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No. 3672

THE DIMENSION OF RISK AND ITS RELATIONSHIP  
TO EFFECTIVE SCHOOL LEADERS

DISSERTATION

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

For the Degree of

DOCTOR OF EDUCATION

By

Betty Burns Krohn, B.S., M.Ed.

Denton, Texas

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The purpose of this study was to determine if a relationship existed between teachers' or principals' effectiveness and their risk tendency.

The population consisted of 57 principals and 115 teachers from the state of Texas from average and exemplary campuses. The exemplary campuses were those nominated by Texas Education Agency to participate in the National Exemplary School Recognition Program for the past four years.

Data was generated by sending a survey packet to the 57 campuses requesting that the principal and two teachers (one who had been recently been recognized as teacher of the year and one who had never been so honored) complete the instruments. Teachers responded to a 16 item Risk Tolerance Questionnaire and principals responded to the Risk Tolerance Questionnaire and a Styles of Leadership Survey.

The hypothesis that exceptional teachers will not take more risks was not upheld. It was determined that exceptional teachers do take more risks; however, there was no significant difference in scores on the Risk Tolerance

Questionnaire of principals from average and exemplary campuses.

The findings were that 1) exceptional teachers do take more risks, 2) age and years of experience of teachers was not significant, 3) principals from average and exemplary campuses did not score significantly different on the risk instrument, 4) principals' years of experience was not significant, 5) sex of principals was significant in determining style of leadership, and 6) there was no relationship established between principals' risk tendencies and styles of leadership. It may be concluded that leadership style may be reflective of the work situation and its people, while the tendency to take risks is an independent attribute.

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## CHAPTER I

### INTRODUCTION

Many studies have researched schools that are effective in promoting academic achievement (Chubb, 1987). Edmonds (1979), as well as Brookover and his associates (1979) made the educational community aware that some schools were more effective than others. This awareness grew out of a reform for excellence which was spurred on by various reports on education such as The Paideia Proposal, A Nation at Risk, and Action for Excellence, and by educational books, such as A Place Called School and Horace's Compromise. Through recurring patterns this research showed that effective schools were related to the effectiveness of the building principal (Manasse, 1984; Rutter, Maugham, Mortimore, & Ouston, 1979; Venzky & Winfield, 1979). Characteristics of effective schools were summarized to include not only strong administrative leadership but also a school climate conducive to learning, a school-wide emphasis on instruction, high teacher expectations for student achievement, and systematic monitoring of pupil performance.

A repeating factor in any investigation of effective schools has been its leadership. The term "leadership" is used almost synonymously with "administration" and

"management." To some, leadership means the role of change agent; to others, it is the influence which one person exerts on another (Newell, 1978). As the quest for effective instruction has continued, research in the area of private business and management has been introduced and applied. This research, which used to be kept separate and explained as not related, is now becoming the measuring stick of how well schools are doing. Peters and Waterman (1982), in their book In Search of Excellence, began by noting and commenting very briefly on characteristics found in excellent companies. Clark (1984), in a conference on "Making Our Schools More Effective," summarized seven characteristics of effective organizations that were also characteristics of effective schools. (a) Commitment--Good schools project a raison d'etre. (b) Expectations--Good schools have confident staffs who expect others to perform at a quality level. (c) Action--People are busy doing things. (d) Leadership--The principal is the key factor in a school's effectiveness. (e) Focus--Good schools focus on the core task at hand and do not stray from it. (f) Climate--Good schools have an orderly and safe environment. (g) Slack--A reasonable level of human resources and slack time is permitted. Presently, six correlates of effective schools are now the focus for restructuring schools. Those correlates, evolving from the business arena, are (a) instructional leadership, (b) instructional focus, (c) safe

and orderly school climate, (d) high student expectations, (e) monitoring and measuring progress, and (f) parental and community support.

This interest in school reform from American businesses has come mainly from the five percent that have undergone restructuring and applied some ingenious approaches. One such example is RJR Nabisco, which gave out \$30 million in grants to schools that were willing to do "what is routine in the business world but against the instincts and acculturation of most educators: take risks. 'We want to fund the china-breakers,' says Nabisco's chairman. 'The biggest risk in education is not taking them.'" (Fiske, 1991 p. 266). Therefore, the term "risk" has crossed from the financial realm into management techniques and thus into education.

With the trend toward site-based management comes the intrapreneurship of the individual building principal and the individual classroom teacher. Entrepreneurs work outside the system to bring about new products and services. By contrast, intrapreneurs operate within the system to devise, implement, and evaluate the effectiveness of its programs. This calls for leaders who are imbued with a risk-taking capacity and who have the vision to explore and create school climates that permit and encourage such activity (Pinchot, 1985). Thus, effective educators possess a set of skills that are common with all effective

educators, but the skills alone do not make a teacher or administrator effective. With this in mind, this study focused on risk-taking, and determined the influence it has upon the "educator personality" by exploring its connection to leadership and effectiveness in Texas schools.

#### Statement of the Problem

The problem of this study was to determine if a relationship existed between teachers' or principals' effectiveness and their risk tendency as measured by the Risk Tolerance Questionnaire.

#### Purposes of the Study

The purpose of the study was to conduct a selected survey that identified average and exceptional teachers as well as administrator leadership styles, comparing each group's tendency to take risks. This study determined the risk tendency of principals on campuses that have and have not been recognized by the Texas Education Agency as exemplary (those nominated for the National Exemplary School Recognition Program). Secondly, this study determined the leadership styles of those principals and ascertained if a relationship existed between their leadership styles and risk tendencies. Thirdly, this study determined the risk tendency of teachers on those campuses who have and have not been recipients of the "Teacher of the Year" honor and ascertained if a relationship existed between their tendencies to take risks and their effectiveness as a teacher.

### Hypotheses

To carry out the purposes of this study, the following hypotheses were tested.

1. There will be no significant difference in scores on the Risk Tolerance Questionnaire between teachers who are identified as exceptional or average.
2. There will be no significant difference in scores on the Risk Tolerance Questionnaire between teachers identified exceptional or average and their years of experience as a teacher.
3. There will be no significant difference in scores on the Risk Tolerance Questionnaire between teachers identified exceptional or average and the teachers' ages.
4. There will be no significant difference in scores on the Risk Tolerance Questionnaire between principals whose campuses have been identified as exemplary and those that have not.
5. There will be no significant difference between scores on the Risk Tolerance Questionnaire and the years of experience of principals.
6. There will be no significant difference in scores on the Risk Tolerance Questionnaire between principals whose campuses have been identified as

exemplary and those that have not and the years of experience of principals.

7. There will be no significant difference in scores on the Styles of Leadership Survey between principals whose campuses have been identified as exemplary and those that have not.
8. There will be no significant difference between scores on the Styles of Leadership Survey and the sex of principals.
9. There will be no significant difference between scores on the Risk Tolerance Questionnaire and the Styles of Leadership Survey between principals whose campuses have been identified as exemplary and those that have not.

#### Significance of the Study

The study is significant in that it provides specific research evidence of the relationship between risk taking and a teacher's success in the classroom and/or a principal's ability to provide appropriate leadership. The findings could result in the need to promote staff development in the area of risk taking in curriculum and leadership. In addition, the data obtained will provide a springboard for future research.

### Limitations of the Study

The following limitations are recognized in this study.

1. The criteria for the "Teacher of the Year" recognition of exceptional teachers was determined by each individual campus. No state guidelines are provided.
2. Correlations obtained in a relationship study do not establish cause and effect relationships between the variables correlated.

### Definition of Terms

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

School Environment - atmosphere of the learning environment including order/discipline, purpose, safety, cleanliness, and supplies (Texas Education Agency)

Risk-taking - the act of taking a chance (McCallon, 1989)

Leadership - capacity to lead; by a person who has commanding authority or influence (Webster, 1988)

Effectiveness - producing a desired result; efficient; operative; making a striking impression; impressive (Webster, 1988)

Average teachers - For this study, the term denoted those teachers who had not been singled out for special recognition for their success in the classroom (i.e. Teacher of the Year)

Exceptional teachers - For this study, the term denoted those above-average ability teachers who had been singled out for special recognition for their success in the classroom (i.e. Teacher of the Year)

Exemplary school - For this study, the term denoted those schools that had been recognized by the Texas Education Agency as exemplary and nominated to the National Exemplary School Recognition Program for the past four years (1987-1991).

#### Summary

This chapter highlighted the problem with which this study is concerned, the relationship between teachers' or principals' effectiveness and their tendency to take risks. Chapter II will present a review of related literature, Chapter III contains a description of the methods and procedures of the study, Chapter IV is a presentation of the data, and Chapter V will discuss and summarize the findings and implications for further research.

## CHAPTER II

### REVIEW OF SELECTED RELATED LITERATURE

The present chapter is a review of literature focusing on three areas: (a) leadership research, (b) effective school research, and (c) risk research.

#### Leadership Research

The review of literature centers around styles, theories, and models of leadership. A more recent conception of leadership identifies leadership styles as being nomothetic, idiographic, and transactional. In the Getzels-Guba-Thelen model, an organizational or nomothetic dimension concerns organizational decision making or legislative action. A personal or idiographic dimension concerns the individual or idea aspect of organization. The transactional leadership, which is characterized by its awareness of both the nomothetic and the idiographic dimensions or organization, integrates the two by analyzing the situation in relation to organizational and individual needs and purposes (Getzels & Guba, 1957). Various leadership theories and models have been developed. The six major types are "Great man" theories, environmental theories, personal-situational theories, interaction-expectation theories, humanistic theories, and exchange

theories (Newell, 1978). In the beginning it was thought that leadership could be explained in terms of certain traits which all leaders were thought to possess. Subsequent research findings, however, cast serious doubts on the validity of the trait theory. Stogdill (1948) made studies on the relationship of personality factors to leadership and summarized that

a person does not become a leader by virtue of the possession of some combination of traits, but the pattern of personal characteristics of the leaders must bear some relevant relationship to the characteristics, activities, and goals of the followers. Thus, leadership must be conceived in terms of the interactions of variables which are in constant flux and change. (p. 64)

Research indicates that conclusions drawn from earlier studies were too extreme in their emphasis upon the importance of the situation and their tendency to downgrade the importance of the personality and competencies of the leader. Thus Stogdill (1974) concluded:

The leader is characterized by strong drive for responsibility and task completion, vigor and persistence in pursuit of goals, venturesomeness and originality in problem solving, drive to exercise initiative in social situations, self-confidence and sense of personal identity, willingness to accept

consequences of decision and action, readiness to absorb interpersonal stress, willingness to tolerate frustration and delay, ability to influence other persons' behavior, and capacity to structure social interaction systems to the purpose at hand....

The characteristics considered singly, hold little diagnostic or predictive significance. In combination, it would appear that they interact to generate personality dynamics advantageous to the person seeking the responsibilities of leadership. The conclusion that personality is a factor in leadership differentiation does not represent a return to the trait approach. It does represent a modification of the extreme situationist point of view....(p. 81-82)

These research findings suggest that both the trait and situational approaches to leadership are still inadequate as leadership involves many interactions among people, tasks, and other situational elements. Research demonstrates that indeed human characteristics do relate to leadership effectiveness. Two dimensions are (a) initiating structure and (b) consideration. Initiating structure deals with organization, and consideration refers to behaviors indicative of friendship, mutual trust, respect, and warmth (Halpin, 1966). Many studies were conducted to substantiate one style over the others. All evidence accumulated seems

to suggest that different types of situations call for different types of leadership styles (Hersey & Blanchard, 1977).

A study by Celia Burger (1988) was conducted to identify characteristics of elementary teachers who were perceived and identified as being influential in curricula change by peers, principals, and district administrators. The analysis of the data collected appeared to indicate that the subjects shared five general characteristics: (a) a propensity toward change and the change process, (b) membership in an informal communication network of educators, (c) a belief in child-centered curriculum, (d) commitment to personal professional growth, (e) interpersonal relationships characterized as positive and receptive to individual differences, and (f) a lifestyle in which teaching was a style of living.

Leadership was examined at the superintendent level in a dissertation on the commonalities among women superintendents in Texas (Howell, 1989). A study was conducted to determine common characteristics and influences among these women. In their leadership positions, commonalities were determined in personal characteristics, personality traits, and perceived barriers to career mobility. These areas included age, race, marital status, parenthood, positive attitudes toward being both mothers and superintendents, preference for husbands in the field of

education, demonstration of early leadership traits, and self-perceptions of being assertive and a risk taker. They rated themselves highest in areas which include self-esteem, general daily activity level, independence, job satisfaction, and the ability to operate under pressure. These women perceived similarly that a lack of a professional network and their employers' negative attitudes toward women were the most common external barriers.

Leadership has recently been examined in light of what must be done to bring about needed improvement in education. Since most research asserts that a strong principal is one of the traits common to effective schools (ie. Dean, 1989), Van Zanten (1988) focused his dissertation study on measuring the relationship between the leadership style of the principal and school effectiveness in the urban setting. Each principal's leadership style was assessed by the Leader Behavior Description Questionnaire, Form XII, and teachers were selected to provide a satisfactory index score of the principal's leadership style. After administering the CAT (standardized test) annually, this data was statistically analyzed to measure the relationship between leadership style and school effectiveness. One hypothesis was that leadership style was an important factor in determining the effectiveness of a leader. It had also been hypothesized that an autocratic leadership style would be a more effective style in an urban setting. The findings partially

supported these assumptions. There appeared to be some support of the hypothesis, particularly in language and mathematical gains, suggesting that a more directive form of administrative leadership style has a positive influence on student achievement. Democratic forms of administrative leadership styles may not have provided enough structure, resulting in less productive student achievement.

Terrence Deal (1987) ties leadership to the culture of schools, and he believes, "The quality of organizations of the future will be those in which leaders have created artful ways to reweave organizational tapestries from old traditions, current realities, and future visions." (p. 12) Other research by Dwyer, Barnett, and Lee (1987) shows that the main element is the presence of an effective leadership with vision and a determined dedication to make it a practical reality. Guild (1987) states that the most important aspect of leadership is the sense of vision, purpose, and mission that the leader holds. Green (1987) summarizes that once leaders have a vision, "a glimpse of an alternative context for living and acting with its own resources, its own risks, its own advantages," (p. 115) education can go forward. Ortego Y Gasca (1991) states that it is

possible for us to be masters of technique yet diminish our leadership potential by dysfunctional value patterns. Technique is always a handmaiden to purpose.

What we believe is always guided by what we know. Leadership malpractice can flow as much from ill-considered values and beliefs as from technical virtuosity. (p. 1)

Firth (1987) says, "It is essential to realize that the journey is more important than the destination, the process more important than the product, and the people more important than the situation." (p. vii)

#### Effective School Research

The review of literature on effective schools focused on identifying competencies that differentiate between principals of effective schools and those of average or less effective schools. Sweeney (1986) reviewed the more valid and extensive studies on whether principals made a difference in schools and, if so, which leadership behaviors were associated with more positive outcomes. The conclusion was that leadership behavior was positively associated with school outcomes and specifically emphasized promoting achievement, establishing instructional strategies, providing an orderly school atmosphere, frequently monitoring student performance, coordinating instruction, and supporting teachers.

In Leithwood and Montgomery's review (1982) of the effective principal, they found that he communicated high expectations for teachers coupled with the assumption that programs would always be changing to better serve learners.

Furthermore, effective principals seemed to attend to all aspects of the educational endeavor. They set specific goals and held teachers to them. They also had knowledge of the instructional practices of their teachers, and, in direct and indirect ways, they saw to it that the teachers had the knowledge and skills necessary for program improvement. Effective principals also took actions to secure the necessary support from the community and from higher administrations for the school improvement efforts they endorsed. (p. 27)

Hatcher (1974), in a study with college professors, found a significant difference between personality traits indicating that those college teachers considered more effective were less cautious and more willing to take risks than was the random sample of college faculty.

The ideal principal as an effective manager is the factor that is used to evaluate effective schools. An ideal principal or effective manager must have insight, show respect for individual differences, understand the creative process, have professional knowledge, know how to listen well and give credit, take calculated risks, assign or suggest responsibility, criticize tactfully, provide inspiration, identify problems as opposed to mere symptoms, be flexible, and keep top management informed of both needs and achievement. (Nottingham, 1983)

The administrator, in order to be successful, must be able to seek out relevant data and analyze complex information to determine the important elements of a problem situation. The administrator must be able to understand district concerns/issues and make high quality decisions based on available information. Decisiveness, the ability to recognize when a decision is required and to act quickly on it, as well as leadership is important. This includes the ability to get others involved in a task, to recognize when a group requires direction, and to guide the group in its accomplishment of a task. The last necessary trait is sensitivity and the ability to perceive the needs, concerns, and personal problems of others. The element of risk permeates these traits (Nottingham, 1983).

In a national study, Dr. Keefe (cited in "Effective school," 1990) found four factors that determine the effectiveness of the administrative team: (a) the degree of autonomy accorded the school by the district, (b) the position, power, or prestige of the principal, (c) the nature of the school-community environment, and (d) staff member competence, diversity, and stability. Effective leadership is essential to restructuring schools, and therefore the autonomy issue is critical. If administrators see that the district must review and approve every decision before it is made at the school level, administrators become hesitant to lead. Effective principals set expectations,

assume control, and establish procedures for clear problem solving and decision making.

Effective school research (cited in "Effective school," 1990) also finds that instructional leadership is not just supporting curriculum development, evaluating teachers, or acting as an instructional "cheerleader." Instructional leadership is the inauguration and implementation of planned changes in an instructional program, utilizing the influence and direction of various components in the school. It begins with an attitude, an expressed commitment to student productivity, from which emanates values, behaviors, and functions designed to foster student achievement and satisfaction.

A recent study by Keefe (cited in "Effective school," 1990), determined that the most effective school leaders are those principals and assistant principals who are willing to take risks and who refuse to let bureaucracy repress innovation. Similarly, efforts devoted to identifying the competencies that differentiate between the effective and noneffective teacher, the effective and noneffective principal, the effective and noneffective school emphasized the key terms pro-active rather than responsive (Leithwood & Montgomery, 1982).

#### Risk Research

A careful review of literature was conducted to determine what traits were related to risk taking and desire

for certainty. Research on risk taking tendencies in people has been very limited. Research on group dynamics and decision making yields conflicting results. Stoner (1961) found that some groups tend toward risky decisions while those members have individually tended toward a more conservative decision. Whyte (1956) found that a team approach in business showed a preference for conservative choices or an inhibition of daring and risk taking.

Stoner (1967) has shown that people exhibiting leadership qualities tend to be higher risk takers. Merei's (1949) research with children supported this conclusion by showing that dominant children exhibited leadership qualities and were prone to take more risks. This indicates that a relationship may exist between leadership and the tendency to take risks.

Brim and Hoff (1957), in a study comparing a person's desire for certainty (or tendency not to take risks), found a consistent relationship between a given situation and the desire for certainty. In their experimental test where the desire for certainty was increased or decreased, results indicated that a person's desire for certainty remained consistent.

The research on locus of control, whether one believes that behavior determines outcome or that events are predetermined, has been related to risk taking (Baron, 1968; Higbee, 1972; Higbee & Streufert, 1968; Lefcourt, 1965;

Liverant & Scodel, 1960; Ryckman & Rodda, 1971; Strickland, Lewicki, & Katz, 1966). Those who believe behavior determines outcomes tend to desire more certainty than those people who believe events are predetermined (Baron, 1968; Liverant & Scodel, 1960). In a 1988 study, Ferrone investigated the relationships between situational leadership and locus of control on the effectiveness of the work group composed of superintendents and board members. Conclusions included that locus of control is a variable that relates to the effectiveness of the boards' work groups. Board members' internal locus of control predisposes them to believe that they exert control over situations. Board members, who share the leadership role with superintendents and who actively participate in the decisions of the group, may also perceive their group operating effectively in group processes, such as communications, decision making, group care, and problem solving.

Risk taking was examined by Kohler (1986) in a cognitive approach to determine the relations of risk taking behavior to critical thinking and locus of control. It was found that no significant relationship existed between risk taking behavior and critical thinking nor between risk taking and locus of control. A significant relationship was found between risk taking behavior and gender when critical thinking and locus of control were held constant.

Research has indicated rather conclusively that males tend to take more risks than females in investments (Blum, 1976), in general decision making (Bonama & Johnston, 1979; Wallach & Kogan, 1959, 1961), and in gambling (Slovic, 1964; Heilizer & Cutter, 1971). Wallach and Kogan (1959) and Wallach and Caron (1959) also found males to be broader categorizers than females, causing them to be more willing to classify ambiguous figures as being similar to standard figures in a situation where the likelihood of error was greater.

With respect to age, it has been found that cautiousness, or the degree to which one is cautious, increases with age. The work of Botwinick (1964) and Wallach and Kogan (1959, 1961) indicate that older persons of both sexes require a higher probability of success before undertaking a risky act.

In a study by Blum (1976) concerning investment preferences and the desire for security, the results suggest that vocation is closely related to a desire for security rather than gender in decisions concerning investment preferences. These results roughly parallel the findings of a previous study in the area of vocational choice.

Several studies support the conclusion that vocation is related to a person's desire for certainty (Litwin, Meyer & Walker, 1961; Atkinson, 1957). Individuals characterized by high aggressive militarism prefer high risk alternatives,

and those individuals with pronounced authoritarian nationalism prefer higher levels of risk compared to those who have low tendencies in these respects (Shure & Meeker, 1967). Miner (1969) found results consistent with previous findings that reasonably high risk takers (as compared to low risk takers) are more concerned about the actual nature of their work than about the security of the environment. Persons aspiring to sales occupations gambled most often, while future civil engineers took fewest risks (Ziller, 1957a, 1957b).

Risk is also a term that deals with educational innovations and evaluation techniques. One example (Grube, Cram, & Melchior, 1988) is in a New York school system where an evaluation model involves only a portion of the staff in any given year to support, encourage, and reinforce the application of the theory and practice of effective teaching stressed in staff development programs. This evaluation model is perceived by the school system as a risk taking venture to improve instruction.

Some research was made on curriculum regarding high school students' curriculum choices. Reardon (1981) found that risk taking ability appears to be a potent variable in students' academic choices, namely in their choice of traditional and alternative curricula.

With the focus on development for accountability and improvement, the element of risk is a key factor to be

assessed. That may be why few specific studies and little research exists dealing with the specifics of risk. Instead, the factor of risk is bypassed, and the focus is on development for accountability and improvement by implementing new programs and techniques, thus making risk a part of the total picture being researched or explained. One such example is a study by Barbara Davis (1990) entitled "Perfectionistic Thinking In Teachers." She asserts that perfectionistic thinking is hypothesized as a blend of intense feelings about competence, comparison, and control. Popular literature portrays perfectionists as unhappy, intolerant, inflexible, and unwilling to take risks necessary for growth. This was the basic relevance of the study, and the element of risk was only part of the total picture being researched.

However, Barth (1990) became more pointed with his view on the element of risk in learning and education. His vision of a good school included a community of learners in which everyone is teaching and everyone is learning-- simultaneously. The principal occupies a more important position of leadership as the "head learner," engaging in, displaying, and modeling the behaviors desired for teachers and students alike. His vision encourages collegiality. Teachers and principals talk with one another about practice, observe one another engaged in daily activities, share their knowledge of their craft with one another, and

actively help one another become more skillful. Everyone becomes a staff developer for everyone else. Taking risks is the next part of the vision. He openly says that students and adults should be encouraged to take risks, and a safety net should protect those who do so.

If we want students to be less docile and more adventuresome in their thinking, then adults must model risk taking as well as learning. If we want to improve schools, we must risk doing things differently. New and unusual ideas must be viewed not as nuisances or embarrassments, but as signs of life and growth. Considerable research suggests that risk taking is strongly associated with learning.... If we're serious about learning, for ourselves and for others, then we must become serious about risk taking. When the risks are high, and when a safety net is in place, the learning curve goes off the chart. (p. 515)

He continues with his vision including choices and commitment, respect for diversity, --"like risk taking, differences hold great opportunities for learning" (Barth, 1990, p. 516), a place for philosophers, humor, and a community of leaders. He stressed, "A school can fulfill no higher purpose than to teach all its members that they can make what they believe in happen and to encourage them to contribute to and benefit from the leadership of others" (p. 516).

### Summary

This chapter has examined literature concerning leadership, effective schools, and risk. It is notable that little research on risk is directly related to education. This study will add to this area of research with respect to Texas educators.

## CHAPTER III

### METHODS AND PROCEDURES FOR COLLECTION OF DATA

#### Introduction

The review of literature revealed much research on leadership, effective schools, and risk; however, little research has focused on the connection of risk tendency to leadership and effective schools. Therefore, the intent of the study was to investigate risk taking tendencies among teachers and principals in Texas to determine if indeed effective managers in the classroom and on each campus do take more calculated risks.

The research technique utilized in the present study consists of teachers and principals rating themselves in the area of risks and principals rating themselves on their leadership styles. The survey questions are worded to ask what teachers and principals would do given specified situations or choices. Even though difficulties are inherent in this type of survey, valid information was found in the validation studies on Risk Tolerance Questionnaire and the Styles of Leadership Survey. A description of the Risk Tolerance Questionnaire and the Styles of Leadership Survey follows.

### Description of the Research Instruments

The Risk Tolerance Questionnaire was designed to measure risk taking tendencies (McCallon, 1989). It distinguishes between gender, age, perceptions, investment preferences, and population groups. Evidence to support the test's ability to measure risk taking tendencies is consistent with previous research. Appendix A provides the reader with the questionnaire.

The reliability and validity data for the sixteen item Risk Tolerance Questionnaire was based on two groups (McCallon & Krohn, 1989). The first group, a general population, consisted of students at a large state university, professionals in various vocations (including educators), blue-collar workers, parents from middle income groups, and senior citizens. The groups were diverse with respect to age, gender, educational background, and socio-economic status.

The second group selected consisted only of professional sales persons. They sold medical supplies, furniture, automobiles, wholesale food supplies, and insurance. This group was deemed to be psychological/ sociological risk takers according to previous research findings (Litwin, Meyer & Walker, 1961; Atkins, 1957; Sure & Meeker, 1967; Miner 1969; Ziller, 1957a, 1957b).

Using these two groups, the variables of gender, self-perceptions of risk taking, investment preferences, and age

were analyzed. Results showed that males tended to take more risks than females, which is consistent with studies by Blum (1976), Bonama and Johnston (1979), Wallach and Kogan (1959, 1961), Slovic (1964), Heilizer and Cutter (1971), and Wallach and Caron (1959). With respect to self-perceptions of risk taking tendencies and investment preference, a significant difference was found between the groups and was consistent with how they had responded on the questionnaire. Results on age, subjects under 40 years old and those over 55 years old, were consistent with previous research findings as well (Botwinick, 1964; Wallach & Kogan 1959, 1961). Finally, when the two population groups were compared, statistically significant data between the general population group and the sales person group showed the sales group was more prone to take risks. This is consistent with other research in this area.

The Styles of Leadership Survey (Hall, Harvey & Williams, 1986) addresses five leadership styles and provides assessment of general leadership based on philosophy, planning, implementation, and evaluation (see Appendix C). The Styles of Leadership Survey is an adaption of the Style of Management Inventory (SMI), and construct and concurrent validities are similar with the median coefficient of statistics greater than .70.

The items on the survey were designed to reflect particular practices which occur in each of the five

leadership styles. Subjects responded to each situation by indicating their preference for a practice representative of their style. These responses were weighted to indicate different leadership orientations, and the sum of their responses infer their preferred approach to accomplishing purpose through people.

Raw scores were transformed to T-scores which were compared to a normative sample of leaders who were representative of a variety of vocations, ages, and number of people supervised by these individuals.

The survey gave five scores revealing the order of preference and the strength of usage of the various styles of leadership, as well as component scores which represented the personal view of leadership dynamics when planning, implementing and evaluating. For the purpose of this study, only the preferred style was used.

#### Subjects

The subjects for the average representation of principals for the proposed study were selected by contacting school principals in the state of Texas whose schools had similar demographics to the exceptional schools identified. Demographics considered were grades taught (secondary, junior high, elementary), enrollment, and geographic area of school. The sample size contacted was 53. (see Appendix E). Only 23 (43%) participated in the study.

The subjects for the exceptional representation of principals for the proposed study were gathered from those schools recognized by the Texas Education Agency as exemplary and nominated to participate in the National Exemplary School Recognition Program for the past four years. The sample size contacted was 53 (see Appendix D). Only 34 (64%) participated in the study.

The subjects for the average and exceptional representation of teachers were selected from the participating Texas school campuses. Participating principals were asked to give a Risk Tolerance Questionnaire to a randomly selected teacher on their campus who had never been a recipient of the "Teacher of the Year" honor on their campus, and to a teacher on their campus who had most recently been recognized as "Teacher of the Year." The random selection criteria specified a teacher which was representative of that campus's staff years of experience, ability, and educational background. The sample size of average teachers contacted was 106 and the sample of exceptional teachers contacted was 106. There were 73 average teachers participating and 42 exceptional teachers participating in the study. This represents 69% and 40% respectively.

### Data Collection

All subjects (principals) were contacted by mail in an initial introductory letter fully explaining the intent of the study (see Appendix G). A stamped, self-addressed envelope was also enclosed. Those respondents who agreed to participate received the questionnaires by mail. The respondents were requested to return the questionnaire within one week of receipt. A follow-up card (see Appendix I) was sent after the initial mailing if the subject had not responded within 10 days. Several follow up phone calls were also made to prompt the return of the questionnaires.

### Data Analysis

The scores on the Risk Tolerance Questionnaire are of a continuous nature from 0 to 96. The higher the score, the more likely the subject is to take risks; conversely, the lower the score, the less likely the subject is to take risks. The scores from the 176 returned questionnaires were entered with their gender, age category, position, and years of experience in education. The data were analyzed using t-tests, one-way and two-way analysis of variance. The results as they relate to the hypotheses tested are reported in Chapter Four.

The scores on the Styles of Leadership Survey are nominal. Of the five different leadership styles (Hall & Williams, 1986), the leadership style 9/9 is considered the most desirable as it is a collaborative leadership style.

This means that the people are the organization and they work together to achieve the purpose or goals of the organization. The 1/9 style is the supportive leadership style where the purpose of the organization is incidental to lack of conflict and "good fellowship" among its employees. The directive leadership style is represented by 9/1 and is high on concern for the organization's purposes. People become a commodity like machines and the leader's responsibility is mainly to plan, direct, and control the work. The most undesirable style is 1/1, bureaucratic leadership, which is low concern for people and the organization's purpose. It asserts that purpose is unobtainable and sound and mature relationships are difficult to achieve because of lazy and indifferent people who are prone to conflict. The "middle of the road" style is 5/5, strategic leadership. This leader compromises knowing that purpose comes first and morale cannot be forgotten. The leader must push enough and give enough.

Because of the nominal information, the two hypotheses related to the Leadership Style Survey were tested using Chi-Square tests. The last hypothesis was answered by a comparative analysis of information gathered from hypotheses four and seven.

#### Summary

This chapter has been concerned with the methods and procedures for the collection and analysis of data. In

particular the survey instruments are described along with information on validity and reliability. The subjects and the data collection and analysis techniques have been briefly explained.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

#### Introduction

This chapter presents the data obtained from responses to the Risk Tolerance Questionnaire and Style of Leadership Survey which was administered to teachers and principals in the state of Texas.

#### Data on the Risk Tolerance Questionnaire

The Risk Tolerance Questionnaire was sent to 78 schools (for its principal, teacher of the year, and average teacher). Returns were received from 58 schools (see Appendix F) providing 176 subjects, with 78 representing the exceptional category (teachers of the year and principals from schools nominated by the Texas Education Agency (TEA) as exemplary), and 98 from the average category (teachers who have never been teacher of the year and principals from schools that have not received the above mentioned honor). Of the 176 subjects, 44 were males and 132 were females. This sex distribution is consistent with the sex distribution in a normal school setting. Tables I and II presents the distribution of age and years of experience in education represented in this survey. Table I presents the distribution of age among teachers and

TABLE I  
 FREQUENCY OF AGE DISTRIBUTION FOR SUBJECTS ON  
 THE RISK TOLERANCE QUESTIONNAIRE

Age	Number of Subjects
Less than 30	10
30-39	50
40-55	108
Over 55	6
Not marked	2

TABLE II  
 FREQUENCY OF YEARS OF EXPERIENCE IN EDUCATION  
 ON THE RISK TOLERANCE QUESTIONNAIRE

Years of Experience	Number of Subjects
0-2 years	3
3-5 years	8
6-10 years	32
11-15 years	29
16-25 years	75
Over 25 years	27
Not marked	2

principals surveyed and shows that the majority of subjects were between 40 and 55 years of age. Table II shows the majority of teachers and principals surveyed had 11-25 years of educational experience.

Table III presents the means and standard deviation value of the raw scores for all subjects taking the Risk

TABLE III  
RAW SCORE SUMMARY ON THE  
RISK TOLERANCE QUESTIONNAIRE

N	Mean	Standard Deviation	Minimum Score	Maximum Score
176	48.79	11.03	23	74

Tolerance Questionnaire. The lowest possible score was 0, and the highest possible score was 96.

Hypothesis one was to determine if a significant difference was observed in scores on the Risk Tolerance Questionnaire between teachers who were identified as exceptional and those identified as average. According to the data presented in Table IV, there was a significant difference at the .05 level. It can be noted that exceptional teachers did tend to score higher on the Risk Tolerance Questionnaire. This supported the hypothesis that exceptional teachers do tend to take more risks than average teachers. Teachers that receive the teacher of the

TABLE IV  
 MEANS, STANDARD DEVIATION, AND  
 T-TEST VALUE BETWEEN EXCEPTIONAL AND AVERAGE TEACHERS  
 ON THE RISK TOLERANCE QUESTIONNAIRE

Teachers	N	Mean Score	Standard Deviation	t value df = 112
Average	73	44.20	10.50	.02*
Exceptional	42	49.02	10.37	

\*Significant at the .05 level

year honor are distinguished for their commitment to learning, their interpersonal relationships which are positive and receptive to individual differences, and a propensity toward change (Burger, 1988). Because they did score higher on the Risk Tolerance Questionnaire, they indeed do take risks to maintain that commitment to learning, positive and receptive relationships, and an open attitude toward the change process.

Hypothesis two analyzed the two groups by years of experience. The two-way analysis of variance presented in Table V revealed that the position (average or exceptional) was significant; however, no significant interaction was noted between the position and years of experience. Interaction is the effect of the score of the Risk Tolerance

TABLE V  
TWO-WAY ANALYSIS OF VARIANCE BETWEEN  
EXCEPTIONAL AND AVERAGE TEACHERS AND THEIR YEARS  
OF EXPERIENCE ON THE RISK TOLERANCE QUESTIONNAIRE

Source of Variation	df	Sum of Squares	Mean Squared	F
Position	1	517.27	517.27	.032*
Years of Experience	5	481.44	96.29	.500
Position by Yrs of Exp	5	230.46	46.09	.834

\*Significant at the .05 level

Questionnaire (dependent variable) on the two independent variables (position and years of experience) operating together. Again, the position, whether the teacher had or had not received the teacher of the year honor, was significant. This further supports the first hypothesis. However, when broken down by years of experience, it was not significant. The frequency of years of experience in education, showing that most subjects fell into the 16-25 years bracket, may have had some effect on the results.

In the two-way analysis of variance used to test hypothesis three, differences were not significant at the .05 level in scores on the Risk Tolerance Questionnaire between teachers identified as exceptional or average

TABLE VI  
TWO-WAY ANALYSIS OF VARIANCE BETWEEN EXCEPTIONAL AND  
AVERAGE TEACHERS AND THEIR AGES ON THE  
RISK TOLERANCE QUESTIONNAIRE

Source of Variation	df	Sum of Squares	Means Squared	F
Position	1	373.78	373.78	.071
Age	2	185.44	185.44	.44
Position by Age	2	9.58	4.79	.958

and their age. Table VI gives the results of an analysis of variance treatment on the data between exceptional and average teachers.

The next three hypotheses examined the scores of principals on the Risk Tolerance Questionnaire. Hypothesis four tested for a significant difference in scores between principals whose schools have been identified as exemplary and those that have not. Table VII presents the means, standard deviation, and T-test value between principals on average and exemplary campuses. Principals on campuses recognized as exemplary did tend to score higher but not significantly higher at the .05 level. This may be a factor of the sample size which was limited by the number of schools recognized as exemplary by TEA.

TABLE VII  
 MEANS, STANDARD DEVIATION, AND  
 T-TEST VALUE OF PRINCIPALS WHOSE SCHOOLS ARE  
 IDENTIFIED EXEMPLARY AND THOSE THAT ARE NOT

Schools	Mean	Standard Deviation	t-value df = 59
Recognized Exemp.	55.944	8.815	.079
Not recognized	51.52	10.44	

Hypothesis five examined the principals' scores on the Risk Tolerance Questionnaire and their years of experience.

TABLE VIII  
 ONE-WAY ANALYSIS OF VARIANCE BETWEEN PRINCIPALS'  
 SCORES ON THE RISK TOLERANCE QUESTIONNAIRE AND  
 THEIR YEARS OF EXPERIENCE

Years of Experience In Education	df	Sum of Squares	Mean Squared	F
11-15 years	2	70.212	35.106	.695
16-25 years	58	5556.739	95.806	
Over 25 years	60	5626.951	93.783	

Table VIII presents the analysis of variance treatment of the data between principals and their years of experience on the Risk Tolerance Questionnaire.

The one-way analysis of variance revealed no significant differences at the .05 level. However, hypothesis six, analyzing the principals' scores on the Risk Tolerance Questionnaire and their years of experience in education between schools that have and have not been

TABLE IX  
FREQUENCY FOR ONE-WAY ANALYSIS OF VARIANCE  
BETWEEN PRINCIPALS FROM EXEMPLARY AND AVERAGE SCHOOLS

SCHOOL RATING	YEARS OF EXPERIENCE IN EDUCATION		
	11-15 YR	16-25 YR	OVER 25 YR
Principals from			
Exemplary Schools	1	25	10
Principals from			
Average Schools	3	12	10

recognized exemplary by TEA, did yield interesting results. Table IX presents the frequency for this one-way analysis of variance.

Table X presents the means and standard deviation of the analysis of variance treatment on the principals' Risk Tolerance Questionnaire scores between the principals' years

TABLE X  
 MEANS, STANDARD DEVIATION OF THE ANALYSIS  
 OF VARIANCE BETWEEN PRINCIPALS' YEARS OF  
 EXPERIENCE AND SCHOOL RATING

School Rating by Yrs. of Experience*	N	Mean	Standard Deviation
<b>Exceptional School</b>			
11-15 years	1	54.00	.000
16-25 years	25	56.84	9.595
Over 25 years	10	53.90	7.031
<b>Average School</b>			
11-15 years	3	51.66	6.658
16-25 years	12	46.66	12.093
Over 25 years	10	57.30	5.831

\*No principal had less than 11 years of  
 experience in education.

of experience in education and their school rating.

Table XI presents the analysis of variance treatment on the data between school rating and principals' years of experience. The one-way analysis of variance showed a significant interaction between the school rating (exemplary or average) and years of experience at the .05 level.

TABLE XI  
ONE-WAY ANALYSIS OF VARIANCE BETWEEN SCHOOL  
RATING AND PRINCIPALS' YEARS OF EXPERIENCE

Source of Variation	df	Sum of Squares	Mean Squared	F
School Rating	1	50.06	50.06	.445
Years of Experience	2	183.48	91.74	.345
School Rating by Years of Experience	2	574.83	287.41	.041*

\*Significant at the .05 level

Because of the significant interaction between school rating and years of experience, simple effects tests were performed. Table XII presents the simple test results that proved to be significant when the years of experience was analyzed by school rating (exemplary and average).

This simple effects test showed that the years of experience in education among principals from average campuses was significant. Principals with 16-25 years of experience scored significantly lower than those principals from average campuses with 11-15 years of experience and those over 25 years of experience. This time span (16-25 years) may be significant due to the number of years they have been a principal, their future aspirations, or other

TABLE XII  
SIMPLE EFFECTS OF THE ONE-WAY ANALYSIS OF VARIANCE  
BETWEEN PRINCIPALS' YEARS OF EXPERIENCE AND  
SCHOOL RATING

Source of Variation	df	Sum of Squares	Mean Squared	F
School Rating	1	50.06	50.06	.445
Years of Experience				
by Exceptional School	2	65.63	32.81	.680
Years of Experience				
by Average School	2	616.81	308.40	.033*

\*Significant at the .05 level

factors. Principals with over 25 years of experience scored higher on the Risk Tolerance Questionnaire. This is contradictory to previous risk research results.

Simple effects tests was also utilized to examine the interaction between school rating and years of experience. Table XIII presents this data. Results showed that principals with less than 15 years experience and over 25 years showed no significant differences on the Risk Tolerance Questionnaire scores. However, exceptional school principals in the 16-25 years bracket took more risks than average schools principals with 16-25 years of experience in

TABLE XIII  
SIMPLE EFFECTS OF THE ONE-WAY ANALYSIS OF VARIANCE  
BETWEEN SCHOOL RATING AND PRINCIPALS'  
YEARS OF EXPERIENCE

Source of Variation	df	Sum of Squares	Mean Squared	F
Years of Experience	2	183.48	91.74	.345
School Rate by				
11-15 years	1	4.08	4.08	.827
School Rate by				
16-25 years	1	839.16	839.16	.003*
School Rate by				
Over 25 years	1	57.80	57.80	.412

\*Significant at the .05 level

education. This finding indicates this is a significant bracket of years of experience with regard to risk tendency.

#### Data on the Styles of Leadership Survey

There were 57 principals participating in the Styles of Leadership Survey. Twenty-three were from average schools, and 34 were from schools nominated by TEA as exemplary. The survey yielded a preferred style for each principal. The styles are 9/9, 9/1, 1/9, 1/1, and 5/5.

### Description of Leadership Styles

The 9/9 leadership style is known as collaborative leadership. This leader believes that work is healthy for people, that people have an innate need to work, and that people must achieve in order to feel good about themselves. People and purpose are interdependent as people are necessary to accomplish the purpose, and accomplishment of purpose is necessary for people.

The directive leadership is the 9/1 style. This style sees people only as contributors to the organization's goals, and the main concern is the output. A definite division exists between the planning and the actual work, and discipline is a must to direct and control the work. Social and psychological needs are viewed as an interference. The people are only expected to carry out their assigned directions, not to contribute original ideas.

In direct contrast is the 1/9 leadership style which focuses on people and their relationships. People are brought together to work toward happiness and harmony and to learn that the leader is interested in them. Organizational goals are not the focus. This leader does not create any long-term satisfaction among members for the very reason that purpose is not considered. Members have few opportunities to be creative or innovative about an issue; conflicts are inevitable and are smoothed over and not dealt with in any constructive way.

The bureaucratic leader is the 1/1 style. This style is sometimes adopted by those who have realized their goals and thus seek to "stay out of trouble." They avoid risk and meet only the necessary requirements for results and relationships. Whereas the 9/1 style does not permit conflict and suppresses it, and the 1/9 smoothes it over or smothers it, the 1/1 ignores it and postpones confrontations with conflict.

The last style is 5/5, the statistical leader. This leader reacts to each situation differently, easily switching from one style to another. There is no consistency in leadership behaviors thus creating a lack of predictability. Table XIV presents the style of leadership distribution for principals on the Styles of

TABLE XIV  
FREQUENCY OF PRINCIPALS FOR EACH STYLE  
ON THE STYLES OF LEADERSHIP SURVEY

Style	Frequency	Percent
9/9	25	43.9
9/1	2	3.5
1/9	23	40.4
1/1	4	7.0
5/5	3	5.3

Leadership Survey. Most principals were either 9/9, collaborative leadership style, or 1/9, supportive leadership style.

The 57 principals responding in the survey included 28 females and 29 males. They represented elementary schools (28 subjects), middle/junior high schools (18 subjects), and high schools (11 subjects).

Hypothesis seven examined the differences on scores from the Styles of Leadership Survey between principals whose schools have been identified as exemplary and those that have not. Table XV presents the leadership style distribution by school rating on the Styles of Leadership Survey.

TABLE XV  
FREQUENCY OF STYLE AND PRINCIPALS' SCHOOL RATING  
ON THE STYLES OF LEADERSHIP SURVEY

Style	Principals' School Rating	
	Average	Exceptional
1/1	1	3
1/9	13	10
5/5	2	1
9/1	1	1
9/9	6	19

Table XVI presents the Chi-Square treatment of the principals' leadership style and school rating. The Chi-Square test found no significant difference at the .05 level.

TABLE XVI  
CHI-SQUARE TEST FOR STYLE AND PRINCIPALS' SCHOOL  
RATING ON THE STYLES OF LEADERSHIP SURVEY

Value	df	p
6.607	4	.15812

When the Chi-Square test was used to analyze hypothesis eight, a significant difference was noted at the

TABLE XVII  
FREQUENCY OF STYLE AND GENDER ON THE  
STYLES OF LEADERSHIP SURVEY

Style	Female	Male
1/1	1	3
1/9	16	7
5/5	0	3
9/1	0	2
9/9	11	14

.05 level (see Table XVIII). This hypothesis tested for differences between scores from the Styles of Leadership Survey and the gender of principals. Table XVII presents the leadership style and gender distribution on the Styles of Leadership Survey and Table XVIII presents its results when analyzed using the Chi-Square treatment.

TABLE XVIII  
CHI-SQUARE TEST FOR STYLE AND GENDER  
ON THE STYLES OF LEADERSHIP SURVEY

Value	df	p
9.86723	4	.04272*

\*Significant at the .05 level

A significant number of females preferred style 1/9 when compared with males. This can be accounted for by females being typically more sensitive to feelings and relationships than males (Eagly & Johnson, 1990). Males were represented in all styles, whereas females tended to be either 1/9 (supportive leadership) or 9/9 (collaborative leadership) styles.

Hypothesis nine tested for a significant difference between scores on the Risk Tolerance Questionnaire and the Styles of Leadership Survey between principals whose campuses had and had not been identified as exemplary. This

hypothesis was analyzed using the statistical results from hypotheses four and seven. Hypothesis four showed no significant difference on the Risk Tolerance Questionnaire between principals (average and exemplary), and hypothesis seven showed no significant difference on principals' scores on the Styles of Learning Survey. It can be concluded that there was no significant difference between scores on the Risk Tolerance Questionnaire and the Styles of Leadership Survey between principals whose schools had been identified as exemplary and those that had not.

#### Summary

Based on the findings presented in this chapter, the following is a summary of the major findings on each hypothesis.

1. There was a significant difference in scores on the Risk Tolerance Questionnaire between teachers who were identified as exceptional or average. Exceptional teachers did tend to take more risks.
2. There was a significant difference in scores on the Risk Tolerance Questionnaire between teachers identified exceptional or average and their years of experience as a teacher. The position was significant; however, there was no significant interaction between the position and years of experience.

3. There was no significant difference in scores on the Risk Tolerance Questionnaire between teachers identified exceptional or average and the teachers' ages.
4. There was no significant difference in scores on the Risk Tolerance Questionnaire between principals whose campuses had been identified as exemplary and those that had not.
5. There was no significant difference in scores on the Risk Tolerance Questionnaire and the years of experience of principals.
6. There was a significant difference in scores on the Risk Tolerance Questionnaire between principals whose campuses had been identified as exemplary and those that had not and the years of experience of principals.
7. There was no significant difference in scores on the Styles of Leadership Survey between principals whose campuses had been identified as exemplary and those that had not been identified as exemplary.
8. There was a significant difference between scores on the Styles of Leadership Survey and the sex of principals.
9. There was no significant difference between scores on the Risk Tolerance Questionnaire and the Styles

of Leadership Survey between principals whose campuses had been identified as exemplary and those that had not.

## CHAPTER V

### FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

This chapter presents a brief overview of the study and a summary of the findings. A discussion of these findings in light of previous research is included, and conclusions are drawn as a result of the analysis of the data collected. Finally, recommendations for further study are included.

#### Overview

In light of the ever-increasing analysis of public school education (determining what makes some schools more effective than others), research has consistently cited the campus principal to be a key factor. The present study was designed to examine the factor of risk in effective educators (principals and teachers) to see if it is a contributing trait. The problem was to determine if a relationship existed between teachers' or principals' effectiveness and their risk tendencies as measured by the Risk Tolerance Questionnaire. Also, the study examined the principal's leadership style and determined if a relationship existed between his/her effectiveness and leadership style as measured by the Styles of Leadership Survey. To this end, 318 subjects in a sample from

exemplary and similar campuses were contacted to participate. Usable data was returned from 176 subjects (115 teachers and 57 principals) and analyzed using T-tests, one and two-way analysis of variance, and Chi Square tests.

#### Summary of Major Findings

The major data findings of this study are as follows:

1. Position (whether the teacher was average or exceptional) was a significant factor in the tendency to take risks.
2. A principal's years of experience was significant among those principals from average campuses in their tendency to take risks.
3. Age was not significant among teachers and principals in their tendency to take risks.
4. Gender was a significant factor in a principal's leadership style as measured by the Styles of Leadership Survey.

#### Discussion

The data support the belief that exceptional educators tend to take more risks than average educators. It is important to note in Table III that the mean score on the Risk Tolerance Questionnaire for the total sample of 176 was 48.79, while the mean score in Table IV for average teachers was 44.20 and for exceptional teachers 49.02. The mean score for average principals was 51.52, and the mean for exceptional principals was 55.94 (Table VII). It is

noteworthy that the principals' mean scores were higher than the teachers' mean scores. Even though the T-test for risk tendency between principals who had not been recognized by TEA and those who had was not significant at the .05 level, it was merely .029 above .05, as shown in Table VII. In fact, the one-way analysis of variance in Table XI between school rating and the principals' years of experience was significant at the .05 level. Therefore, it is possible to conclude that given a larger sample, the T-test for principals' school rating may well have been found to be significant.

As the data were collected, it was notable that principals from schools recognized by TEA as exemplary were more responsive (64% returns), than those which had not received that distinction (43% returns). This may be a byproduct of that school's effectiveness. Change occurs slowly in education, and its responsiveness to those people and organizations outside the institution is slow, also. Through effective school research this is beginning to change. Schools are realizing that they are not a separate entity but the heartbeat of a community and therefore must be open and responsive to its needs, pressures, feelings, and assistance.

In examining the simple effects test of the one-way analysis of variance between school rating and principal's years of experience, it was interesting to note that the 16-

25 years experience group was significantly different. The mean scores in Table X between principals from average and exceptional schools in this bracket was 46.66 and 56.84, respectively. It was also interesting to note the difference in mean scores in the over 25 years bracket. Average school principals' mean score was 57.30, and exceptional school principals' mean score was 53.90. This may be a response to TEA's pressure for effectiveness. Principals in this particular years of experience bracket can sit comfortably while anticipating a graceful exodus from education, or they can be aggressive knowing that they have "nothing to lose." It is also interesting to note that while age was not significant in any of the data analyzed, the years of experience did yield significant findings.

Data collected in the Styles of Leadership Survey showed in Table XIV that the preferred leadership style was 9/9, collaborative leadership style, for 43.9% of those surveyed, and the second style was 1/9, supportive leadership style, for 40.4% of those surveyed. Table XV indicated that more exceptional principals preferred the 9/9 leadership style than did average principals although it was not significant at the .05 level. The 9/9 collaborative leadership style is the ideal leadership style (Hall, Harvey, & Williams, 1986). In this style, the people and purpose are interdependent. Such a leader believes that

people are competent and responsible, and all are involved in the planning process. The associates of this leader are given opportunities to be involved in decisions affecting their own work, have their opinions sought, and have their ideas listened to. A feeling of ownership is created, resulting in a commitment to organizational goals and personal responsibility for their successful achievement. This leader creates a feeling of high self-worth, a sense of personal value.

Gender proved to be significant in the Styles of Leadership Survey. Table XVII showed that a significant number of females preferred the 1/9 style, supportative leadership, as compared to males. The second preferred style of females was 9/9, collaborative leadership style. In fact, while the males were scattered with a representation in all of the leadership styles, the females were either 1/9 or 9/9 with the exception of one female in the 1/1 style. The 1/9 leader overlooks problems in the process because of their stress on interpersonal relationships. On the other hand, the 9/9 leader views interpersonal relationships in the organization as being appropriately based around task issues (Hall, Harvey, & Williams, 1986).

Because the only data that were significant at the .05 level on the Style of Leadership Survey was gender and not

school rating, no link was established between leadership style and risk tendency.

#### Conclusions

The results of the data analysis permit some speculative inferences. The findings lead one to conclude that exceptional teachers tend to have higher risk tendencies than average teachers. The numbers also indicate that a greater number of exceptional principals have higher risk tendencies than average principals, although not significant at the .05 level.

Age and years of experience was not a factor in the measurement of risk tendencies in teachers. However, years of experience was a factor among principals' risk tendencies, and gender was a factor in leadership style. (Gender was not examined on the Risk Tolerance Questionnaire because of the limited number of male teachers in the sampling.)

It may be concluded that leadership style may be reflective of the work situation and its people, while the tendency to take risks is an independent attribute. This idea is supported by the outcome of the data analyzed.

#### Recommendations

The following are suggested as possible areas for future inquiry:

1. Because the sample size of exceptional schools was limited, it is recommended that the study be re-

examined using the newly implemented Texas Education Agency school "report card" which rates schools by academic excellence indicators.

2. Because a significantly larger group of females was represented in the teacher sample, it was not possible to make inferences regarding gender. It is recommended that the study be re-examined using equal sample numbers of male and female teachers in the average and exceptional positions.
3. Because of the significant findings regarding risk tendencies and position, it is recommended that the study be re-examined using a single large district's principals and teachers. It would be possible to rate the schools as effective or average using test scores, dropout rates, attendance, and pass/fail percentages. Teachers could be more accurately rated as exceptional or average by examining honors received for outstanding performance in the classroom, ratings on the Texas Teacher Appraisal System, pass/fail percentages, and student mastery of essential elements.
4. Because risk tendency may be related to security, it is recommended that the study be re-examined to include the job, vocational, financial, and personal security of the subjects.

5. Because of the significant findings that exceptional teachers have a greater tendency for risk taking, it is recommended that the study be expanded to examine student risk tendencies in relation to their academic success.

**APPENDIX A:**  
**RISK TOLERANCE QUESTIONNAIRE**

## RISK TOLERANCE QUESTIONNAIRE

## INSTRUCTIONS:

Read each statement carefully. Indicate the extent to which a statement is like or unlike you by circling the appropriate number as described below.

- |                        |                          |
|------------------------|--------------------------|
| 6 ...Very much like me | 3 ...Slightly unlike me  |
| 5 ...Somewhat like me  | 2 ...Somewhat unlike me  |
| 4 ...Slightly like me  | 1 ...Very much unlike me |

Respond rapidly. Usually your first impression is the best.

- |  | Like  |   |   |   |   | Unlike |
|--|-------|---|---|---|---|--------|
|  | <---- |   |   |   |   | ---->  |
| 1. If I had lost \$500 at the blackjack table in Las Vegas, I would be willing to risk \$500 to win my money back. | 6     | 5 | 4 | 3 | 2 | 1      |
| 2. If I had lived in the last century I would probably have joined a group of settlers heading west.               | 6     | 5 | 4 | 3 | 2 | 1      |
| 3. I like to work in an atmosphere where I have a set daily routine.   | 6     | 5 | 4 | 3 | 2 | 1      |
| 4. I prefer outstanding recognition in a profession, even above job security.                                      | 6     | 5 | 4 | 3 | 2 | 1      |
| 5. The word unplanned appeals to me more than scheduled.   | 6     | 5 | 4 | 3 | 2 | 1      |
| 6. I would rather be famous than rich.   | 6     | 5 | 4 | 3 | 2 | 1      |
| 7. Business deals that are relatively certain are the only ones I engage in.                                       | 6     | 5 | 4 | 3 | 2 | 1      |
| 8. When doing something others have done many times, I usually try to figure out a new way to do it.               | 6     | 5 | 4 | 3 | 2 | 1      |
| 9. I like to play games when a large amount of money is at stake.  | 6     | 5 | 4 | 3 | 2 | 1      |
| 10. I would never bet more money than I had available to me at the moment.   | 6     | 5 | 4 | 3 | 2 | 1      |
| 11. When I take a day off for fun, I like to plan exactly what I am going to do and follow the plan.               | 6     | 5 | 4 | 3 | 2 | 1      |

(continued on the back of page)

- |   | Like<br>←-----             | Unlike<br>-----→ |
|---|----------------------------|------------------|
|   | 6 5 4                      | 3 2 1            |
| 12. I would not give up my job before I was sure I had another one.   | 6 5 4                      | 3 2 1            |
| 13. Knowing that any business can fail, I prefer not to invest in one even if the potential payoff is high. | 6 5 4                      | 3 2 1            |
| 14. If I were to gamble, I would prefer to make small bets.   | 6 5 4                      | 3 2 1            |
| 15. Although war is terrible, I would not hesitate to enlist in the army if I were needed.                  | 6 5 4                      | 3 2 1            |
| 16. I like to play games of chance.   | 6 5 4                      | 3 2 1            |
| 17. My gender is  | ___ 1) Male                | ___ 2) Female    |
| 18. My age category is  | ___ 1) Less than 30        | ___ 3) 40-55     |
|   | ___ 2) 30-39               | ___ 4) Over 55   |
| 19. My position is  | ___ 1) Teacher             |                  |
|   | ___ 2) Teacher of the Year |                  |
|   | for the year _____.        |                  |
|   | ___ 3) Principal           |                  |
| 20. My years of experience in education are   | ___ 1) 0-2 years           |                  |
|   | ___ 2) 3-5 years           |                  |
|   | ___ 3) 6-10 years          |                  |
|   | ___ 4) 11-15 years         |                  |
|   | ___ 5) 16-25 years         |                  |
|   | ___ 6) More than 25 years  |                  |

THANK YOU FOR YOUR HELP.

**APPENDIX B**  
**THE DEVELOPMENT AND VALIDATION OF AN INSTRUMENT**  
**FOR MEASURING GENERAL RISK-TAKING BEHAVIOR**

**THE DEVELOPMENT AND VALIDATION OF AN INSTRUMENT FOR  
MEASURING GENERAL RISK-TAKING BEHAVIOR**

Earl McCallon, Ed. D.  
University of North Texas  
Betty Krohn, M. Ed.  
Arlington Public Schools

**Background and Statement of Problem:**

In the fall of 1987, the Professional Development Institute of the University of North Texas contacted the authors about developing an instrument for measuring general risk-taking behavior. Of primary interest was risk-taking behavior as it related to financial investments. While many measuring instruments designed to measure risk-taking tendencies can be found in the literature (particularly popular literature), a careful review of the literature revealed no instrument with adequate reliability and validity that was easily administered and scored. The problem of this study is to design such an instrument.

**Review of Literature:**

A careful review of literature was conducted to determine what traits were related to risk taking and desire for certainty.

Stoner (1967) has shown that people exhibiting leadership qualities tend to be higher risk takers. Merri's (1949) research with children supported this conclusion. In his research, dominant children exhibited leadership qualities and were prone to take more risks. Thus, there may be a relationship between leadership and the tendency to take risks.

Brim and Hoff (1957), in a study comparing a person's desire for certainty (or tendency to not take risks), found that there was a consistent relationship between a given situation and the desire for certainty. In their experimental test where the desire for certainty was increased or decreased, results indicated that the person's desire for certainty remained consistent.

The research on locus of control, whether one believes that behavior determines outcome or that events are predetermined, has been related to risk taking (Baron, 1968; Higbee, 1972; Higbee & Streufert, 1968; Lefcourt, 1965; Liverant & Scodel, 1960; Ryckman & Rodda, 1971; Strickland, Lewicki, & Katz, 1966). Those who believe behavior

determines outcomes tend to desire more certainty than those people who believe events are predetermined (Baron, 1968; Liverant & Scodel, 1960).

Research has indicated rather conclusively that males tend to take more risks than females in investments (Blum, 1976) in general decision making (Bonama & Johnston, 1979; Wallach & Kogan, 1959, 1961), and in gambling (Slovic, 1964; Heilizer & Cutter, 1971). Wallach and Kogan (1959) and Wallach and Caron (1959) also found males were broader categorizers than females causing them to be more willing to classify ambiguous figures as being similar to standard figures in a situation where the likelihood of error was greater.

With respect to age, it has been found that cautiousness, or the degree to which one is cautious, increases with age. The work of Botwinick (1964) and Wallach and Kogan (1959, 1961) indicate that older persons of both sexes required a higher probability of success before saying they would undertake a risky act.

In a study by Blum (1976) concerning investment preferences and the desire for security, the results suggested that vocation closely related to a desire for security rather than gender in decisions concerning investment preferences. These results roughly parallel the findings of a previous study in the area of vocational choice (Blum, 1976).

Several studies support the conclusion that vocation is related to a person's desire for certainty (Litwin, Meyer & Walker, 1961; Atkinson, 1957). Individuals high in aggressive militarism prefer high risk alternatives and those high in authoritarian nationalism prefer higher levels of risk than those low in these respects (Sure & Meeker, 1967). Miner (1969) found results consistent with previous findings that reasonably high risk takers (as compared to low risk takers) are more concerned about the actual nature of their work than about the security of the environment. Persons aspiring to sales occupations gambled most often, while future civil engineers took fewest risks (Ziller, 1957a, 1957b).

#### Design of Instrument:

The first step in the design of the instrument used in this study was to generate from various sources a potential list of items to measure risk taking tendencies. These sources consisted of standardized tests and tests in popular

magazines that purported to measure risk taking tendencies. The original item pool consisted of approximately 175 items. These items were administered to various populations over the period of several months and subject to a series of item analyses to determine inter-item relationships. Factor analyses were also performed on the item try-out data. A total of three studies was required to produce the sixteen items on the final instrument.

#### Design of Study:

The study reported in this paper was conducted to provide reliability and validity data for the sixteen item Risk Tolerance Questionnaire that had resulted from earlier studies. Two groups were utilized in the study. The first group a general population group, consisted of students at a large state university, professionals in various vocations, blue-collar workers, parents from middle income groups, and senior citizens. The groups were diverse with respect to age, gender, educational background, and socio-economic status.

The second group selected consisted only of professional sales persons. They sold medical supplies, furniture, automobiles, wholesale food supplies and insurance. This group was deemed to be psychological/sociological risk takers.

Using these two groups, the variables of gender, self-perceptions of risk taking, investment preferences, and age were analyzed. These results are reported in the results section.

#### Results:

Prior to the analysis of the validity data, an internal consistency coefficient was calculated to determine the reliability of the scale. The coefficient obtained from this analysis was .66.

Table 1 and 2 presents the results of an analysis of the general population groups with respect to the gender variable. It can be noted from Table 1 that the males tended to score higher on the Risk Tolerance Questionnaire. Table 2 presents the results of an analysis of variance test. A statistically significant difference (.001 level) was found between the male and female groups.

TABLE ONE: Means and Standard Deviation Values for Males and Females in the General Population Group

GROUPS	N	MEAN	SD
Males	124	66.41	12.92
Females	65	56.26	13.91
Total	189	62.92	14.08

TABLE TWO: Analysis of Variance Results for the Male and Female Groups in the General Population

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F RATIO	P
Between Groups	1	4393.2	4392.2	24.949	.001
Within Groups	187	32928.5	176.08		
Total	188	37321.8			

Participants in the study were asked to rate themselves as above average, average, or below average risk takers. Table 3 presents the means and standard deviations for subjects placing themselves in one of these three groups.

**TABLE THREE: Deviations Values for Three Perceived Risk Taking Groups in the General Population**

GROUPS	N	MEAN	SD
Above Average	25	78.00	14.79
Average	116	63.45	11.13
Below Average	48	53.77	13.10
Total	189	62.92	14.08

Table 4 gives the results of an analysis of variance treatment of the data on the three groups.

**TABLE FOUR: Analysis of Variance Results for the Three Perceived Risk Taking Groups in the General Population**

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F RATIO	P
Between Groups	2	9736.5	4868.27	32.82	.001
Within Groups	186	27585.2	148.31		
Total	188	37321.8			

This analysis indicated a significant difference (.001 level) between the groups. Multiple comparison procedures revealed that each group mean differed from every other group mean at the .05 level.

The participants were asked to indicate their preference of investments. Table 5 presents the means and standard deviations for subjects who selected one of the types of investments.

TABLE FIVE: Means and Standard Deviation Values for Preferred Investment Groups

GROUP	N	MEAN	SD
Savings/CD	122	59.59	12.90
Mutual Funds	20	63.10	10.53
Common Stocks	7	77.14	14.02
Commodities	6	76.50	18.58
Real Estate	23	69.21	14.54

Table 6 gives the results of an analysis of variance treatment of the data on the investment groups.

TABLE SIX: Analysis of Variance Results for Preferred Investment Groups

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F RATIO	P
Between Groups	4	4749.1	1187.27	6.88	.001
Within Groups	173	29821.3	172.37		
Total	177	34570.4			

This analysis indicated a significant difference between the preferred investment groups at the .001 level. In a Multiple Range Test that was made, it was noted that these differences were most significant between low-risk mutual funds and savings groups and between the real estate and savings groups at the .05 level.

From the general population group, two groups of subjects were selected. These were subjects under 40 years old and those over 55 years old. Table 7 presents the means and standard deviations for these two age groups along with the results of a t-test for the significance of difference between the means.

TABLE SEVEN: Means, Standard Deviation and T-test Value for Two Age Groups

AGE GROUPS	M	SD	t	P
Age Group 39 or younger	51.5	9.409	3.786	.001
Age Group 55 or older	42.0	8.246		

A significant difference (.001) was noted between the two age groups.

In the final validity study, the general population groups were compared to a group of sales persons. It was expected that the sales persons would score higher on the Risk Tolerance Questionnaire. The results are presented in Table 8. It can be noted that the sales persons group did tend to score higher on the instrument (.001 level).

TABLE EIGHT: Means, Standard Deviation and T-test Value for the General Population Group and Sales Persons

GROUP	M	SD	t	P
General Population	61.33	15.61	2.370	.001
Sales Persons	68.10	13.72		

#### Conclusion:

Based on the results of the study, the Risk Tolerance Questionnaire does seem to be measuring risk taking tendencies. This is confirmed by the fact that it does

indeed distinguish between gender, age, perceptions, investment preferences, and population groups as have been found and related in the literature.

Evidence to support the questionnaire's ability to measure risk taking tendencies is consistent with previous research. The questionnaire shows males in general to be more likely to take risks. Age is a factor, showing that the older one is, the less risks one takes. The way people perceive themselves is consistent with the scoring of risk taking tendencies.

Three definite groups emerged from the inter-item analysis in each of the previous studies leading to this 16 item instrument (below-average risk takers, average risk takers, and above-average risk takers). The questionnaire noted a significant difference between investment preference groups and it was consistent to the other risk taking tendencies such as gender, age, etc. measured. The different populations sampled revealed statistically significant data between a general population group and the sales person group showing the sales group to indeed to be more prone to take risks than the general population. This is consistent with other research in this area.

It can be concluded that the questionnaire does indeed measure risk taking tendencies and is consistent with previous research conclusions.

**APPENDIX C**  
**STYLES OF LEADERSHIP SURVEY**

# TELEOMETRICS INTERNATIONAL

DEDICATED TO HELPING YOU MAKE A DIFFERENCE

July 28, 1992

Via Telefax: (817) 483-9915

Ms. Betty Krohn  
University of North Texas

Dear Ms. Krohn,

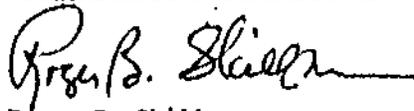
As you requested, Teleometrics International grants you permission to use the Styles of Leadership Survey in your research work at the University of North Texas.

We request, in lieu of including the entire instrument in the appendix of your thesis, that you include only a copy of the front cover--front and back with the copyright notice showing--and two to three questions from the instrument itself. This practice has been acceptable to virtually all graduate research committees with whom our graduate student/customers have worked, and University Microfilms in the past.

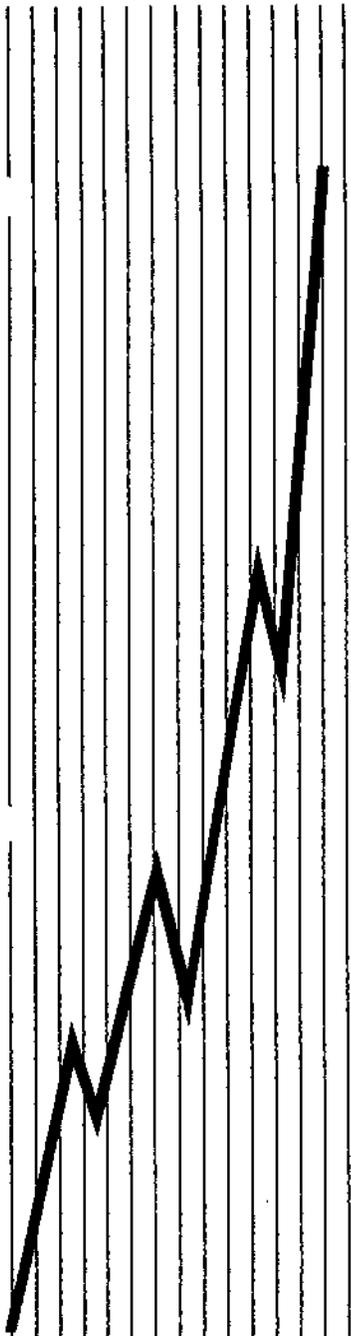
All of us at Teleometrics International wish you the best with your research. If there is anything that we can do to help you, please call us at (713) 367-0060.

Yours sincerely,

TELEOMETRICS INTERNATIONAL



Roger B. Skillman  
Director of Marketing



# STYLES OF LEADERSHIP SURVEY

BY  
JAY HALL, PH.D.  
JERRY B. HARVEY, PH.D.  
MARTHA S. WILLIAMS, PH.D.

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**TELEOMETRICS INTERNATIONAL**

DEDICATED TO HELPING YOU MAKE A DIFFERENCE

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1735 WOODSTEAD COURT □ THE WOODLANDS, TEXAS □ 77380 □ (713) 367-0060

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**I. Concerning a philosophy of leadership:** The opinions and attitudes held, and the assumptions a person makes, regarding the accomplishment of goals through others are reflections of that individual's leadership "philosophy." This personal philosophy is not only an index of the way that person leads but the degree of success the individual is likely to achieve as a leader. Below are listed some areas of philosophic concern to leaders.

**A. Most leaders recognize the fact that a variety of goals or needs — both individual and organizational — operate in the average work situation. In general, how do you view the relative importance of these?**

- a. I feel that I can best insure a smooth running organization by first attending to the needs of the members and providing the conditions for high morale.
- b. I feel that, while the needs of both individual members and the organization are important considerations, in the final analysis the needs of the organization should prevail.
- c. I feel that the needs of the organization come first and that members are obligated to sacrifice their personal goals, when necessary, in order to maintain a high quality of performance.
- d. I feel that the needs of both individual members and the organization are equally important in determining the quality of organizational performance and that neither can be sacrificed if optimal results are to be obtained.
- e. I feel that the tasks of the organization are dictated primarily by organizational charters and that the individual member — regardless of rank or needs — can do little to alter them significantly.

Completely Characteristic : 10 : 9 : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Completely Uncharacteristic

**B. The leader's job is to accomplish work through people. What relationship between leaders and other members do you feel to be the most effective for accomplishing this?**

- a. I feel that the best relationship is one in which the leader plans and directs the work of the members and the members implement these plans and directions in a reasonable period of time.
- b. I feel that the best relationship is one in which the leader and members work together in meeting organizational goals and individual needs for job satisfaction.
- c. I feel that the best relationship is one characterized by autonomy in the work situation and minimal contact between the leader and other members.
- d. I feel the best relationship is one in which both the leader and the members are willing to "give a little and take a little" when necessary to get the job done.
- e. I feel that the best relationship is one in which the leader ultimately places emphasis on the morale and well-being of other members rather than on the requirements of the job.

Completely Characteristic : 10 : 9 : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Completely Uncharacteristic

**C. Evaluation of organizational effectiveness is the leader's way of isolating areas needing improvement and of determining how well his or her group has achieved its goals. The way in which evaluation is handled often affects both planning and implementation functions for attaining future objectives. How do you feel the evaluation function should be handled?**

- a. I feel evaluation should be used to stimulate interest, develop high morale, and provide for individual growth within the organization and, therefore, I should encourage members to make their own evaluations of the way in which the organization is functioning.
- b. I feel that evaluations should be treated as a shared responsibility and, therefore, the members and I should meet together to critique, evaluate, and plan improvements in the functioning of the organization.
- c. I feel that, on the basis of reports, comparisons with the performance of others and my knowledge of the various task requirements, I should personally evaluate each member's performance and determine the areas in which improvements are needed.
- d. I feel that in order to place the responsibility for evaluating organizational effectiveness where it may best be used, I should pass on to the other members any evaluative comments and suggestions for improvement made to me by "V.I.P.'s" from our own and other organizations.
- e. I feel that, after consulting with the other members individually, I should make an overall report and then meet with them in order to encourage improvement in the areas I have decided require it.

Completely Characteristic : 10 : 9 : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Completely Uncharacteristic

**APPENDIX D**  
**NOMINATION FOR THE FEDERAL EXEMPLARY**  
**SCHOOLS RECOGNITION PROGRAM**

NOMINATION FOR THE FEDERAL EXEMPLARY  
SCHOOLS REDOGNITON PROGRAM

Schools of Excellence in the U. S. Department of Education School Recognition Program nominated by Texas Education Association to be used as the exceptional representation are as follows:

1987-88 Elementary:

Corpus Christi ISD, Los Encinos Elementary School,  
Linda Kelly, Principal, 512-853-6283

Dallas ISD, Lanier Elementary School, Miriam Kelley,  
Principal, 214-742-3661

El Paso ISD, Schuster Elementary School, Nancy Archer,  
Principal, 915-751-1273

Greenville ISD, Travis Elementary School, James Evans,  
Principal, 214-457-2696

Highland Park ISD, University Park Elementary School,  
Dr. Charles Cole, Principal, 214-361-4216

North East ISD, Castle Hills Elementary School, Ann  
Pope Crook, Principal, 512-342-7552

Pharr-San Juan-Alamo ISD, Raul Longoria Elementary  
School, Berta Palacios, Principal,  
512-787-0086

Port Arthur ISD, Booker T. Washington Elementary  
School, Dr. N. L. Traylor, Principal,  
409-983-2095

Richardson ISD, Big Springs Elementary School, Dr. F.  
Smith, Principal, 214-495-8250

Temple ISD, Meridith Magnet School, Bonnie Martin,  
Principal, 817-778-2936

Ysleta ISD, North Loop Elementary School, Alice Davis,  
Principal, 915-598-5989

Plano ISD, H. B. Carlisle Elementary School, Charles  
McCasland, Principal, 214-618-2867

Katy ISD, Bear Creek Elementary School, Sandra Shenkir,  
Principal, 409-463-0734

1988-89 Secondary Schools:

Aldine ISD, Eisenhower High School, Fred Richardson,  
Principal, 713-448-8401

Cypress-Fairbanks ISD, Labay Junior High School, Bob  
Warner, Principal, 713-463-5800

Eanes ISD, Westlake High School, John Matysek,  
Principal, 512-328-4100

North East ISD, Douglas MacArthur High School, Anthony  
Petri, Principal, 512-653-3920

North East ISD, Dwight D. Eisenhower Middle School,  
Robert Bird, Principal, 512-342-5293

Pasadena ISD, V. W. Miller Intermediate School, James  
R. Smith, Principal, 713-944-0770

Plano ISD, Schimelpfenig Middle School, Tom Leyden,  
Principal, 214-618-6703

Plano ISD, Wilson Middle School, Beverly Sellers,  
Principal, 214-423-1112

Pine Tree ISD, Pine Tree High School, John Hocker,  
Principal, 214-295-5031

Richardson ISD, L. V. Berkner High School, Ron Parks,  
Principal, 214-231-9495

Richardson ISD, J. J. Pearce High School, Kirk London,  
Principal, 214-238-8231

Spring Branch ISD, Memorial Junior High School, Melvin  
Eldridge, Principal, 713-468-7613

Spring Branch ISD, Memorial High School, Virginia  
Leiker, Principal, 713-468-7721

Spring Branch ISD, Northbrook High School, James King,  
Principal, 713-461-0527

1989-90 Elementary School:

Palacios ISD, East Side Elementary School, Dr. Linda  
Reaves, Principal, 512-972-2544

McAllen ISD, Ben Milam Elementary School, Roger L.  
Larson, Principal, 512-682-4221

Katy ISD, Mayde Creek Elementary School, Elsie Huang,  
Principal, 713-578-5313

Spring Branch ISD, Wilchester Elementary School, Martha  
C. Bair, Principal, 713-465-4978

Spring Branch ISD, Frostwood Elementary School, Dr.  
Jean Quigg, Principal, 713-468-7179

Spring ISD, Anderson Elementary School, Jean Polarolo,  
Principal, 713-443-2210

Eanes ISD, Forest Trail Elementary School, James R.  
Veitenheimer, Principal, 512-328-1416

Richardson ISD, Merriman Park Elementary School, Dr.  
James A. Smith, Principal, 214-349-5531

Richardson ISD, Dartmouth Elementary School, Dr.  
Melanie Cook, Principal, 214-234-8866

Highland Park ISD, John S. Bradfield Elementary School,  
Elaine S. Prude, Principal, 214-521-7355

Plano ISD, Dooley Elementary School, Sandra Wysong,  
Principal, 214-423-3146

## 1990-91 Secondary School:

Richardson ISD, Richardson Junior High School, Don Skaggs, Principal, 214-235-2323

Round Rock ISD, Canyon Vista Middle School, Don Dalton, Principal, 512-331-1666

Highland Park ISD, Arch H. McCulloch Middle School, Dr. Cecil R. Floyd, Principal, 214-521-0786

Fort Sam Houston ISD, Robert G. Cole Junior/Senior High School, Clinton E. Compton, Principal, 512-824-7535

Cypress-Fairbanks ISD, Arnold Junior High School, Phyllis Hamilton, Principal 713-373-1072

Cypress-Fairbanks ISD, Bleyl Junior High School, William C. Martin, Principal, 713-897-4340

Cypress-Fairbanks ISD, Langham Creek High School, George Hopper, Principal, 713-463-5400

Eanes ISD, Hill Country Middle School, Joe M. Bartlett, Principal, 512-327-3771

Northside ISD, Northside Health Careers High School, John Boyers, Principal, 512-692-0022

Northside ISD, Coke R. Stevenson Middle School, Linda Garcia, Principal, 512-681-0720

Pine Tree ISD, Pine Tree Junior High School, Royce Shipp, Principal, 214-295-5081

Aldine ISD, Thomas J. Stovall Junior High School, Mr. Jody Tyson, Principal, 713-448-5283

Alief ISD, E. A. Olle Middle School, Linda Sheehan, Principal, 713-498-8110

Carrollton-Farmers Branch ISD, R. L. Turner High School, Sheila Maher, Principal, 214-323-5900

Klein ISD, Strack Intermediate School, Gary Jones, Principal, 713-320-4000

**APPENDIX E**  
**SCHOOLS AND PRINCIPALS FOR THE AVERAGE REPRESENTATION**

## SCHOOLS AND PRINCIPALS FOR THE AVERAGE REPRESENTATION

Schools and their principals selected for the average representation that are similar in demographics to the exceptional representation are as follows:

### Secondary High Schools:

Fort Worth ISD, Southwest High School, Quince Fulton,  
Principal, 817-292-3915  
Arlington ISD, Sam Houston High School, Jerry Griffin,  
Principal, 817-460-6282  
San Antonio ISD, Jefferson High School, Rodemiro  
Gonzales, Principal, 512-736-1981  
Houston ISD, Lamar High School, Ronnie Veselka,  
Principal, 713-522-5960  
Dallas ISD, Spruce High School, Charles Tuckey,  
Principal, 214-286-0330  
North Forest ISD, Forest Brook High School, Dennis Film  
Principal, 713-631-7720  
Katy ISD, Katy High School, Bill Haskett, Principal,  
713-391-8138  
Galena Park ISD, Galena Park High School, Wayne Lucky,  
Principal, 713-672-6331  
Austin ISD, Lanier High School, Paul Turner, Principal,  
512-836-2340  
Kilgore ISD, Kilgore High School, James F. Powell,  
Principal, 214-984-5591  
Southside ISD, Southside High School, Joe Arriaga,  
Principal, 512-626-0550  
Somerset ISD, Somerset High School, John Parker,  
Principal, 512-622-5671

### Secondary Middle/Junior High Schools:

Dallas ISD, Holmes Middle School, Carl Williams,  
Principal, 214-375-2535  
Round Rock ISD, Chisholm Trail Middle School, Alan  
Veach, Principal, 512-255-7866  
Aldine ISD, Hoffman Middle School, James Royster,  
Principal, 713-683-0338  
Galena Park ISD, North Shore Middle School, Raymond  
Kilgo, Principal, 713-453-3501  
Houston ISD, Edison Middle School, Carlos Pomares,  
Principal, 713-921-1400  
Humble ISD, Creekwood Middle School, Paul Roser,  
Principal, 713-540-5280  
Pasadena ISD, South Houston Intermediate School, Lucas  
Vegas, Jr., Principal, 713-946-7247

Galveston ISD, Central Middle School, Tom Lasater,  
Principal, 409-765-6637

Harlandale ISD, Harlandale Middle School, Santiago  
Zamora, Principal, 512-921-4507

Duncanville ISD, Reed Junior High School, Mel Morris,  
Principal, 214-709-2900

Grand Prairie ISD, Adams Middle School, Bebe Bingham,  
Principal, 214-262-1934

Mesquite ISD, Vanston Middle School, Michael Coffey,  
Principal, 214-279-3646

Longview ISD, Foster Middle School, Beth Bassett,  
Principal, 214-753-1692

Pflugerville ISD, Pflugerville Middle School, Fred  
Fasel, Principal, 512-251-4123

Del Valle ISD, Del Valle Junior High School, Susan  
Olgesbee, Principal, 512-247-2222

Spring ISD, Twin Creeks Middle School, Mike Mier,  
Principal, 713-353-5451

Klein ISD, Klein Intermediate School, Don Rather,  
Principal, 713-999-9917

#### Elementary Schools:

El Paso ISD, Lamar Elementary, Ted Taylor, Principal,  
915-533-9883

Grapevine-Colleyville ISD, Dove Elementary, Linda  
Holifield, Principal, 817-488-9594

Mansfield ISD, Erma Nash Elementary, Judy Miller,  
Principal, 817-473-5662

Goose Creek ISD, Carver Elementary, Joy Wristers,  
Principal, 713-427-7459

North Forest ISD, Shadydale Elementary, Mary Holman,  
Principal, 713-633-5150

Tomball ISD, Tomball Elementary, Michael W. Williams,  
Principal, 713-351-0044

Hamshire-Fannett ISD, Hamshire-Fannett Elementary,  
Connie McCray, Principal, 409-794-1412

Cedar Hill ISD, Plummer Elementary, Doris Wortham,  
Principal, 214-291-4058

Lake Worth ISD, Effie Morris Elementary, Marilyn J.  
Miller, Principal, 817-237-3687

Arlington ISD, Berry Elementary, Gwen Wilkins,  
Principal, 817-460-3741

Hurst-Euless-Bedford ISD, Stonegate Elementary, Joyce  
Early, Principal, 817-282-2110

Sherman ISD, Fairview Elementary, D. Ann Johnson,  
Principal, 214-893-6511

Killeen ISD, Clifton Park Elementary, Jennifer  
Sullivan, Principal, 817-699-5175

Randolph Field, ISD, Randolph Elementary, Barbara  
Baker, Principal, 512-658-6285

Edinburg ISD, L. B. J. Elementary, Dolores Edwards,  
Principal, 512-383-0201

Donna ISD, Moya Elementary, Andres Martinez, Principal,  
512-464-4461

Victoria ISD, Shields Elementary, Luis Rodriguez,  
Principal, 512-578-0175

Harlandale ISD, Gillette Elementary, Maria Herrera,  
Principal, 512-922-7831

Clint ISD, Desert Hills Elementary, Manuel Jimenez,  
Principal, 915-852-4881

East Chambers ISD, East Chambers Elementary, Sidney P.  
Bertrand, Principal, 409-296-2980

Lamar Consolidated ISD, Beasley Elementary, Sidney J.  
Pastor, Principal, 713-342-8032

Conroe ISD, San Jacinto Elementary, Dixie Jackson,  
Principal, 409-572-2248

Ingleside ISD, Blaschke-Sheldon Elementary, Luis F.  
Rodriguez, Principal, 512-776-3050

Grand Prairie ISD, Fannin Elementary, Dan Menchaca,  
Principal, 214-262-8668

**APPENDIX F**  
**LISTING OF ALL PARTICIPATING SCHOOLS**

## LISTING OF ALL PARTICIPATING SCHOOLS

Average Representation:  
Elementary Schools

Sue Lamp	Tomball Elementary 221 West Main Street Tomball, Texas 77375-5529
Earlene Pike	Desert Hills Elementary P. O. Box 779 Clint, Texas 79836-0779
Mark Terry	Berry Elementary 1800 Joyce Arlington, Texas 76010
Maria Herrera	Gillette Elementary 102 Genevieve Street San Antonio, Texas 78285-0901
Barbara Baker	Randolph Elementary P. O. Box 2217 Universal City, Texas 78148-1247
D. Ann Johnson	Fairview Elementary Taylor-Wood Sherman, Texas 75090
Gene Hargrove	Effie Morris Elementary 6800 Telephone Road Lake Worth, Texas 76135-2899
Connie McCray	Hamshire Fannett Elementary Rt. 2 Box 302 Beaumont, Texas 77705
Linda Holifield	Heritage Elementary 4500 Heritage Avenue Grapevine, Texas 76051-3897
Luis Rodriguez	Shields Elementary P. O. Box 1759 Victoria, Texas 77902-1759
Judy Miller	Erma Nash Elementary 605 East Broad Street Mansfield, Texas 76063-1766
Judy Roberts	San Jacinto Elementary 702 North Thompson Street Conroe, Texas 77301-2557

## Middle Schools/Junior High Schools

Fred Fasel	Pflugerville Middle School 1401 West Pecan Street Pflugerville, Texas 78660-2518
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Ted Lee Holmes Middle School  
2001 E. Kiest  
Dallas, Texas 75216

Mike Mier Twin Creeks Middle School  
16717 Ella Boulevard  
Houston, Texas 77090-4213

Beth Bassett Foster Middle School  
P. O. Box 3268  
Longview, Texas 75606-3268

Jack Stork Central Middle School  
3014 Sealy  
Galveston, Texas 77553-0660

Charlotte Bilderback Creekwood Middle School  
P. O. Box 2000  
Humble, Texas 77347-5000

Darla Regner Chisholm Trail Middle School  
500 Oakridge  
Round Rock, Texas 78681

Bebe Bingham Adams Middle School  
833 W. Tarrant Road  
Grand Prairie, Texas 75050

## High School

Jerry Griffin Sam Houston High  
2000 Sam Houston Drive  
Arlington, Texas 76014

Shirleen Zacharias Somerset High  
P. O. Box 279  
Somerset, Texas 78069

Mr. Bill Haskett Katy High  
P. O. Box 159  
Katy, Texas 77494

Joe Arriaga Southside High  
1610 Martinez-Losoya Road  
San Antonio, Texas 78221

## Exemplary Representation:

## Elementary Schools

Dr. Norman L. Traylor  
Booker T. Washington Elementary  
Retired: 8950 Homer Dr.  
Beaumont, Texas 77708

Lynn Johnston Anderson Elementary  
6218 Lynngate Dr.  
Spring, Texas 77373

Dr. Charles C. Cole University Park Elementary  
Now at Carrollton Elementary  
1905 Pearl  
Carrollton, Texas 75006

Mr. Charles McCasland H. B. Carlisle Elementary  
1517 Avenue H  
Plano, Texas 75074

Miriam Kelley Lanier Elementary  
3700 Ross Avenue  
Dallas, Texas 75204

Sandra Wysong Dooley Elementary  
2425 San Gabriel  
Plano, Texas 75074

Patti Kieker Dartmouth Elementary  
417 Dartmouth Lane  
Richardson, Texas 75081

Dr. James A. Smith Merriman Park Elementary  
7101 Winedale Road  
Dallas, Texas 75231

Linda Roudebush Forest Trail Elementary  
1203 Loop 360 South  
Austin, Texas 78746

Dr. Jean Quigg Frostwood Elementary  
12214 Memorial  
Houston, Texas 77024

Elsie Huang Mayde Creek Elementary  
2698 Greenhouse Road  
Houston, Texas 77084

Roger L. Larson Ben Milam Elementary  
3800 North Main Street  
McAllen, Texas 78501

Linda Reaves East Side Elementary  
901 Second Street  
Palacios, Texas 77465

Linda Kelly Los Encinos Elementary  
1826 Frio  
Corpus Christi, Texas 78417

Shandra Shenkir Bear Creek Elementary  
P. O. Box 159  
Katy, Texas 77492

Alice Davis North Loop Elementary  
412 Emerson  
El Paso, Texas 79915

Nancy Archer Schuster Elementary School  
5515 Will Ruth  
El Paso, Texas 79924

Middle School/Junior High School

Melvin Eldridge Memorial Middle School  
12550 Vindon  
Houston, Texas 77024

Joe M. Bartlett Hill Country Middle School  
1300 Walsh Tarlton  
Austin, Texas 78746

Linda Sheehan E. A. Olle Middle School  
9200 Boone Road  
Houston, Texas 77099

Royce Shipp Pine Tree Junior High  
P. O. Box 5878  
Longview, Texas 75608

Linda Garcia Coke R. Stevenson Middle School  
8403 Tezel  
San Antonio, Texas 78250

William C. Martin Bleyl Junior High  
P. O. Box 692003  
Houston, Texas 77269-2003

Don Dalton Canyon Vista Middle School  
1311 Round Road Avenue  
Round Rock, Texas 78681-4941

Don Skaggs Richardson Junior High  
400 S. Greenville Avenue  
Richardson, Texas 75081

James R. Smith V. W. Miller Intermediate School  
1002 Fairmont Parkway  
Pasadena, Texas 77504

Bob Warner Labay Junior High  
15435 Willow Ridge Drive  
Houston, Texas 77095

#### High Schools

Virginia Leiker Memorial High  
935 Echo Lane  
Houston, Texas 77024

John Boyers Northside Health Careers High  
5900 Evers Road  
San Antonio, Texas 78238

George Hopper Langham Creek High  
17610 FM 529  
Houston, Texas 77095

Kirk London J. J. Pearce High  
1600 North Coit  
Richardson, Texas 75080

Ron Parks L. V. Berkner High  
1600 East Spring Valley Road  
Richardson, Texas 75081

John Matysek Westlake High  
4100 Westlake High Drive  
Austin, Texas 78746

Fred Richardson Eisenhower High  
7922 Antoine  
Houston, Texas 77088

**APPENDIX G**  
**INTRODUCTORY LETTERS TO SUBJECTS EXPLAINING THE STUDY**  
**AND REQUESTING THEIR PARTICIPATION**

## LETTER TO AVERAGE REPRESENTATION

Dear:

I am writing to ask for your participation in a survey of Texas schools to investigate the relationship between an educator's tendency to take risks and their effectiveness. The study is being done for my dissertation topic: The Dimension of Risk and its Relationship to Effective School Leaders.

At a time when education's emphasis is on effective schools and effective leadership, the word "risk" keeps appearing. Very little research has been done on the element of risk in education, and no research has tried to measure or determine its relationship to effectiveness.

As principal of your school, the survey will require your participation and the participation of two teachers from your campus. The entire survey will take less than thirty minutes to complete.

I am eager to hear from you. Your input is vital to this study. Please, take a moment right now, fill out the enclosed card, and drop it in the mail.

With my sincerest appreciation,

Betty J. Krohn, M. Ed.  
11 Kyle Ct.  
Mansfield, Texas 76063  
817-473-0708 Home  
817-483-5216 Work

Enclosure

## LETTER TO EXEMPLARY REPRESENTATION

Dear:

I am writing to ask for your participation in a survey of Texas schools to investigate the relationship between an educator's tendency to take risks and their effectiveness. The study is being done for my dissertation topic: The Dimension of Risk and its Relationship to Effective School Leaders.

At a time when education's emphasis is on effective schools and effective leadership, the word "risk" keeps appearing. Very little research has been done on the element of risk in education, and no research has tried to measure or determine its relationship to effectiveness.

As principal of your school, the survey will require your participation and the participation of two teachers from your campus. The entire survey will take less than thirty minutes to complete.

Your school was selected because it was nominated by the Texas Education Agency for the Schools of Excellence in the U. S. Department of Education School Recognition Program. Since there are so few schools that have received this honor, your input is very important to my dissertation study. I am eager to hear from you. Please, take a moment right now, fill out the enclosed card, and drop it in the mail.

With my sincerest appreciation,

Betty J. Krohn, M. Ed.  
11 Kyle Ct.  
Mansfield, Texas 76063  
817-473-0708 Home  
817-483-5216 Work

Enclosure

## ENCLOSURE

Survey on the Relationship of Risk to  
Effective School Leaders

\_\_\_\_\_ YES, I am willing to participate in this  
study.

Was the address used correct? \_\_\_\_\_ YES

\_\_\_\_\_ NO, Change address to:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ NO, I will not be able to participate in  
this study.

APPENDIX H  
LETTER OF EXPLANATION TO COMPLETE SURVEYS

Dear \_\_\_\_\_ :

Thank you for responding so quickly. I know your time is valuable and I appreciate you taking the time to help me with my doctorate dissertation study.

Enclosed in this packet are the following materials:

For you, the principal: Styles of Leadership Survey  
Risk Tolerance Questionnaire  
Stamped Return Envelope

For the most recent recipient of the Teacher of the Year award: Risk Tolerance Questionnaire  
Stamped Return Envelope

For other teacher: Risk Tolerance Questionnaire  
Stamped Return Envelope

The Styles of Leadership Survey is (in spite of appearances) a twelve question survey. The instructions are on the inside of the cover and the questions stop on page 4. When you reach the gold seal, please stop. I will score your survey when you return it. This instrument is a major cost of my study. Thank you for taking the time to complete and return it.

The Risk Tolerance Questionnaire is a questionnaire that you will find interesting. The instructions are simple to follow.

My Examining Committee for the dissertation specifies that one teacher be the most recent recipient of the Teacher of the Year award on your campus. The other teacher is to be selected at random. Please use the following criteria to select this teacher.

1. The teacher is not to have ever received the Teacher of the Year award.
2. Select a teacher which is representative of your staff's years of experience, ability, and educational background.

Each of these teachers' Risk Tolerance Questionnaire comes with a return envelope to guarantee their confidentiality.

If you have any questions, concerns, or comments, please let me know. Again, I thank you for your time. It means a lot to me as I hope to graduate this summer.

Sincerely,

Betty Krohn

**APPENDIX I**

**CARD TO SUBJECTS NOT RETURNING THE QUESTIONNAIRES**

Dear: \_\_\_\_\_

I haven't received the questionnaires from your school on Risk Tolerance and Leadership Styles. I know how little spare time you have. Please take the time necessary. I would greatly appreciate your help.

Do you need additional copies of the questionnaire? I'll give you a call in a couple of days.

Thanking you in advance,

Betty Krohn

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