with the principal. Once the return timeline elapsed, additional follow-up telephone calls were made until all samples had been returned.

If a sample district declined to participate, an alternative school district was selected using the Random Table of Numbers process. The same procedure was applied as outlined above.

Sources of Evidence and Authority

Previous studies using the LBDQ-XII have indicated that the consideration and initiating structure factors are definitely separate and unique, not extremes to be identified at opposite ends of the same continuum. Therefore, four quadrants were established by cross-partitioning on the mean score values of each scale (refer to Figure 1). Each subscale was divided into high and low groups and then combined with one another to determine four distinct groups, or quadrants.

Initiating Structures	Consideration	
	Low (-)	High (+)
High (+)	*QUADRANT 2* Low consideration (-) High initiating structure (+) II = (-,+) (Dedicated Style)	*QUADRANT 1* High consideration (+) High initiating structure (+) I = (+,+) (Integrated Style)
Low (-)	*QUADRANT 3* Low consideration (-) Low initiating structure (-) III = (-,-) (Separated Style)	*QUADRANT 4* High consideration (+) Low initiating structure (-) IV = (+,-) (Related Style)

Figure 1. Quadrants formed by using the LBDQ-XII dimensions.

Figure 1 is interpreted as follows: Given a group of leaders and their respective scores on the LBDQ-XII relative to initiating structure and consideration, those who scored above the mean of both dimensions were in

quadrant 1, the (+,+) quadrant; those below the mean on both dimensions were in quadrant 3, the (-,-) quadrant; those who scored below the mean in consideration but above the mean in initiating structure were in quadrant 2, the (-,+) quadrant; and those in quadrant 4, the (+,-) quadrant, exhibited the opposite relationship. Thus, by utilizing these two dimensions, four leadership styles can be identified.

Halpin (1966) outlined the major findings emerging from the Ohio State University LBDQ studies as follows:

(1) Initiating structure and consideration as measured by the LBDQ are fundamental dimensions of leader behavior.

(2) Effective leader behavior tends most often to be associated with high performance on both dimensions.

(3) Superiors and subordinates tend to evaluate the contributions of the leader behavior dimensions oppositely in assessing effectiveness. Superiors tend to emphasize initiating structure, whereas subordinates are more concerned with consideration. Hence, the leader often finds some degree of role conflict.

(4) The leadership style characterized by Quadrant 1, high in both dimensions, is associated with such group characteristics as harmony, intimacy, and procedural clarity, and with favorable changes in group attitude.

(5) Only a slight relationship exists between how leaders say they should behave and how subordinates describe that they do behave.

(6) Different institutional settings tend to foster different leadership styles. (p. 147)

The typical methods of measuring job satisfaction employ questionnaires that vary primarily in their directness in assessing the concept. The most direct method is a single question such as, "How satisfied are you with your

present job?" Usually response options range from very satisfied to very dissatisfied. This procedure is not entirely adequate because the reliability of a single item cannot be assessed. A slightly less direct approach uses a series of items that probe various components or indicators of job satisfaction. Table 1 presents the Overall Job Satisfaction Questionnaire, which utilizes such a scale. The OJSQ is scored on a 7-35 point scale, i.e., strongly disagree = 7, and strongly agree = 35.

Table 1. Overall Job Satisfaction Questionnaire.

No.	DESCRIPTION
1	As I evaluate my future as an educator, I feel my level of satisfaction will increase.
*2	I am somewhat dissatisfied with my job.
*3	If I came into enough money so that I could live comfortably without working, I would quit my job.
*4	I often think of changing jobs.
5	My job as an educator gives me a great deal of personal satisfaction.
6	I am satisfied with my job.
*7	Most other educators are more satisfied with their jobs than I am.
Response Categories: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree	

*Indicates reverse score.

According to Hoy and Miskel (1987), the seven-item measure developed by Miskel displays adequate reliability (0.81) and high face validity. The OJSQ, with slight variations, has been used to measure the criterion variable in numerous other studies conducted by researchers, including Miskel and

Gerhardt; Miskel, Glanapp and Hatley; and Miskel, DeFrain, and Wilcox (Hoy & Miskel, 1987). Dr. Miskel gave his consent to use the OJSQ in this study (see letter of consent, Appendix E).

Statistical Hypotheses

The following null hypotheses were tested in seeking resolve to the research problem of this study. All hypotheses were tested at the .05 level of significance.

Null Hypothesis 1. There is no statistically significant difference in elementary teacher job satisfaction mean scores based on leadership styles of elementary principals.

Null Hypothesis 2. There is no significant interaction between the independent variable of gender and the independent variable of leadership style as determined by the dependent variable of job satisfaction.

Null Hypothesis 3. There is no statistically significant difference in job satisfaction mean scores based on gender of elementary teachers.

Null Hypothesis 4. There is no significant interaction between the independent variable of teaching experience and the independent variable of leadership style as determined by the dependent variable of job satisfaction.

Null Hypothesis 5. There is no statistically significant difference in job satisfaction between teachers with varying years of teaching experience.

Null Hypothesis 6. There is no significant interaction between the independent variable of education level and the independent variable of leadership style as determined by the dependent variable of elementary teacher job satisfaction.

Null Hypothesis 7. There is no statistically significant difference in elementary teacher job satisfaction and the level of education they have achieved.

Null Hypothesis 8. There is no relationship between the combined components (as measured by the LBDQ-XII) of leader behavior and teacher job satisfaction.

Null Hypothesis 9. There is no relationship between the unique contribution of leader behavior components (as measured by the LBDQ-XII) and the explanation of variance in teacher job satisfaction.

Analytical Techniques and Research Design

A mean was calculated for the raw scores in job satisfaction for all the male teachers in each of the school districts and for all the female teachers in each of those districts. Those mean scores were entered in the appropriate cells of a table for two-way analysis of variance, as illustrated in Figure 2.

Gender	Leadership Styles as Determined by LBDQ-XII Quadrants			
	1	2	3	4
Male	X (J.S.)			
Female				

Figure 2. Cells for two-way ANOVA (leadership style x gender).

In addition, a mean was calculated for job satisfaction raw scores of elementary teachers in the following ranges of years of teaching experience: (1) 0-3 years, (2) 4-6 years, (3) 7-9 years, and (4) 10 years and above. Those mean scores were entered in the appropriate cells of a table for a two-way analysis of variance, as illustrated in Figure 3.

Leadership Style	Years of Teaching Experience			
	1	2	3	4
1	X (J.S.)			
2				
3				
4				

Figure 3. Cells for two-way ANOVA (years of teaching experience x leadership style).

Another two-way analysis of variance table was designed to obtain data regarding the level of education of the participants. A mean was calculated

for job satisfaction raw scores of elementary teachers in the following education categories: (1) BA/ BS degree, (2) BA/BS degree + 15 graduate credits, (3) BA/BS degree + 30 graduate credits, and (4) MA/MS degree and beyond. Job satisfaction mean scores were entered in the appropriate cells of the table (see Figure 4).

Leadership Style	Teacher Education Level			
	1	2	3	4
1	X (J.S.)			
2				
3				
4				

Figure 4. Cells for two-way ANOVA (teacher education level x leadership style).

Analysis of the data utilizing Figure 3 helped in determining whether or not there was a relationship between years of teaching experience and a particular principal leadership style. Data utilizing Figure 4 assisted in drawing conclusions as to whether or not a relationship existed between levels of teacher education and leadership style of the elementary principal. Analysis of the mean scores determined significant interaction or differences among the various teacher experience groups to assist the researcher in drawing conclusions about leadership style and the relationship to years of teaching experience.

Hypothesis 8 was tested using a multiple linear regression. A stepwise procedure with backward selection was utilized to test Hypothesis 9. The collective value of the variables was calculated and then compared to the value of the variables with significant scores.

CHAPTER 3

DATA ANALYSIS AND RESULTS

Introduction

The major purpose of this study was to determine if there was a significant relationship between elementary teachers' job satisfaction and the leadership style of their principal. Analysis of the independent variables of teacher gender, level of education obtained by the teacher (i.e., professional degree), and years of teaching experience, as each relates to principal leadership style, was performed.

The study was conducted in 15 randomly selected school districts in Montana. Aggregately, 272 questionnaires were sent out to the districts that agreed to participate. Of that number, 255 questionnaires were returned, for a rate of return of 91%. Eleven of the returned surveys were incomplete; 17 were not returned.

Once the surveys were returned, the sample receipt was recorded and the number of returned instruments was reconciled with the number sent. Next, incomplete surveys were scrutinized and culled from the completed stack. The returned surveys were then clipped together and placed back

into the envelope bearing their sample number to help ensure avoidance of co-mingling with others.

The questionnaires, one sample at a time, were carefully hand-scored. Results were recorded and transposed onto an IBM FORTRAN Coding Form and a data file was established.

Shortly after the requested return date had elapsed, those districts failing to meet the deadline were contacted again by telephone. The response was prompt and all sample districts were accounted for within the week. As soon as the final sample was returned and processed, the information from the data file was entered into the computer using the Statistical Package for Social Sciences (SPSS, revised 1990).

Hypotheses 1 through 7 were tested by using either a one-way or two-way analysis of variance (ANOVA), while the two remaining hypotheses were evaluated using a multiple-regression analysis. In the analysis of variance, an overall F-test, if significant, indicates that there are significant differences somewhere in the data. Inspection of the means gives evidence of which differences are important. Multiple regression analysis is a method for studying the effects and the magnitudes of the effects of more than one independent variable using principles of correlation and regression. More simply, it enables the researcher to predict the influence of independent variables on a single dependent variable.

For ease of understanding the tables on the next few pages, the identification of the leader behavior quadrants will be reviewed and/or reiterated.

Several prior studies using the LBDQ-XII instrument have indicated that the consideration and initiating structure factors are definitely separate and unique, not extremes to be identified at opposite ends of the same continuum. Therefore, four quadrants can be established by cross-partitioning on the mean score values of each scale (refer to Figure 5). Each subscale is divided into high and low groups and then combined with one another to establish four distinct groups, or quadrants. Those quadrants (1, 2, 3, and 4) are referenced by number several times in the tables in this section of the study. Therefore, it becomes imperative that the quadrant numbers be associated with the leadership style each depicts. In this manner, references to quadrants 1, 2, 3, and 4 will become more meaningful.

Figure 5 is interpreted as follows: Given a group of leaders and their respective scores on the LBDQ-XII relative to initiating structure and consideration, those who scored above the mean of both dimensions were in quadrant 1, the (+,+) quadrant; those below the mean on both dimensions were in quadrant 3, the (-,-) quadrant; those who scored below the mean in consideration but above the mean in initiating structure were in quadrant 2, the (-,+) quadrant; and those in quadrant 4, the (+,-) quadrant, exhibited the

opposite relationship. Thus, by utilizing these two dimensions, four leadership styles can be identified (refer to Figure 1, Chapter 2).

Reddin (1970) described those four leadership styles as: (1) integrated, (2) dedicated, (3) separated, and (4) related (refer to Figure 5).

	Quadrant (LBDQ-XII)			
	1	2	3	4
	Integrated	Dedicated	Separated	Related
STYLE DEFINITION	Likes to be part of things	Dominates; gives many verbal directions to subordinates	Very few communications; rule-oriented; aloof from staff	Accepts others; praises readily

Figure 5. Leadership style definitions identified by quadrant.

Relevant Data and Findings

Null Hypotheses

Hypothesis 1. *There is no statistically significant difference in elementary teacher job satisfaction mean scores based on leadership styles of elementary principals.*

Table 2 depicts the job satisfaction mean scores based on leadership styles of elementary principals. A one-way analysis of variance (ANOVA) was used to analyze these data because four independent groups or leadership styles were considered in relationship to the single independent variable of job satisfaction.

Job satisfaction mean scores in the four leadership style quadrants (Table 2) ranged from 172.29 to 196.38. Standard deviations indicated a range from 32.41 to 38.09. Of the 244 responses, 32 teachers identified their principal in quadrant 3 (low consideration and low initiating structure, i.e., separated style); 96 teachers identified their principal in quadrant 4 (high consideration and low initiating structure, i.e., related style).

An F-ratio score of 7.49 was obtained (Table 3). That score was significant at the .05 level. Therefore, Hypothesis 1 was rejected. There is a statistically significant difference in elementary teacher job satisfaction based on leadership style of the principal.

Table 2. Job satisfaction mean scores for leadership style groups.

Style	Number	Mean	Standard Deviation
1 Integrated*	76	172.29	38.09
2 Dedicated	40	184.98	34.51
3 Separated*	32	176.09	33.36
4 Related*	96	196.38	32.41

*It appears that group 4 (related) would be significantly different from group 1 (integrated) and group 3 (separated).

Table 3. One-way analysis of variance: Job satisfaction by leadership style.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	27135.260	9044.42	7.49	.0001*
Within Groups	240	289545.830	1206.44		
Total	243	316679.082			

*Significant at the .05 level.

Hypothesis 2. *There is no significant interaction between the independent variable of gender and the independent variable of leadership style as determined by the dependent variable of job satisfaction.*

A two-way analysis of variance was constructed to evaluate the mean scores of the variables (Table 4). The number of respondents in each cell is indicated by the number in parentheses. The two-way ANOVA yielded a significance level of .7760 (Table 5). Since this exceeds the established alpha level of .05, Hypothesis 2 was retained to indicate that there is no interaction.

Table 4. Job satisfaction mean scores by gender for the four leadership styles.

Gender	Leader Style 1	Leader Style 2	Leader Style 3	Leader Style 4
Male	160.67 (21)	182.47 (15)	169.75 (4)	192.92 (25)
Female	176.73 (55)	186.48 (25)	177.00 (28)	197.58 (71)

Table 5. Two-way analysis of variance: Leadership style by gender for job satisfaction.

Source of Variation	Sum of Squares	DF	Mean Squares	F	Signif of F
Gender	3320.3	1	3320.30	2.750	.0990
Leader style	27572.4	3	9190.80	7.612	.0001
2-way interaction	1335.8	3	445.25	.369	.7760*

*Not significant at the .05 level.

Hypothesis 3. *There is no statistically significant difference in job satisfaction mean scores based on gender of elementary teachers.*

A one-way analysis of variance was used to test Hypothesis 3. Table 6 presents the job satisfaction mean scores based on gender. The ANOVA yielded an F ratio of 2.1944 (Table 7), which is not significant at the .05 level; therefore, Hypothesis 3 was retained.

Table 6. Job satisfaction mean scores by gender.

Gender	Number	Mean	Standard Deviation
Male	65	178.68	38.82
Female	179	186.40	34.50

Table 7. One-way analysis of variance: Job satisfaction by gender.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	1	2845.83	2845.83	2.1944*	.1398
Within Groups	242	313833.25	1296.83		
Total	243	316679.08			

*Not significant at the .05 level.

Hypothesis 4. *There is no significant interaction between the independent variable of teaching experience and the independent variable of leadership style as determined by the dependent variable of job satisfaction.*

A two-way analysis of variance was constructed to test Hypothesis 4. Table 8 presents job satisfaction mean scores by years of experience for the

four leadership styles. Mean scores are given in each cell with the number of respondents given in parentheses. The two-way ANOVA yielded an F score of .595 (Table 9), indicating no significant interaction between principal leadership style and elementary teacher experience. Therefore, Hypothesis 4 was retained.

Table 8. Job satisfaction mean scores by years of experience for the four leadership styles.

No. Years Experience	Leader Style 1	Leader Style 2	Leader Style 3	Leader Style 4
0 - 3	165.67 (6)	224.00 (2)	169.75 (4)	195.30 (10)
4 - 6	196.00 (6)	187.83 (6)	182.00 (7)	197.27 (11)
7 - 9	169.56 (18)	187.25 (4)	189.00 (3)	198.80 (20)
10 +	171.13 (46)	181.25 (28)	173.06 (18)	195.87 (54)

Table 9. Two-way analysis of variance: Leadership style by years of teaching for job satisfaction.

Source of Variation	Sum of Squares	DF	Mean Squares	F	Signif of F
Years experience	1937.94	3	645.980	.523	.6670
Leader style	27269.50	3	9089.830	7.350	.0001
2-way interaction	6617.27	9	735.253	.595	.8010*

*Not significant at the .05 level.

Hypothesis 5. *There is no statistically significant difference in job satisfaction between teachers with varying years of teaching experience.*

A one-way analysis of variance was constructed to test Hypothesis 5. Table 10 presents job satisfaction mean scores for number of years of teaching experience. The one-way ANOVA yielded an F ratio of .5545 (Table 11), which is not significant at the .05 level. Therefore, Hypothesis 5 was retained.

Table 10. Job satisfaction mean scores for number of years of teaching experience.*

Years of Experience	Number	Mean	Standard Deviation
0 - 3	22	185.18	33.03
4 - 6	30	191.57	30.18
7 - 9	45	185.42	34.22
10 +	147	182.42	38.26

*No two groups are significantly different at the .05 level.

Table 11. One-way analysis of variance: Job satisfaction by teaching experience.

Source of Variation	DF	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	2179.78	726.59	.5545*	.6456
Within Groups	240	314499.30	1310.41		
Total	243	316679.08			

*Not significant at the .05 level.