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**THE ORGANIZATIONAL HEALTH OF HIGH SCHOOLS
AND DIMENSIONS OF FACULTY TRUST**

DISSERTATION

Presented in Partial Fulfillment of the Requirements for

the Degree Doctor of Philosophy

in the Graduate School of The Ohio State University

By

Page A. Smith, M.S.

*** * * * ***

**The Ohio State University
2000**

Dissertation Committee:

Professor Wayne K. Hoy, Adviser

Professor Scott R. Sweetland

Professor Franklin B. Walter

Professor Robert W. Backoff

Approved by

**Adviser
College of Education**

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ABSTRACT

Climate and trust are both important aspects of school environments. An understanding of those aspects of organizational climate that influence faculty trust in specific school groups may help to refine the concept of organizational trust. The major aim of this study is to examine the relationship between dimensions of faculty trust and aspects of health in high schools.

The relationship between faculty trust in students and faculty trust in parents is blurred. The question of whether they are separate or unitary concepts in high schools remains and will be addressed in this study. The general hypothesis of this study is that school climate will be positively related to faculty trust; however, school climate is viewed from the multi-dimensional perspective and so is faculty trust. Thus, the research addresses what dimensions of organizational health best predict each aspect of faculty trust.

Researchers collected data from 98 high schools throughout the state of Ohio. One-half of each school faculty was administered the Organizational Health Inventory and the other half was administered the Trust Survey. Additional data came from statewide summaries obtained from the Ohio Department of Education. The unit of analysis in this study was the school.

Descriptive statistics were summarized for all variables. Correlation coefficients were computed for each aspect of health with each dimension of faculty trust. Further testing of variables was conducted using multiple regression analysis. In addition, factor analysis was performed on both research instruments.

The general hypothesis that school health would be positively related to faculty trust was supported; however, different dimensions of health were more or less important depending on which aspect of faculty trust was targeted. Furthermore, Faculty Trust in Parents and Faculty Trust in Students were found to form a single, unidimensional factor, Trust in Clients, at the high school level. Additionally, the instruments employed in this research were found to possess factor structures consistent with their theoretical underpinnings. Finally, although organizational health was used as the independent variable, the direction of causality is not clear. In fact, the relationships between school health and faculty trust are reciprocal.

Dedicated to my three greatest blessings:

Trish, Adam, and Tara

ACKNOWLEDGMENTS

Beyond the protracted excitement, intellectual rigor, and physical demands required to conduct this research lies my greatest reward...that of acknowledging and thanking those who have aided me in this endeavor. I have been assisted in my research by a multitude of kind, considerate, and infinitely patient individuals who have encouraged me in ways too numerous to realize.

The Ivory Towers hold many special and unique individuals who possess a wide variety of intellectual skills and talents. During my three years of study, I have been privileged to have been exposed to scholars of the first rank who have demonstrated, by their capacities and productivity, that indeed they are “a breed apart.” Yet, there are those few who have gone beyond the rest. My advisor, Dr. Wayne Hoy, is truly one of those individuals. During my tenure under his expert guidance, I have witnessed uncountable examples of what true scholarship and professionalism entails. In truth, only Wayne’s compassion, understanding, and humanity supercede his scholarly abilities. Through his mentoring, patience, and persistence, I have added much to my personal arsenal and for that I offer my most heartfelt thanks to a true renaissance man.

I also wish to thank Dr. Scott Sweetland for being there at “crunch time” to offer up sound advice, wise counsel, and above all, much needed friendship when times were tough. My goal would have been infinitely more difficult to accomplish without Scott’s

uncanny knack for stripping away the minutiae of the moment in favor of revealing the “real” issue. I can never do better than to consider him a mentor and friend.

I am also extremely grateful to have stumbled into Dr. Bob Backoff’s office and found not only a provident scholar in the area of public policy, but a wonderful resource for many of those esoteric matters that accompany this type of endeavor. He is, and will continue to be, much more than a dedicated committee member and confidant to me.

I also wish to thank Dr. Frank Walter for taking the time out of his demanding schedule to serve on my dissertation committee. His kindness and assistance to me, in light of his commitments to others, was exemplary.

Although a myriad of personalities cross one’s path when involved in this type of journey, special people continue to shine through. I am truly blessed to have had the opportunity to work with Dr. Megan Tschannen-Moran. In addition to her wonderful array of scholarly attributes, Megan was gracious enough to share with me her eye for detail and a patience that truly “passed all understanding.” I am much indebted to her and wish to thank her straight from the heart.

It is wholly inconceivable to me that I could have managed to stay afloat during this process without the vigilant support of my parents, my brother, and my two closest friends, Ronnie and Nick. Also, thanks to my cohort brother, Steve Larcomb. My fondest hope is that I might continue to express to them my gratitude for their investment.

Finally, I would like to extend to my wife, Trish, all the love I can possibly muster for her daunting courage, faithfulness, patience, and sacrifice over the last three years. Likewise to my children, Adam and Tara, I love you. Dad’s finally home. Although this train has been travelling slowly, it’s finally arrived at the station.

VITA

July 22, 1953.....Born – St. Marys, Ohio

1978.....B.S. Education, Wright State University

1978 – 1997.....Department Chairperson and Instructor,
Celina Senior High School, Celina, Ohio.

1983.....M.S. Education, University of Dayton

1983 – 1997.....Instructor, Wright State University

1997 – present.....Graduate Teaching and Research Associate,
The Ohio State University

PUBLICATIONS

FIELDS OF STUDY

MAJOR FIELD: Education

TABLE OF CONTENTS

	<u>Page</u>
Abstract.....	ii
Dedication.....	iv
Acknowledgments.....	v
Vita.....	vii
List of Tables	xi
 CHAPTER 1: INTRODUCTION	 1
Trust	2
School Climate	4
Openness.....	5
Health	6
Problem Statement.....	6
Research Questions and Hypotheses	7
Definitions of Terms.....	9
Limitations	11
 CHAPTER 2: LITERATURE REVIEW.....	 12
Organizational Climate	13
Historical and Theoretical Underpinnings of Climate	13
Business and Organizational Climate	14
University Studies and Organizational Climate.....	14
Classroom Studies and Organizational Climate	16
Schoolwide Emphasis and Organizational Climate	17
Relevant Research on Openness of School Climate	31
Organizational Health.....	34
Relevant Research on School Health	40
Organizational Health: A Rationale	43
Trust	44
Historical and Theoretical Underpinnings of Trust	46

Behavioral Decision Theory	46
The Osgood Proposal	50
Criticisms of Game Theory	53
Dispositional Trust Theory	55
Institutional Trust Theory	58
Trust Among Familiar Actors	59
Trust: Meanings, Facets, and Bases.....	61
Facets of Trust.....	61
Vulnerability	62
Confidence.....	63
Benevolence.....	63
Reliability	64
Competence	64
Honesty.....	65
Openness.....	66
Bases of Trust	66
History-Based Trust	67
Category-Based Trust.....	68
Role-Based Trust.....	69
Calculative Trust.....	71
Relational Trust.....	72
Deference-Based Trust.....	73
Third Parties and Trust.....	75
Barriers to Trust: Distrust and Suspicion, Betrayal, and Trust Rehabilitation.....	76
Distrust and Suspicion.....	77
Betrayal.....	79
Trust Rehabilitation.....	81
Trust and Schools	83
Trust and Climate.....	84
Communication and Trust	84
Trust and Collaboration	86
School Effectiveness and Trust.....	87
Organizational Trust: A Rationale	88
Rationale for the Hypotheses	89
Hypotheses.....	91
Conclusion.....	94
 CHAPTER 3: METHODOLOGY	 95
Introduction	95
Sample.....	95
Schools	95
Teachers.....	96
Data Collection.....	96
Teachers.....	96
Variables	97

Operational Measures	97
Organizational Health Inventory.....	98
Trust Survey.....	100
Data Analysis	102
Conclusion.....	104
 CHAPTER 4: PRESENTATION AND ANALYSIS OF DATA.....	 105
Factor Analysis of the Trust Inventory.....	105
Factor Analysis of the Organizational Health Inventory.....	108
Second-order Factor Analysis of the OHI	109
Dimensions of Organizational Health and Aspects of Faculty Trust.....	113
Demographic Characteristics and Aspects of Faculty Trust	114
Multiple Regression Analysis.....	115
 CHAPTER 5: SUMMARY, DISCUSSION, AND IMPLICATIONS	 119
Summary	119
Discussion	121
School Health and Faculty Trust in Colleagues.....	121
School Health and Faculty Trust in Principal.....	122
School Health and Faculty Trust in Clients.....	122
Faculty Trust in Parents and Students	123
Faculty Trust.....	124
Organizational Health Inventory (OHI) and the Trust Scales	125
Implications.....	125
Practical Implications	126
Research Implications	128
 Appendix A Organizational Health Inventory.....	 131
Appendix B Trust Items by Level.....	134
Appendix C The Seven Subtests of the Organizational Health Inventory	136
Appendix D The Three Subtests of the Faculty Trust Inventory.....	140
Appendix E Trust Research Instrument	143
Appendix F Health Research Instrument.....	146
Appendix G Telephone Solicitation Script.....	149
 Bibliography.....	 151

LIST OF TABLES

<u>Table</u>	<u>Page</u>
4.1 Factor analysis of the Faculty Trust Inventory.....	107
4.2 Correlations among the Trust Scales	108
4.3 Factor loadings of the Organizational Health Inventory.....	110
4.4 Correlations among the seven subtests of the Organizational Health Inventory	111
4.5 Descriptive statistics of research variables	112
4.6 Correlations between health dimensions and faculty trust aspects.....	114
4.7 Correlations between faculty trust aspects and demographic characteristics	115
4.8 Regression of aspects of faculty trust on dimensions of school health	117

CHAPTER 1

INTRODUCTION

In recent years, developments in the organizational sciences have prompted scholars to focus their interests on the importance of trust. A burgeoning body of research is emerging that supports trust as a key element in formulating and maintaining interpersonal communication and organizational effectiveness (Axelrod, 1984; Gambetta, 1988; Good, 1988; Mayer, Davis, & Schoorman, 1995; McAllister, 1995). Throughout the 1980's and 1990's, economists, organizational theorists, psychologists, and sociologists have pursued the concept of trust and how trust is cultivated and utilized in organizational settings. Research has also demonstrated that trust represents a critical element in the development of healthy and purposefully directed school environments (Hoy, Tarter, & Witkoskie, 1992; Tarter, Sabo, & Hoy, 1995; Hoy, Hoffman, Sabo, & Bliss, 1996; Tarter, Bliss, & Hoy, 1989). Studies of trust and school climate reveal that certain principal behaviors (Hoy & Henderson, 1983; Henderson & Hoy, 1983; Hoy & Kupersmith, 1985) and collegial interactions (Hoy, Tarter, & Witkoskie, 1992; Tarter, Sabo, & Hoy, 1995; Tarter, Bliss, & Hoy, 1989; Tarter, Hoy, & Bliss, 1989) do indeed buttress the case that trust is critical in healthy and open schools. Seeking to offer a further contribution to the organizational literature on schools, this study investigates the constructs of trust and school climate.

Trust

Although scholars across many disciplines have widely acknowledged that trust can precipitate cooperative behavior in human endeavor, there appears to be an equally pervasive lack of agreement on a commonly accepted definition of the concept.

Conceptually, trust is very complex and a plethora of definitions of trust exist.

A comparison of prominent definitions of trust serves to illustrate the breath of conceptual diversity on this topic. Deutsch (1958) defined trust as an expectation by an individual in the occurrence of an event such that that expectation leads to behavior that the individual perceived would have greater negative consequences if the expectation was not confirmed than positive consequences if it was confirmed. Rotter (1967), pursuing an interpersonal description of trust, postulated that trust is an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group could be relied upon. Zand (1971) identified trusting behavior as consisting of actions that increase one's vulnerability to another whose behavior is not under one's control in a situation in which the penalty (disutility) one suffers if the other abuses that vulnerability is greater than the benefit (utility) one gains if the other does not abuse that vulnerability. Gambetta (1988) defined trust as a calculated decision to cooperate with specific others, based on information about others' personal qualities and social constraints. Zucker (1986) posits that trust is a group of common expectations ascribed to by all parties involved in an exchange and that these expectations are taken for granted as part of the world known in common, until they are violated. Hosmer (1995) maintains that trust is the expectation by one person, group, or firm of ethically

justifiable behavior – that is, morally correct decisions and actions based upon ethical principles of analysis – on the part of the other person, group, or firm in a joint endeavor or economic exchange. Finally, Hoy and Tschannen-Moran (1999) define trust as an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open. For the purpose of this study, the latter definition will be employed because it captures the key elements of contemporary analyses of trust and has been applied to the study of organizational trust in schools.

In the context of schools, trust helps create positive interpersonal relations and openness of expression. Educators are quick to discover that “one who does not trust others will conceal or distort relevant information . . . so that the information he provides will be low in accuracy, comprehensiveness, and timeliness; and therefore have low congruence with reality” (Zand, 1971, p. 230). Establishing trust between school partners and school related clients seems important if not critical in schools.

Parsons (1970), in discussing trust between professionals and clients, proffers an interesting theoretical proposal. In the professional-client arrangement trust supersedes factors such as moral obligation, monetary incentive, and administrative authority as a foundational premise to the relationship due to the gap in competency which exists between the participants. Since the client cannot confirm the competence of the professional, the most viable client response is trusting in the expertise of the professional. Parsons proceeds to identify four conditions that generate trust: (1) all participants must acknowledge that action is dedicated to common values such as education; (2) the common values espoused must be “translatable into common goals,”

such as educating a student; (3) each person's expectations must position into his or her general set of solidary involvement since each person is more than a mere student or teacher; (4) trust of the participants must be reasonable in light of relevant empirical information. In the school setting these four conditions serve to complement each other and to produce a type of trust that forwards a sense of autonomy and regulates the behavior of both the client and the professional.

Building on the work of Hoy and his colleagues (1985, 1988, 1989, 1992, 1994, 1995, 1996, 1997, 1998, 1999), this study seeks to further examine the concept of trust in schools. Specifically, this research seeks to advance trust as a multidimensional construct and targets the investigation of faculty trust in school clients. More specifically, this study is concerned with both student-clients and parent-clients, and thus in faculty trust in students and faculty trust in parents.

School Climate

Just as the definitional ambiguities and dimensional complexities of trust pose a contextual dilemma for researchers, investigating the concept of organizational climate has also proven to be challenging. From its social science origins in the late 1950's, the study of organizational climate has provided students of business environments and educational institutions with a myriad of research data and diagnostic tools dedicated to identifying and measuring system characteristics.

Originally, "climate was used as a general notion to express the enduring quality of organizational life" (Hoy & Sabo, 1998, p.3). Organizational climate is holistically descriptive of the total organization, and although measured, is gauged primarily by the perception of its members. In addition, organizational climate arises from routine

organizational practices that are salient to the organizational membership. In the educational setting, Hoy and Miskel assert that “school climate is a relatively enduring quality of the entire school that is experienced by members, describes their collective perceptions of routine behavior, and affects their attitudes and behavior in the school” (1996, p.141). Schools comprise intellectual ecosystems. They grow and flourish. Unfortunately, some schools fall prey to atrophy and decline. School climate represents stakeholder perceptions of critical characteristics of these systems. Indeed, the study of organizational climate in schools provides researchers with an intriguing subject.

Openness

With the emergence of Halpin and Croft’s (1962) pioneering work regarding organizational climate in elementary schools, an early foundation for conceptualizing and measuring interpersonal dynamics in organizations was established. In order to identify salient aspects of teacher-principal and teacher-teacher behavior, Halpin and Croft constructed the Organizational Climate Descriptive Questionnaire (OCDQ). Drawing on Rokeach’s (1960) work of personality types, Halpin and Croft conceptualized school climate in terms of an open-to-closed continuum. In essence, school climate came to be associated with the “personality” of the institution. Employing the openness framework of Halpin and Croft, Hoy and his colleagues (Hoy, Tarter, & Kottkamp, 1991; Hoy & Sabo, 1998) updated and expanded the OCDQ. Through the use of these new instruments, which operationalize aspects of school climate at the elementary, middle, and secondary levels, there now exists several contemporary measures of school climate.

Health

Organizational health is another useful framework for the analysis of school climate. School health “describes the vitality and dynamics of professional interactions of students, teachers, and administrators” (Hoy & Sabo, 1998, p. 54). Following Miles’ (1969) seminal examination of the organizational health of school systems and drawing on the theoretical analyses that all social systems must solve the four basic problems of adaptation, goal attainment, integration, and latency if they are to survive, grow, and prosper (Parsons, 1967; Scott, 1992), Hoy and his colleagues (1991) pursued an operational framework that conceptualized and measured the organizational health of schools. Hoy and Feldman (1987) subsequently devised the Organizational Health Inventory for Secondary Schools (OHI) that measures seven dimensions of school health. Nested within a Parsonian perspective (1967), which “suggests that formal organizations such as schools exhibit three distinct levels of responsibility and control” over instrumental and expressive needs, the Organizational Health Inventory (OHI) includes the dimensions of academic emphasis, initiating structure, resource support, institutional integrity, consideration, principal influence, and morale (Hoy & Miskel, 1996, p. 151).

Problem Statement

Climate and trust are both important aspects of school environments. The continued study of trust in schools is warranted for several reasons. First, the construct of trust continues to develop and become more refined (Hoy & Tschannen-Moran, 1999); in fact the construct has at least six different aspects—benevolence, vulnerability, reliability, openness, honesty, and competence. Second, the empirical study of trust in

schools remains limited and has been especially neglected in high schools. Finally, organizational trust seems a key aspect of productive schools (Tarter, Sabo, & Hoy, 1995).

Research findings (Hoy, Tarter, & Kottkamp, 1991; Hoy, Tarter, & Witkoskie, 1992; Tarter, Sabo, & Hoy, 1995) indicate that school health is associated with both trust in the principal and trust in colleagues. In fact, over the last several decades researchers have linked faculty trust in both colleagues and the principal to a number of variables including principal authenticity (Hoy & Henderson, 1983; Hoy & Kupersmith, 1985) and school effectiveness (Hoy, Tarter, & Witkoskie, 1992). In addition, faculty trust in colleagues and the principal has been linked to openness in school climate (Hoy, Hoffman, Sabo, & Bliss, 1996; Tarter, Bliss, & Hoy, 1989; Hoffman, Sabo, Bliss, & Hoy, 1994; Hoy, Sabo, & Barnes, 1996).

Conspicuously absent from the study of school climate and trust, however, is the investigation of faculty trust in school clients. No extant studies examine the relationship between school climate and faculty trust in clients; thus, the major aim of this study is to examine the relationship between dimensions of faculty trust and aspects of school climate in high schools from a large Midwestern state. Faculty trust in clients is conceived to have two aspects—faculty trust in students and faculty trust in parents.

Research Questions and Hypotheses

Although recent research findings (Hoy & Tschannen-Moran, 1999) have established relationships between faculty trust in parents and faculty trust in students in elementary schools, the question of whether school health is related to faculty trust in parents and students remains. Moreover, the relationship between faculty trust in students

and faculty trust in parents is fuzzy. These two aspects of trust have been identified as a single factor in the study of elementary schools (Hoy & Tschannen-Moran, 1999), but the question of whether they are separate or unitary concepts in high schools remains and will be addressed in this study. The general hypothesis of this study is that school climate will be positively related to faculty trust; however, school climate is viewed from the multi-dimensional perspective and so is faculty trust. Thus, the question is what dimensions of organizational health are the best predictors of each dimension of faculty trust? The focus of this research is summarized by the following set of questions:

Q1. What is the relationship between faculty trust in parents and faculty trust in students? Do these two facets of trust form a unitary construct or are they separate but related concepts?

Q2. What are the aspects of school health that are the best predictors of faculty trust in the principal?

Q3. What are the aspects of school health that are the best predictors of faculty trust in the colleagues?

Q4. What are the aspects of school health that are the best predictors of faculty trust in the students?

Q5. What are the aspects of school health that are the best predictors of faculty trust in parents?

In the next chapter, an attempt will be made to provide theoretical answers to these questions in the form of a set of hypotheses that will guide the empirical phase of this study.

Definitions of Terms

This investigation of the relationship between faculty trust and school climate employs the following constitutive definitions. Trust is “an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (Hoy & Tschannen-Moran, 1999, p.189). Each facet of trust is defined as follows:

Benevolence is the “confidence that one’s well-being or something one cares about will be protected by the trusted person or group” (Hoy & Tschannen-Moran, 1999, p. 187).

Reliability refers to the “extent to which one can count on another to come through with what is needed” (Hoy & Tschannen-Moran, 1999, p. 187).

Competence refers to the condition of sustaining a sufficient aptitude or ability to satisfy the needs of a dependent other.

Honesty is the intentional adherence to truthful and ethically sound behavior according to the expectations of one’s social class, profession, or position.

Openness is “the extent to which relevant information is not withheld; it is a process by which individuals make themselves vulnerable by sharing information with others” (Hoy & Tschannen-Moran, 1999, p. 188).

Moreover, four dimensions of faculty trust are examined in this research—trust in the principal, colleagues, students, and parents.

Clients refer to the students and parents or custodial guardians of the students who comprise the primary group of school stakeholders having a vested interest in receiving the services offered by the school.

Organizational Climate represents “a set of measurable properties of the work environment, based on the collective perceptions of the people who live and work in the environment and demonstrated to influence their behavior” (Litwin & Stringer, 1968, p.1).

School Climate is “a relatively enduring quality of the school environment that is experienced by participants, affects their behavior, and is based on their collective perceptions of behavior in schools” (Hoy & Miskel, 1996, p.141). **Organizational health** is the perspective of school climate used in this research.

Organizational health refers to a set of measurable and interrelated concepts evident in an organization that are dedicated to successfully managing disruptive outside forces and directing energy toward the mission and objectives of the organization (Hoy, Hannum, & Tschannen-Moran, 1998). Seven dimensions of the health of the school are defined as follows:

Institutional Integrity is the “school’s ability to cope with its environment in a way that maintains the educational integrity of its programs “ (Hoy, Tarter, & Kottkamp, 1991, p.71).

Principal Influence is the “principal’s ability to influence the action of superiors” (Hoy, Tarter, & Kottkamp, 1991, p.71).

Consideration is “principal behavior that is friendly, supportive, open, and collegial; it is a genuine concern, on the part of the principal, for the welfare of the teachers” (Hoy, Tarter, & Kottkamp, 1991, p.71).

Initiating Structure refers to the ability of the principal to engage in behavior that clearly defines performance standards, work expectations, and school procedures (Hoy, Tarter, & Kottkamp, 1991).

Resource Support “refers to schools where adequate classroom supplies and instructional materials are available, and extra materials are readily supplied if requested” (Hoy, Tarter, & Kottkamp, 1991, p.71).

Morale is “a collective sense of friendliness, openness, enthusiasm, and confidence among faculty members” (Hoy, Tarter, & Kottkamp, 1991, p.71).

Academic Emphasis refers to the “extent to which the school is driven by a quest for academic excellence” (Hoy, Tarter, & Kottkamp, 1991, p.71).

Limitations

Several limitations of this study exist. First, although the sample of schools will be a diverse one, it will not be possible to select a random sample of high schools. As a consequence of the non-randomness of the sample of high schools, a potential problem exists in generalizing the results of the data. Second, the sample is drawn from only one state and that also limits generalizability. Third, this study will reflect high school teachers’ perceptions of school climate and faculty trust; the relationships will be perceived ones. Finally, unidirectional causation is not assumed; school climate may influence trust, but faculty trust may also influence school climate.

CHAPTER 2

LITERATURE REVIEW

This chapter targets the concepts of organizational climate and the construct of trust. First, the historical underpinnings of climate will be reviewed followed by an analysis of the theoretical foundations of organizational climate of schools. Next, the development of operational measures and instrumentation procedures of businesses, universities, and classroom domains that are closely associated with the evolution of school climate measures will be reviewed. Furthermore, a review of the relevant research findings on organizational climate in schools is presented. Also critical to this chapter is a review of research on organizational health—a key aspect of organizational climate. Later, the construct of trust will be reviewed from a historical and theoretical perspective. In addition, a review of relevant trust findings spanning various disciplines will be presented. The dynamics of trust development, cultivation, growth, and expansion within organizations are included in this chapter as well as an examination of research into the areas of breaches of trust, distrust, and trust rehabilitation. Subsequently, a review of the extant literature on trust in schools is presented. Finally, the chapter concludes with a rationale for the research hypotheses introduced earlier.

Organizational Climate

Organizational climate is much akin to the human body harboring a serious disease — it tends to go relatively undetected until we notice something seriously wrong with our system. Just as those seeking the healing arts of medical practitioners acknowledge that years of medical research contribute heavily to the probability of a successful cure, scholars of the organizational sciences have also realized that a firm grounding in the research history of organizational climate may provide some guidance for institutional health and maintenance. The key historical and theoretical components of organizational climate are discussed in this section.

Historical and Theoretical Underpinnings of Climate

In analyzing the beginnings of organizational climate it becomes apparent that the historical underpinnings of the concept are closely tied to, if not inseparable from, the parallel development of a variety of assessment instruments designed to measure those characteristics that designate the organization as unique. Early researchers of organizational climate dedicated much attention to the use of quantitative techniques and statistical analyses in the pursuit of understanding the concept and therefore a plethora of operational measures from a variety of domains have emerged to assist scholars in their more recent endeavors. In essence, to view the historical development of organizational climate research is to observe the simultaneous development of operational measures befitting the concept.

Organizational climate research was initiated during the late 1950s as scholars preoccupied with educational institutions (Halpin & Croft, 1963; Pace & Stern, 1958) attempted to conceptualize and measure certain properties of organizations. Although

researchers interested in assessing educational organizations pioneered the concept of organizational climate, much of the theory, instrumentation, and methodology on organizational climate was developed by businesses (Tagiuri, 1968) and universities (Pace & Stern, 1958), and for use in individual classroom settings (Walberg, 1969; Moos, 1979a) as scholars in those disciplines were quick to recognize the value of the construct.

Business and Organizational Climate

In their seminal analysis of business organizations, March and Simon (1958), emphasized the influences of an organizational environment on institutional factors such as rates of turnover, productivity issues, and employee morale. Argyris (1958), in his case study of interpersonal relations in a bank, also found that the organizational environment altered similar personnel characteristics. In essence, while business researchers were beginning to seek out situational characteristics that affected the behavior of the individual in the workplace, those associated with education (and psychology) remained preoccupied with evaluating the effect of personality characteristics on behavior (Schnieder & Bartlett, 1968). Although identifying the importance of the organizational environment in evaluating the productive ventures of system stakeholders was primarily conceived by business researchers, a number of environmental measures parroting these business prototypes began to emerge at the college level.

University Studies and Organizational Climate

Employing the theoretical foundations of psychologist Henry Murray (1938), who hypothesized that critical environmental factors (press) cause persons to respond differently according to their individual needs and circumstances, Pace and Stern (1958) sought to develop an instrument which would measure the dual concept of personal needs

and environmental press. “The term ‘need’ refers to denotable characteristics of individuals, including drives, motives, goals, etc.” whereas “the term ‘press’ can similarly be regarded as a general label for stimulus, treatment, or process variables” (Pace & Stern, 1958, p. 269). As a result of their efforts to operationalize college “press,” Pace and Stern (1958) developed the College Characteristics Index to describe college environments. Coupled with the development of the Activities Index (Pace & Stern, 1958), an ancillary needs inventory, the CCI became the first systematic measuring instrument for college environments. The framework of the CCI consisted of 300 “True-False” statements about college environments that were organized into 30 ten-item scales designed to measure press and need. Subsequently, in a nonrepresentative sample of five institutions (423 students and 71 faculty), Pace and Stern’s findings (1958) suggested that a “college environment may be viewed as a system of pressures, practices, and politics intended to influence the development of students toward the attainment of important goals of higher education” (p. 277). The study was also one of the first in the field of education to suggest that an organizational environment is gauged by what the students perceive it to be and not necessarily what faculty, administrators, and university officials claim it to be. Thus, scholars began to take note of the notion of stakeholder perceptions of the environment rather than remaining primarily focused on the official “spin” of the organizational climate.

Building on the work of Pace and Stern, several other instruments designed to measure aspects of college environments were developed. Closely paralleling the framework of the CCI, Stern (1970) constructed three subsequent indices—the College Characteristics Analysis, the College and University Environment Scales, and the

Inventory of College Characteristics. These indices sought to further operationalize the concept of college press. In addition, Astin and Holland (1961) devised the Environmental Assessment Technique (EAT) which, although stemming from a different theoretical vantage than the CCI, attempted to identify the concept of climate as a reflection of eight student characteristic variables including student body size, average intelligence level of student body, and six personal value orientations of the students.

Classroom Studies and Organizational Climate

During the latter part of the 1960s researchers also began to undertake the measurement of classroom climates. Empirical research in regard to this particular venue of organizational climate history is often blurred by closely related investigations of schoolwide climate studies. However interrelated school and classroom climate literature may be, both areas seem to mirror the theoretical grounding of Murray's (1938) deliberations on environmental press. Two instruments designed to measure classroom environments, the Learning Environment Inventory (Walberg, 1969) and the Classroom Environment Scale (Moos, 1976, 1979a, 1979b; Trickett & Moos, 1973) have been instrumental in the concept of climate being "viewed as a function of all participants' perceptions of classroom interactions" (Anderson, 1982, p. 374). In particular, Ellett and Walberg (1979) have cited the pervasive use of the Learning Environment Inventory, an instrument used primarily for secondary students, in over 300 hundred studies worldwide. Although the major portion of this use was dedicated to the investigation of classroom environments, the Learning Environment Inventory and the My Classroom Inventory (its companion measure for elementary classrooms) have also been used in schoolwide climate studies (Ellett, Payne, Masters, & Pool, 1977; Ellett & Walberg, 1979).

Schoolwide Emphasis and Organizational Climate

More than thirty years ago, Halpin and Croft (1963) pioneered school climate research in elementary schools. Their purpose was to identify salient properties of teacher-teacher and teacher-principal relationships in schools. Using multivariate statistical methods and descriptive research techniques, they developed the Organizational Climate Descriptive Questionnaire (OCDQ) that assesses elementary school climate. Halpin and Croft, in conceptualizing school climate types along an open to closed continuum, alluded to school climate as akin to the “personality” of the organization much like the terminology employed in Rokeach’s (1960) exploration of personality types. In essence, “personality is to an individual as climate is to an organization” (Hoy & Miskel, 1996, p.141). Much early climate research conducted in elementary and secondary schools was predicated on the OCDQ. Indeed, the influence of the OCDQ is widely recognized, universally acknowledged, and often parroted by researchers and scholars (Brown & House, 1967; Kalis, 1980; Thomas, 1976). As an operational measure of school climate, the OCDQ has produced hundreds of studies and an abundance of empirical research dedicated to the study of school climate.

The strategic motivation for the development of the OCDQ was fueled by four key premises: (1) educational organizations exhibit considerable variation in their “feel”; (2) the concept of school “personality” is an interesting and fascinating subject; (3) gifted administrators who assume positions in schools where innovative change is demanded are often thwarted by a stubborn and defiant staff; and (4) the issue of morale does not adequately address the difference in “feel” among schools. Armed with the impetus of

these four critical factors, Halpin and Croft sought to provide researchers and practitioners alike with a descriptive methodology that would warrant serious attention in improving school environments.

Halpin and Croft were guided in their research by the assumption that in an attractive organizational atmosphere, acts of leadership may be generated by both leaders or followers in the course of satisfying system needs or accomplishing system tasks. Put simply, acts of leadership in desirable organizations should flow easily from any system stakeholder regardless of whether that person is an administrator or teacher. Henceforth, items were composed which described the actions of teachers interacting with teachers as well as teacher-principal behaviors. The professional staff of each school was then asked to determine the extent to which each Likert-type item on the questionnaire occurred in their schools. Staff respondents to the OCDQ were asked to use a scale with four distinct categories ranging from (1) Rarely occurs to (4) Very frequently occurs. Halpin and Croft also emphasized the need to develop items for the OCDQ that would “yield a reasonable amount of consensus within a given school, but ones that also would provide discrimination among schools” (Hoy, Tarter, & Kottkamp, 1991, p.13). Similar to Pace and Stern (1958), Halpin and Croft ultimately defined climate in terms of the perceptions of the organizational participants. They posited that how a faculty or school group actually interacts is far less important than their perceptions of those interactions and that any consensus of perception by stakeholders would prove to be a reliable gauge of what actually exists in the organization.

Having employed a series of statistical and conceptual methodologies over the duration of three test iterations, Halpin and Croft (1963) radically reduced the number of

items in the OCDQ from 1,000 behavioral descriptives to a final aggregate of 64 items. The OCDQ was then administered to the certificated and administrative staff of 71 elementary schools located throughout six different sections of the nation. The 64 test items comprising the final version of the OCDQ were subjected to factor analysis and were found to be grouped into eight subtest groupings. Four of the factors (disengagement, hindrance, esprit, and intimacy) referenced characteristics of the faculty group and four others (aloofness, production emphasis, thrust, and consideration) identified aspects of teacher-principal interactions. Each of these eight groups of items was subsequently labeled and together formed the eight salient dimensions of organizational climate. Cumulatively, the eight subtest scores on the OCDQ chart the climate profile of a particular school.

After designating a climate profile for each of the 71 elementary schools, Halpin and Croft proceeded to employ factor analytic manipulations to their subtest data and reduced the total number of profiles to six basic categories. The 71 elementary schools in their study were then grouped into one of the six designated climate types according to system similarities. Henceforth, six overall school climate profiles (open, autonomous, controlled, familiar, paternal, and closed) were distributed along a crude continuum ranging from open to closed. A brief description of each climate prototype follows.

- The Open Climate is characterized by high levels of cooperation and professional reinforcement among the teachers. The teaching staff experiences low levels of conflict and is not discouraged from accomplishing tasks due to an inordinate amount of bureaucratic routinization. The teachers are satisfied with their jobs as well as the school and actively seek to keep the organization moving in the right direction. The

principal provides leadership by example and is actively engaged in forwarding school rules and regulations that are flexible, uninhibiting to the staff, and yet are expected to be followed for the good of the order. As the chief administrator of the building, the principal is generally supportive of the staff, comfortable with leadership acts emerging from them, and is in total control of the school surroundings. In sum, the open climate prototype is descriptive of a school where individuals want to work and enjoy an overall passion for their vocation in an unbridled, authentic, and unrestricted manner.

- The Autonomous Climate is characterized by a high degree of freedom accorded the teaching staff by the building principal. The teachers are “engaged” with each other and are given the latitude by the principal to interact freely with their colleagues in order to encourage productive task achievement. The teaching staff experiences relatively high morale and is generally more preoccupied with social-needs satisfaction than those teachers in the open climate. The principal operates the school in a business-like manner and is confident that the professional staff is accomplishing its tasks without a great deal of monitoring. Teachers are left to work at their own pace and the principal serves as an example to the staff by working hard. Principal behavior in the autonomous climate is genuine and concerned, but is not as encompassing as that of the principal operating within the open climate.
- The Controlled Climate is heavily distinguished by an achievement mentality. The school portrays a “nose to the stone” attitude where task achievement and the drive to excel far supersedes social needs. Although high levels of morale exist, teachers expect to be told exactly what is to be accomplished and how it is to be done. There is

a plethora of paperwork accompanying the job that tends to compound and frustrate the drive for task achievement. The controlled climate school is marked by teacher impersonality and is often characterized by social isolation among the staff. In essence, teacher job satisfaction is largely derived from task achievement which tends to act as a surrogate for low levels of social-needs satisfaction. The principal exhibits highly directive, inflexible, and impersonal behaviors in dealing with teachers.

Written directives by the principal are oftentimes substitutes for personal staff contact and standardization of procedures is common practice. In general, the principal engages in a “my way or the highway” type of leadership style that is largely predicated on strict rule adherence by the staff and results in very low levels of staff support, empathy or consideration.

- The Familiar Climate is characterized by a very high level of social-needs satisfaction. Indeed, the major impetus of this climate type is social engagement; even at the cost of task achievement. The professional staff is portrayed as one big, happy, family and the attitude among the teachers is one of complete disengagement. As opposed to teachers in the controlled climate, the staff working in the familiar climate is characterized by task underachievement. Working at full capacity is relatively unknown and the principal, being preoccupied with maintaining the “family” atmosphere of the organization, does little to encourage productivity. School rules and regulations are ambiguous, scarce, and unobtrusive. The principal does not encourage task achievement and the social-needs agenda of the school overrides the need for order and accomplishment. In the familiar climate, being a “good guy” carries much more influence than being a competent teacher or administrator.

- **The Paternal Climate is a closed climate type that is distinguished by a principal who has failed to “connect” with the teaching staff and is regarded as less than genuine. The teachers have difficulty working together and are unmotivated. The faculty is divided into interest groups and factions, and school in-fighting is common. Although the teachers are not hindered by excessive busy work , there is little concern for task accomplishment or positive social relations. Put simply, teachers in a school that exhibits characteristics of a paternal climate have abandoned their efforts and given up. Contrary to the plight of the teachers, the principal is prone to micromanage the school and exhibits a tendency to become intrusive. The school is the principal’s life and teachers are prevented from “interfering” with what he or she deems is best for the system. In the context of the school, the principal becomes a camp director of sorts; indicating all tasks and events that should be undertaken. The principal’s intrusiveness and microemphasis on how and why things should be done produce extremely high levels of disengagement and frustration among the teachers. Ultimately, much is discussed but little is accomplished in the school.**
- **The Closed Climate is the opposite of the open climate setting. In the closed climate environment the teachers suffer high levels of disengagement and are not inclined to work well in groups. To induce some sense of achievement, the teachers proceed to fill out reports and participate in routine “housekeeping” details. A general sense of malaise pervades the closed school climate atmosphere. Overall, the principal’s leadership is perceived as totally ineffective and devoid of sincerity. The staff “reads” the principal as self-serving and insincere—a grandstand player who talks a great game but does nothing to lead by example. Little, if any, leadership is permitted to**

emerge from the staff ranks and the principal is unlikely to provide genuine and inspired leadership in the school. The behaviors of the principal and teachers are steeped in inauthenticity and the school tends to operate dangerously close to total system dysfunctionality due to low levels of morale, high levels of apathy, and a pervasive sense of organizational stagnation.

Although the OCDQ has been the most widely used conceptual and operational measure of school climate research over the past thirty years, a growing battery of criticisms of the framework have surfaced. Hayes (1973) concluded that since the OCDQ has not undergone any revision, the possibility exists that the instrument no longer measures what the researchers intended it to measure. Thus, due to societal and school change, it may be conceptually and operationally antiquated.

Another problem pertinent to the OCDQ is the unit-of-analysis issue. In undertaking the study of elementary schools, Halpin and Croft sought to identify specific dimensions of climate—an organizational characteristic where data is typically collected at the individual level and aggregated at the school level. However, “in identifying the dimensions of climate, the initial analysis was performed at the individual level, not an organizational one. That is, the sample for analysis was 1151 individuals, not 71 schools. Such an analysis ignores a basic conceptual assumption” (Hoy & Clover, 1986, p. 96).

As research on the OCDQ continued, additional criticisms of the instrument surfaced. Sliver (1983) criticized the conceptual underpinnings of the instrument by maintaining that the framework lacked a clearly identifiable logic, while Carver and Sergiovanni (1969) argued that the measure was not appropriately suited to the study of secondary schools or large, urban schools. Other findings have suggested that the overall

climate categories are less predictive of school climate than the instrument's separate subtests (Andrews, 1965; Feldvebel, 1964a,b). Additionally, the measure has been criticized for various psychometric inadequacies (Hoy & Clover, 1986; Hoy & Miskel, 1996; Kottkamp, Mulhern, & Hoy, 1987) as well as for attempting to describe the school climate while failing to reference the student population. "To exclude the student from the analysis of school climate is to restrict the scope of the climate measure" (Hoy & Clover, 1986, p. 95).

Despite the fact that a variety of research findings indicate that the OCDQ seems to be in need of some timely revision, Halpin and Croft's original framework has forwarded a useful and heuristic tool for organizational scholars to utilize. To be sure, the OCDQ has played a key part in promoting a broad-based interest in school climate research within elementary and secondary schools. Many subsequent (and more contemporary) climate instruments emanate from the early work of Halpin and Croft and the OCDQ continues to be recognized as one of the most utilized measures ever applied in the field of school climate research.

Endeavoring to address the criticisms leveled at the original OCDQ, several revised and more contemporary climate instruments have been developed. Building on the work of Halpin and Croft, Hoy and his colleagues have developed three new versions of the OCDQ: the OCDQ-RE (elementary schools), the OCDQ-RM (middle schools), and the OCDQ-RS (secondary schools). Although the research contained in this study is confined to the characteristics of secondary schools, a brief exploration of the OCDQ-RE and the OCDQ-RM is also presented to assist in distinguishing the development and subsequent utility of each of the revised instruments.

In an attempt to develop an instrument that would preserve the conceptual spirit of the original OCDQ and yet address some of the criticisms of the measure, Hoy and Clover (1986) constructed the Organizational Climate Description Questionnaire-Revised Elementary (OCDQ-RE). Concentrating on the evaluation of the original items contained in the OCDQ and a generation of new items that were viewed as more contemporary and statistically valid, a revised climate instrument was devised. In addition, Hoy and Clover (1986) succeeded in reducing and refining many of the descriptive items while maintaining the integrity of the original design by utilizing a four-point Likert scale ranging from (1) Rarely occurs to (4) Very frequently occurs. Seeking to remedy the unit of analysis problem presented in the original study by Halpin and Croft (1963), Hoy and Clover employed between-school analysis techniques (Sirotnik, 1980) that use the group as the unit of analysis rather than total analysis techniques that examine “relationships among variables across individuals, ignoring possible relevant grouping factors” (Hoy & Clover, 1986, p. 98). Thus, scores were aggregated to the school level and not the individual level.

Following a series of test iterations and factor analytic manipulations, a more parsimonious and contemporary instrument was established. The OCDQ-RE emerged as an instrument containing 42 items and six subtest dimensions that outline the behavior of elementary teachers and principals. Three climate dimensions of administrative behavior (supportive, directive, and restrictive) are identified as well as three key aspects of teacher behavior (collegial, intimate, and disengaged). Subsequently, a factor analysis of the six subtests revealed that the conceptual and operational bases of the OCDQ-RE were undergirded by two, independent, premises: openness in faculty relations and closedness

in principal behavior. An index of openness of faculty relations can then be constructed by summing the collegial, intimacy, and disengagement scores while an index of closedness in principal behavior can be created by adding the supportiveness, restrictiveness, and directiveness scores. Hence, both factors may be viewed along an open-closed continuum.

As a result of discovering the openness-closedness factors in their model as independent of each other, Hoy and Clover proceeded to identify four distinct school climate prototypes as germane to their instrument. A brief description of each climate profile follows.

- The Open Climate is distinguished by faculty and administrative behaviors that are genuine and positive. The principal seeks to edify the productive capacities of the teachers by providing open and honest dialogue that is supportive and respectful. The principal also provides the faculty with “room to breathe” in regards to facilitating “leadership behaviors devoid of bureaucratic trivia” (Hoy & Miskel, 1996, p. 146). Similarly, the teachers encourage close, professional interactions with their colleagues and are likely to socialize as friends outside of the school environment. In sum, teachers and principals in open climates are highly cooperative and authentically committed to their jobs and the workplace.**
- The Engaged Climate is characterized by a dedicated and professional teaching staff but is plagued by a principal who is highly directive and inflexible. The principal is weak in substance and support of the staff, lacking both competence and authenticity. Furthermore, the principal initiates bureaucratic minutiae and creates trivial activities that tend to hinder the effectiveness of the faculty. However, the teachers remain**

dedicated to the task at hand, act in a professional manner, and cooperate well with each other. Mutual respect pervades the faculty and the teachers are committed to doing their jobs effectively, despite the presence of an administratively anemic and inauthentic principal.

- The Disengaged Climate represents the antithesis of the engaged climate. At best, the teachers are engulfed in a malaise whereby commitment is dangerously low. Teachers exhibit very little professional respect in their relations with each other and even less respect is directed at the principal. Cooperation among the faculty is low. Although the principal is dedicated to the teachers and seeks to “lighten their load” by personally undertaking much of the bureaucratic “busywork” present in the school, the teachers remain disengaged from their tasks, each other, and the school.
- The Closed Climate represents school characteristics that radically contrast with the those of the open climate. Both the principal and the teachers are “removed” from their purpose. The teachers are disengaged from each other and the principal, who provides limited and ineffective leadership. In general, the principal and the teachers simply “put in their time.” In a closed climate, the principal is perceived as insincere, rigid, and contriving. Teachers feel burdened and are generally afflicted with high levels of apathy, intolerance, and disrespect.

The research leading to the development of the OCDQ-RE (Hoy & Clover, 1986) was intended to buttress the conceptual framework of school climate developed by Halpin and Croft (1963) as well as to address some empirical shortcomings of the original OCDQ. “Although the OCDQ-RE builds upon the original OCDQ, it is more parsimonious; it has different dimensions; and one-half the items are new” (Hoy and

Clover, 1986, p. 100). In effect, Hoy and Clover have constructed what amounts to a new and more empirically valid measure of elementary school climate. However, elementary schools are different in their “feel” from middle schools and pose different diagnostic dilemmas. Accordingly, Hoy and his colleagues have succeeded in developing an instrument designed to conceptualize and measure the organizational properties of middle schools.

Using research methodologies and theoretical perspectives similar to those employed in developing the OCDQ-RE (Hoy & Clover, 1986), a specific instrument was created for measuring the organizational climate of middle schools (Hoffman, Sabo, Bliss, & Hoy, 1994; Hoy, Hoffman, Sabo, & Bliss, 1996). The Organizational Climate Description Questionnaire-Revised Middle (OCDQ-RM) was created by Hoy, et al. (1996) to conceptualize and operationalize the unique properties of middle schools. Consistent with the extant literature and their postulation that the critical dimensions of middle school climate would closely parallel those evident in elementary schools, Hoy, et al. (1996) found that the six subtest dimensions of the OCDQ-RM were quite similar to those associated with the OCDQ-RE. Three climate dimensions of principal behavior—supportive, directive, and restrictive—and three aspects of teacher behavior—collegial, committed, and disengaged—were identified. With the exception of intimacy, which was found not to be a dimension of middle school climate, the profiles of the OCDQ-RM mirror those identified at the elementary level. In lieu of the intimacy dimension evident in the OCDQ-RE, teacher commitment was identified as a salient profile type in middle school climates. Put briefly, “middle schools have a commitment dimension that resembles the engagement dimension found in high schools but with a

greater emphasis on commitment to students rather than to the school or colleagues” (Hoy & Sabo, 1998, p. 48). Retaining the basic factor structure of the OCDQ-RE, the six subtests of the OCDQ-RM were also found to gauge openness in principal behaviors and openness in teacher interactions (Hoy, Hoffman, Sabo, & Bliss, 1996). “Thus, the OCDQ-RM has two general second-order factors, both viewed along an open-closed continuum—openness of principal behavior and openness of teacher behavior—findings consistent with the extant literature” (Hoy & Sabo, 1998, p. 40). The middle school instrument also shares the same four primary climate types that are evidenced in the elementary version of the OCDQ-RE—open, engaged, disengaged, or closed climates.

Operating from a rationale that middle schools differ markedly from either elementary or secondary schools, the OCDQ-RM is a 50-item instrument constructed specifically to measure the unique properties of middle school climate. Although the instrument is similar to its companion measure for elementary schools, significant differences between elementary school climates and middle school environments exist. Thus, the OCDQ-RM provides both researchers and practitioners with a reliable and heuristic tool for conceptualizing and measuring middle school climate.

Secondary schools differ substantially from either elementary schools or middle schools. Typically, secondary schools are more complex and harbor greater levels of departmentalized specialization. They possess a proliferation of rules and are larger in scale than their elementary or middle school counterparts. In essence, secondary schools present a unique educational environment that is distinctly separate from other schools.

In keeping with the rationale that secondary schools are unique, a new instrument using the original framework of the OCDQ was developed to measure the organizational properties of secondary schools. A discussion of the instrument follows.

Applying item generation, refinement, and reduction procedures, along with statistical analyses similar to those employed in the construction of the OCDQ-RE, the Organizational Climate Description Questionnaire-Revised Secondary (OCDQ-RS) was developed (Kottkamp, Mulhern, & Hoy, 1987; Hoy, Tarter, & Kottkamp, 1991). The OCDQ-RS, a 34-item instrument, was designed to measure the behavior of teachers and principals in secondary schools. Consisting of five dimensions, the measure describes two critical aspects of principal behavior (supportive and directive) and three key aspects of teacher behavior (engaged, frustrated, and intimate). “Although most of these aspects of secondary school climate are conceptually similar to those at the elementary levels, their measures are not identical” (Hoy & Miskel, 1996, p. 148). For example, the “frustrated” dimension of teacher behavior, which alludes to a pattern of disruptive school occurrences that complicate the teaching task, is peculiar only to the OCDQ-RS while the “collegial” dimension common to both the OCDQ-RE and the OCDQ-RM is conspicuously absent from the secondary instrument.

In addition to identifying five specific profiles of school climate, the OCDQ-RS also provides a description of two general dimensions of secondary school environments. One general dimension was found to entail supportive, engaged, directive, and frustrated behaviors and was named openness—in keeping with the original research rationale of an open-closed continuum. Thus, by summing the subtest scores for the supportive, engaged, directive, and frustrated dimensions of the OCDQ-RS, an index of the degree of

openness can be formulated. The second factor, intimacy, “is a facet of secondary school climate that stands alone; unlike elementary school climate, intimacy is not a part of the openness construct” (Hoy, Tarter, & Kottkamp, 1991, p. 173). An overall view the climate of each secondary school can be ascertained by charting its profile along the five subtest dimensions.

Notwithstanding that the OCDQ-RS provides a tenable framework for conceptualizing and measuring secondary school climate, the instrument is very parsimonious. Although theoretically congruent with the earlier work of Halpin and Croft (1963), the 34-item questionnaire does appear to be relatively brief in reference to the OCDQ-RE (42 items) and the OCDQ-RM (50 items). In addition, the factor structure is inconsistent with the other instruments. Whereas the general factors of openness of teacher-teacher relations and openness of principal-teacher behaviors are present in both the elementary and secondary instruments, the OCDQ-RS identifies two separate and independent dimensions—openness and intimacy. As the intent of this study is to identify critical characteristics of secondary school climates, the question remains whether the OCDQ-RS most appropriately fits the conceptual and operational requirements of the research. Following an exploration of the relevant research findings applicable to openness of school climate, an investigation of another key facet of school climate—organizational health—will be conducted.

Relevant Research on Openness of School Climate

Over the last two decades considerable research has been conducted to unearth the factors that influence school environments and form school climate (Brookover, Schweitzer, Schneider, Beady, Flood & Weisenbaker, 1978; Rutter, Maughn, Mortimore,

Ouston, & Smith, 1979; Hoy, Tarter, & Kottkamp, 1991). Much of this research has been attributed to the pervasive use of the OCDQ (Haipin & Croft, 1963) and several revised editions of the original measure (Hoy & Clover, 1986; Kottkamp, Mulhern, & Hoy, 1987; Hoy, Tarter, & Kottkamp, 1991; Hoy, Hoffman, Sabo, & Bliss, 1996; Hoy & Sabo, 1998). To be sure, the openness-closedness framework of these instruments has been utilized to predict a plethora of school outcomes and school climate relationships.

In a sample of 72 New Jersey secondary schools, Tarter et al. (1989) found that different dimensions of school climate were associated with certain aspects of faculty trust. Specifically, supportive principal behavior was strongly related to faculty trust in the principal while engaged behavior demonstrated by teachers encouraged greater levels of faculty trust in colleagues. In addition, a more recent study by Hoffman, Sabo, Bliss and Hoy (1994) concluded that collegial teacher behavior coupled with engaged teacher behavior seems to best facilitate trust in colleagues. Likewise, Tarter and Hoy (1988) found that administrators who are open and collegial with teachers manifest trust and respect from the faculty. Findings from the study also suggest that faculty trust in the principal increases as the principal insulates the teachers from demanding outside influences.

The control of students in the school setting is no small matter. Research has highlighted the significance of pupil control methodologies as a salient aspect of organizational life of schools (Waller, 1961; Willower & Jones, 1963; Willower, Eidell & Hoy, 1967; Hoy, 1972). Open school climate has also been found to have a significant impact on pupil control orientations. In a study of 592 teachers in 42 New Jersey elementary schools, Hoy and Henderson (1983) found that humanistic pupil-control

orientations were much more prevalent in schools with open climate profiles. Thus, schools where pupils feel actively involved in the educational process through lower levels of teacher control and higher levels of student self-discipline—open schools—encourage rather than discourage a cooperative learning atmosphere.

In the same study, Hoy and Henderson (1983) buttressed earlier research by Appleberry and Hoy (1969) that indicated authenticity among the professional staff in schools acts as a catalyst for further enhancing openness in schools. Specifically, they found that authentic principal-teacher and teacher-teacher interactions would “pervade teacher-pupil interactions and that a humanistic pupil control orientation would facilitate and be facilitated by authentic interactions between teachers and pupils” (Hoy & Henderson, 1983, p. 128-129).

Several empirical studies have demonstrated the importance of climate in student achievement (Armor et al, 1976; Brookover et al., 1978; Bossert, 1988; Hoy, Tarter, & Kottkamp, 1991). Building on the work of Hannum (1994), Hoy, Hannum, and Tschannen-Moran (1998) conducted a longitudinal study designed to tap the effects of climate on achievement levels of middle school students. Employing a sample of 86 New Jersey middle schools from all socioeconomic denominations and geographic areas, they found that school characteristics associated with open climate types encouraged student achievement. Their findings also suggest that “the impact of a school’s climate is relatively enduring. The influence of climate on achievement continues over time” (Hoy, Hannum, & Tschannen-Moran, 1998, p. 353). Indeed, the protracted effects of an open or closed environment on middle school students seems to indicate a relatively vibrant relationship between student achievement and school climate.

Other climate research based on the framework of openness-closedness has emerged. Hartley and Hoy (1972) found that students in schools with open climates experience fewer feelings of alienation toward both the staff and the school, while Anderson (1964) reported that as opposed to closed schools, open school environments harbor administrators who are more creative, socially respondent, and confident. Further research has indicated that open and authentic principal leadership evidences greater levels of teacher self-confidence and satisfaction (Andrews, 1965).

The OCDQ and three new versions of the measure—the OCDQ-RE, OCDQ-RM and OCDQ-RS— have spawned hundreds of studies pertaining to school climate research (Anderson, 1982; Hoy & Miskel, 1996; Miskel & Ogawa, 1988; Silver, 1983). On a global scale, research based on the openness index put forth by Halpin and Croft, and refined by Hoy and his colleagues, continues to grow. School climate research, profiled in terms of principal-teacher and teacher-teacher behaviors, can be used to identify various organizational strengths and weaknesses and to facilitate effective organizational change. Although the OCDQ and its companion measures are far from being the only valid measures of gauging school effectiveness and climate, they continue to provide researchers with important data designed to assist in understanding the educational environment.

Organizational Health

Schools, like most contemporary organizations, are concerned with effectiveness. External pressures for greater system accountability coupled with public demands for increased school quality have prompted researchers to examine school climate for the purpose of identifying key characteristics of healthy schools. Thus, another method of

describing organizational climate stems from the early work produced on organizational health (Miles, 1969) and the theoretical underpinnings of the school as a social system (Parsons, 1967; Parsons, Bales, & Shils, 1953).

Three decades ago Miles (1969) described a healthy organization as one that “not only survives in its environment, but continues to cope adequately over the long haul, and continuously develops and extends its surviving and coping abilities” (p. 378). In essence, healthy organizations are subject to short-term system upheavals but are, in the long term, quite durable and lasting. Miles (1969) developed a conceptual framework of school health predicted on ten critical factors. The first three factors of Miles’ taxonomy encompassed “task-centered” needs of the organization (goal focus, communication adequacy, and power equalization) that served to address organizational goals and the decision-making methodologies of the system. A second group of “maintenance-oriented” needs (resource utilization, cohesiveness, and morale) stressed attention to the internal state of the organization. Finally, a third group of “change and growth” needs (innovativeness, autonomy, adaptation, and problem-solving adequacy) assist the organization in its goal of efficiency. Although numerous attempts to construct an operational measure of Miles’ ten dimensions of organizational health have been made (Kimpston & Sonnabend, 1975; Childers & Fairman, 1985; Clark & Fairman, 1983; Fairman, Holmes, Hardage, & Lucas, 1979) psychometric and methodological shortcomings have impeded the process. Nevertheless, Miles’ framework continues to be regarded as a heuristic beginning in the pursuit of studying school health.

Many of the theoretical underpinnings of organizational health of schools are derived from the work of Parsons, Bales, and Shils (1953) and Hoy and his colleagues

(1986, 1987, 1991). All organizations, if they are to flourish and grow, must address four fundamental problems. Parsons et al.(1953) identify these situational dilemmas as facets of adaptation, goal attainment, integration, and latency.

In other words, Hoy and Miskel (1996) assert that,

Organizations must successfully solve (1) the problem of acquiring sufficient resources and accommodating to their environments, (2) the problem of setting and attaining goals, (3) the problem of maintaining solidarity within the system, and (4) the problem of creating and preserving the unique values of the system. (p. 151)

Parsons (1967) also maintains that schools possess three unique levels of control over these organizational problems—the technical, managerial, and institutional levels. The technical level represents the teaching-learning process and places teachers in a direct position of control. The managerial level entails the principal as leader-facilitator and represents the area where the allocation of resources and supervision of work is the primary goal. At this level, principals must serve as innovators who foster teacher commitment and motivation while creating influence with their superiors. The institutional level connects the internal stakeholders of the school system with the external environment as the superintendent and school board assume responsibility for developing and maintaining system legitimacy and support.

Accordingly, Hoy, Tarter, and Kottkamp (1991) described a healthy school in this way,

A healthy school is one in which the technical, managerial, and institutional levels are in harmony and the school is meeting both its instrumental and expressive needs as it successfully copes with disruptive external forces and directs its energies toward its mission. (p. 68)

The theoretical framework of Parsons et al. (1953) has provided the basis for conceptualizing and measuring school health. Equipped with these Parsonian perspectives, Hoy and his colleagues (1987, 1991) constructed the Organizational Health Inventory (OHI), an instrument that charts the health of secondary schools.

Following the generation of 95 simple, descriptive statements that focused on the technical, managerial, and institutional levels of the organization, a pilot study of the measure was conducted in 72 schools to refine the instrument and reduce the number of items. The data, which was collected at the individual level and aggregated to the school level to accommodate the unit of analysis as the school, was then analyzed to further determine the factor structure of the instrument. Subsequently, the number of items were reduced by half, seven dimensions of school health were identified, and the final instrument was tested using a diverse sample of 78 New Jersey secondary schools (Hoy, Tarter, & Kottkamp, 1991). A second-order factor analysis of the seven subtests produced one overall underlying factor that was called school health (Hoy & Feldman, 1987). Thus, the health of a school can be mapped by summing the standard scores on the subtests. Higher total school scores would indicate healthier schools, while lower scores would indicate more of an unhealthy school climate. Thus, the final 44-item version of the Organizational Health Inventory for Secondary Schools (OHI) consists of seven characteristics of climate that specifically define the organizational health of secondary schools—institutional integrity, principal influence, consideration, initiating structure, resource support, morale, and academic emphasis. A brief conceptual description of each dimension of school health follows.

- **Institutional integrity represents the school's skill in protecting its programs from meddlesome and destructive outside forces. Teachers are protected from excessively demanding parents and the school is insulated from community groups that focus on narrowly conceived agendas. (institutional level)**
- **Principal influence refers to the building administrator's ability to impact the opinions, decisions, and actions of superiors. Principals are able to constructively negotiate the scalar chain of command to garner additional resources and consideration from the superintendent while still maintaining autonomy. (managerial level)**
- **Consideration describes administrator-teacher behavior patterns of the principal that are congenial, authentic, supportive, collegial, and sociable. (managerial level)**
- **Initiating structure constitutes principal behavior that is goal focused. Principals clearly establish performance outcomes, procedural expectations, and work objectives. (managerial level)**
- **Resource support alludes to schools that consistently possess sufficient classroom supplies and instructional materials. School personnel are not burdened by a lack of materials and feel comfortable requesting additional supplies in the course of their duties. (managerial)**
- **Morale refers to schools where faculty members exude confidence, are gregarious and friendly, and cultivate collegiality. Teachers seek out cooperative endeavors with each other, appreciate their jobs, and feel a sense of pride and accomplishment in their school. (technical level)**

- **Academic emphasis is the degree to which the school seeks to achieve academic excellence. Academic goals for students are lofty, but achievable, and the students indulge in a scholastic environment where high academic performance is recognized by both teachers and students. (technical level)**

Thus taken together, the dimensions identified by the OHI form a composite of the organizational health of a secondary school (Tarter & Hoy, 1988). Utilizing the descriptive properties of the OHI subtests, a model for each end of the school health continuum— healthy and unhealthy—can be formulated.

A healthy school exhibits high levels of institutional integrity as evidenced by the efforts of the principal, superintendent, and school board to insulate the school from unwarranted community pressures. The principal of a healthy school provides authentic and constructive leadership that befits the task and relations orientations of the school. Likewise, the principal is persuasive in dealing with superiors, yet preserves his or her independence and administrative autonomy. Teachers in a healthy school are supportive of the principal's leadership and constructively engage their colleagues and students in an open and friendly manner. In addition, they establish lofty, but achievable, performance standards for their students and themselves, and are proud of their school. Finally, students armed with adequate instructional materials energetically pursue academic targets and are motivated and respectful of other students who perform well. In general, healthy schools are schools where administrators, teachers, and students are in harmony with a constructive and robust intellectual environment (Hoy & Miskel, 1996).

An unhealthy school is characterized by system instability and uncertainty. Outside pressures from community interest groups freely permeate the school boundary

and administrators and board members do little to protect the faculty from these intrusions. The principal is unable (or unwilling) to provide any semblance of leadership at the school or central office level. In essence, the principal is perceived as offering no support or encouragement to the faculty. The teachers in an unhealthy school exhibit low levels of cooperation with their colleagues and are generally apathetic about their position in the school. They experience low morale which is invariably projected to the students. Thus, the students respond with little or no academic zeal and often deride those students who exhibit academic excellence. The unhealthy school is plagued by disruptions from the outside community and beset with internal problems at all stakeholder levels (Hoy & Miskel, 1996).

The OHI (Hoy & Feldman, 1987; Hoy, Tarter, & Kottkamp, 1991) is a diagnostic tool that can assist in identifying key dimensions of organizational health of secondary schools. Although the measure is relatively new, a growing body of school health research utilizing the instrument is promising (Hoy & Miskel, 1996). A summary of the research findings associated with the OHI and its companion measures— the OHI-E (elementary schools) (Podgurski, 1990; Hoy, Tarter, & Kottkamp, 1991) and the OHI-M (middle schools) (Hoy & Sabo, 1998)—follows.

Relevant Research on School Health

In a study of 75 New Jersey secondary schools, Tarter and Hoy (1988) found that organizational health and two specific dimensions of trust—faculty trust in the principal and faculty trust in colleagues—were related. In general, the overall findings of the study linked healthier schools with greater levels of trust across the board.

Independent findings of the study indicated that faculty trust in the principal was encouraged by those administrators who were supportive, engaging, and collegial toward the teachers (high consideration). In addition, Tarter & Hoy (1988) discovered that principals who were perceived as protecting teachers from meddlesome parents and other disruptive outside sources (high institutional integrity) also experienced greater degrees of faculty trust.

Morale, academic emphasis, consideration, principal influence, and institutional integrity were found to affect levels of faculty trust in colleagues. In fact, initiating structure and resource support were the only two variables of health that were not related to trust in colleagues. In further analyzing the data, morale and principal influence were found to be the best predictors of faculty trust in colleagues. Obviously, teachers who share a collective sense of friendliness and enthusiasm about their jobs (high morale) have reason to exhibit high levels of trust in colleagues.

School health has also been related to commitment levels of teachers in secondary schools. In a study of 72 New Jersey secondary schools, Tarter, Hoy, and Kottkamp (1990) investigated elements of school health and teacher commitment. Their findings indicated that individual as well as aggregated dimensions of school health are positively related to organizational commitment.

Additional research gleaned from the study indicated that each of the seven elements of the OHI were found to predict teacher commitment. However, only the dimension of principal influence made a substantial contribution in developing teacher commitment to the school (Tarter, Hoy, & Kottkamp, 1990). Thus, it would appear that principals who can influence the classroom environments of their teachers by impacting

the decisions of superiors elicit staff commitment. This finding would seem to reinforce the premise that “the principal plays a key role in mediating the relationships between teachers, parents, and students, and in developing a climate of commitment” (Tarter, Hoy, & Kottkamp, 1990, p. 241).

Encouraged by studies (Ashton et al., 1983; Newmann et al., 1989) that suggested certain aspects of school climate may be related to teachers’ sense of general and personal teaching efficacy, Hoy and Woolfolk (1993) found that the health dimensions of principal influence and academic emphasis predicted personal teaching efficacy. Accordingly, when teachers feel that their colleagues are dedicated to establishing high but achievable academic goals in a serious and orderly scholastic environment personal teaching efficacy is promulgated. Moreover, administrators who were perceived to exert influence with their superiors were also likely to foster teaching atmospheres where teachers felt more personally efficacious (Hoy & Woolfolk, 1993). These findings closely parallel those produced by other studies of efficacy and performance (Ashton et al., 1983; Brookover et al., 1978; Brookover & Lozette, 1977; Edmonds, 1979; Ellet & Walberg, 1979; Little, 1982; Newmann et al., 1989).

Although independent from the construct of personal teaching efficacy, Hoy & Woolfolk (1993) also found that general teaching efficacy was influenced by certain school health dimensions. Institutional integrity and morale were found to have significant impacts on general teaching efficacy. By perceiving that students at school are insulated from distracting domestic influences, teachers may well believe that they are in

a position to filter out the negative parental influences and accentuate positive parental factors (institutional integrity). Obviously, high levels of faculty morale effect greater general efficacy of the teaching staff.

Research findings have also indicated that secondary school math and reading achievement levels on standardized tests are positively related to school health (Hoy & Tarter, & Bliss, 1990). Likewise, Hannum (1994) and Hoy, Hannum, and Tschannen-Moran (1998) have found that the healthier the school climate of middle schools, the higher the student achievement levels on standardized math, reading, and writing tests. In addition, Hoy, Barnes, and Sabo (1996) have found that school health is positively related to middle school teacher participation in decision making.

Organizational Health: A Rationale

The OCDQ-RS and the OHI are both operational tools that predict organizational characteristics. The OCDQ-RS has an extensive empirical history of organizational climate research (Anderson, 1982; Miskel & Ogawa, 1988) and is credited with many more research undertakings than the OHI. However, the OCDQ-RS lacks the theoretical foundation inherent in the OHI and therefore its practical utility may well be restricted. In addition, the instrument itself possesses a paucity of items, evidences fewer dimensions than does the OHI, and maps secondary school climate primarily from an open-closed perspective. In contrast, the OHI is grounded in a Parsonian framework steeped in social systems theory that is employed to explain organizational actions (Hoy et al., 1990). When compared to the OCDQ-RS, the OHI also uses a greater number of descriptive items and more subtest dimensions to measure organizational climate. Thus, the OHI may well provide a more holistic and theory-driven appraisal of secondary school climate than

the OCDQ-RS. Notwithstanding that the OCDQ-RS represents a valid methodology for assessing school climate, research (Hoy et al., 1990) comparing the two measures in predicting student performance and teacher commitment levels indicated that the OHI proved to be a better instrument for the prediction of both outcome variables.

Although both the OCDQ-RS and the OHI have made substantial contributions to the field of school climate research, for the purpose of this study organizational health represents a more intriguing and comprehensive concept. Indeed, the OHI seems well suited as a predictor of innovativeness, cohesiveness, task achievement, loyalty, and trust. In spite of the fact that research concentrating on school health is scarce and its measures are new, the OHI constitutes a valid and reliable instrument designed to gather empirical data. For this reason, the investigation of school health as a critical aspect of school climate presents a better theoretical and methodological approach to this study. Indeed, trust and health have been found to be complementary aspects of effective school environments (Tarter & Hoy, 1988; Hoy, Tarter, & Witkoskie, 1992). Therefore, the construct of organizational health will be employed to complement the investigation of faculty trust in secondary schools.

Trust

Over the last decade scholars studying the organizational sciences have focused much attention on the value of developing greater levels of interpersonal cooperation and teamwork in organizations. As various forms of risk-taking behavior become routinized in organizational life, management theorists have become acutely aware of the importance of the abilities and knowledge of organizational participants (Amit & Shoemaker, 1993) and in the exchanges among them. In an era where both public and

private organizations are increasingly assaulted by downsizing pressures, reduction-in-force initiatives, and a general bombardment of external forces attempting to garner a “bigger slice of the pie,” trust has become “vital for the maintenance of cooperation in society and necessary as grounds for even the most routine, everyday interactions” (Zucker, 1986, p.56). Indeed, scholars have identified the effect that trust has on organizational control and cooperation at both the interpersonal (Granovetter, 1985) and institutional levels (Shapiro, 1987; Zucker, 1986). In the 1990s, where the concept of vulnerability has oftentimes been cast with the profane, “there is no single variable which so thoroughly influences interpersonal and group behavior as does trust” (Golembiewski & McConkie, 1975, p.31).

Trust is an important, yet complex aspect of organizational life. Although the formal study of trust spans over forty years, there is still much debate among scholars as to a concise and uniform definition of trust and no universally accepted conceptualization is recognized. One of the continuing difficulties of assessing trust constitutively is that the concept is relational and is viewed within the context of the relationship where it occurs. Exploring trust from a contextual viewpoint poses a further dilemma for those wishing to study the construct insofar as when relationships change, so does the nature of trust within those relationships. Nevertheless, several theories of trust development have emerged to provide an empirical basis from which to study the construct. A review of some of the important historical and theoretical foundations of trust research follows, beginning with some of the early foundations of trust exploration in the 1950s and 1960s.

Historical and Theoretical Underpinnings of Trust

The initial investigation of trust began following World War II as a response by the scientific community to the call for a resolution of international tensions created by the Cold War and the accompanying nuclear arms race (Deutsch, 1958). The Office of Naval Research funded the first attempt to experimentally explore the subject of trust, which had hitherto been relatively neglected as a topic of scholarly inquiry.

Behavioral Decision Theory

Deutsch (1958), pursuing a theoretical approach to understanding trust among unfamiliar actors, proposed a framework that focused on immediate situational factors in the context of laboratory-based game settings. Targeting the study of trust and suspicion, Deutsch posited that “trusting” is basically a function of processes involved in making rational decisions (Axelrod, 1984; Deutsch, 1958, 1960; Deutsch & Krauss, 1960; Loomis, 1959; Matthews, Kordonski, & Shimoff, 1983) and is relatively independent from personality variables. Accordingly, Deutsch (1958) posited that “an individual may be said to have trust in the occurrence of an event if he expects its occurrence and his expectation leads to behavior which he perceives to have greater negative motivational consequences if the expectation is not confirmed than positive motivational consequences if it is confirmed” (p. 266). Subsequently, Deutsch investigated the impact of cooperative, individualistic, and competitive motivational orientations upon the development of mutual trust in a two-person mixed-motive (non-zero-sum) game. A mixed motive game is a contest where a variety of alternating player decisions can influence cooperation or competition. Personality traits and response reactions can affect player decisions.

In describing the game, Schlenker, Helm, & Tedschi (1973) posit that,

If both players cooperate, they both win a moderate amount; while if they both compete, they both lose a moderate amount. If one player cooperates while the other competes, the competitor gains his largest amount while the cooperator loses his largest amount. (p. 412)

The critical psychological underpinning of the exercise is that in order for each participant to maximize their respective gains without suffering a loss (prompted by their opponent in retaliation for an exploitive move), eventual cooperation must occur. In essence, trust is operationalized in terms of cooperative and competitive behavior exhibited respectively by the game participants. Experimental simulations such as these are often cited as variations of Luce and Raffia's (1957) prisoner's dilemma (PD) game. In the PD simulation, two players are identified as suspects who have been taken into police custody and separated. Lacking the evidence to convict the two prisoners at trial, the district attorney presents the prisoners with two alternatives—to admit to the crime or refuse to confess. Each of the prisoners is confronted with a dilemma. If neither of them admits guilt, the district attorney will book them both on a minor charge. If both of them confess, they will be prosecuted, but the district attorney will recommend reduced sentences. However, if one confesses and the other does not, the confessor is assured of leniency while the other prisoner will receive the maximum sentence—hence, the prisoner's dilemma.

Rather than dealing with legal measures, Deutsch (1958, 1960a) employed a mixed-motive model involving monetary gain or loss. Game research was conducted on the basis of either one round or ten round occurrences. Cooperation on the part of both participants resulted in each subject receiving \$9, while each lost \$9 if mutually

uncooperative actions were undertaken. Furthermore, if one player made a cooperative move and the other subject did not, the uncooperative participant would gain \$10 and the cooperative subject would lose \$10. Hence, Deutsch maintained that “trusting” participants would engage in cooperative choices even at the risk of being vulnerable to their opponents actions, while players who took advantage of a participant’s cooperative behavior for self-benefit would be deemed untrustworthy.

In order to ascertain the effects of cooperative, individualistic, and competitive motivations on trust, Deutsch introduced several situational variables into the mixed-motive scenario. Using three distinctly different sets of messages, participants were encouraged to adopt different motivational orientations toward their partners. Players directed toward the cooperative orientation were led to believe that the other players held similar beliefs and that the common welfare of each participant was to be of paramount concern. Those players sharing the individualistic concern were informed that each person was looking out for their own welfare and that all participants shared this philosophy. The competitively-oriented group was led to believe that the activity would be based on a “dog-eat-dog” format whereby each player was dedicated to maximizing his or her gains at the expense of the others.

Deutsch (1958, 1960a) found that those participants ascribing to a cooperative motivation made cooperative choices that resulted in mutual gain, whereas those purporting a competitive orientation consistently selected options that were non-cooperative and resulted in mutual loss. The individualistic orientation produced results that were very much influenced by the conditions of the experiment. In cases where communication was possible among the participants, those players possessing

individualistic orientations tended to select cooperative choices, but when selections were made without any type of communication the individualistic participants were prone to respond competitively. Furthermore, when choices were made in sequence, those who shared an individualistic orientation tended to adopt a competitive response. In sum, a cooperative orientation tended to produce participant behaviors that were consistently trusting and trustworthy, regardless of the situational determinants associated with the game. Conversely, “even when situational facilities are encouraging, a competitive orientation will result in suspicious and/or untrustworthy behavior rather than trust and trustworthiness” (Deutsch, 1958, p. 272).

In the same study, Deutsch (1958) also noted that in an ongoing system violations of one person’s personal expectations by another is likely to occur during the course of events. These violations, if unchecked, may endanger and eventually handicap the system of cooperative interchange. In order to avoid such occurrences, Deutsch (1958) posited that each system participant must engender a method of responding to violations of his or her expectations “which is known to the other and which can serve as an inhibitor of violation” (p. 273). Thus, in order to preserve cooperation (and trust) in the system of interchange a “credible threat” serves to deter future repeated violations of personal expectations. In addition, a method of absolving violated expectations is also critical as a method of recognizing when the system has returned to a state of cooperative interchange.

The presence of a third person in relation to a two person mixed-motive scenario was also tested by Deutsch. In an attempt to determine whether two individualistically

oriented participants would exhibit greater levels of mutual trust if they were aware that they both disliked a third party, findings indicated that the introduction of a disliked third party increased the occurrence of cooperative choices. These findings also held consistent when the disliked third party was involved only as an observer and did not display intrusive or obnoxious behaviors.

Although Deutsch's (1958, 1960a) seminal work in the development of behavioral decision theory has been employed to explore relationships of varying lengths, much of the research is preoccupied with situational determinants of trust behavior where partners are strangers. Stimulated by Deutsch's early experimentalist work, research guided by prisoner's dilemma or mixed-motive games (Pruitt & Kimmel, 1977; Deutsch & Krauss, 1960) has spawned a substantial volume of empirical data (Dawes, Van de Kragt, & Orbell, 1990). Much of this research has been dedicated to assessing the feasibility of Osgood's Graduated and Reciprocal Initiatives in Tension Reduction (GRIT) proposal that was put forth as a conciliatory approach to ending Cold War tensions between the United States and the Soviet Union.

The Osgood Proposal

Seeking to present a viable alternative to the escalating spiral of international distrust and suspicion prompted by the Cold War doctrine of deterrence, Osgood (1959) argued that trust and cooperation could be fostered by one party acting unilaterally through conciliatory actions. Noting that a strategy of deterrence prompts fear, promulgates hostility, and encourages tension and stress between parties, Osgood directed his proposal at developing trust and cooperation through affective initiatives

designed to work within a conciliatory framework without sacrificing legitimate security. Although recognizing the difficulty of counteracting the cycle of distrust and competition once it has been established, Osgood proposed that conciliatory actions undertaken sequentially and unilaterally by one party, can ease the suspicion of the target in favor of increased trust in the initiator.

According to the Graduated and Reciprocated Initiatives in Tension Reduction (GRIT) proposal one party publicly announces its intentions and precisely outlines the content, schedule, and procedures relating to the conciliatory measures. This announcement is followed by an invitation to reciprocate, “but no commitment to reciprocate should be demanded from the target party” (Lindskold, 1978, p. 775). The initiatives, which must be as site verifiable as possible, should be protracted so as to evidence the objective credibility of the undertaking—even if reciprocation is lacking. Notwithstanding that reciprocity of action may not be pursued by the target, the norm of reciprocity is tacitly implied and therefore any escalatory acts initiated by the target are justifiably met with equal retaliation. Eventually, through the persistent evidence of the unilateral and conciliatory acts of the initiator, the target is persuaded to engage in trustworthy behaviors that serve to benefit the self-interest of both parties. In sum, GRIT theory (Osgood, 1959) offers a way that one party can grasp the initiative in forwarding an atmosphere of international trust and cooperation rather than being relegated to reacting to the hostile actions and suspect motives of others.

Applying Deutsch’s framework concerning the situational conditions critical to developing mutual trust, Solomon (1960) sought to ascertain how a player cast in different positions of power in a mixed-motive simulation might strategically utilize this

authority to promote cooperative behavior in another player possessing an individualistic orientation. A two person non-zero-sum game was conceived to gauge how differences in social power among partners might impact the development of interpersonal trust. One of the players was a programmed confederate and assumed a scripted role while the other player simply ascribed to the specified rules of the game. During the course of the simulation, the confederate interacted with his or her opponent in one of three ways regarding power orientations: absolute power, partial power, and equal power. The programmed participant also adopted one of three forms of game strategies in each condition of power including: conditional cooperation in which the confederate initially made a cooperative choice but thereafter parroted whatever choice the nonconfederate player made; noncooperation in which the preprogrammed player always chose the exploitive action; and unconditional cooperation in which the confederate always chose the cooperative choice regardless of the nonconfederate's selection .

Solomon's findings supported Deutsch's theory of behavioral trust. The nonscripted player was more likely to engage in trusting behavior the greater the power that he or she possessed in relation to the confederate. Participants operating under conditions of equal power tended to react to a confederate exhibiting unconditionally cooperative behavior in an exploitive manner, whereas preprogrammed participants were recipients of cooperative behavior by their opponents when they adopted a conditionally cooperative strategy. Indeed, the reaction of the nonconfederate exhibiting cooperative behavior toward the confederate who assumed a conditionally cooperative position seems to buttress Deutsch's contention that the threat of retaliation provides a means for mediating potential trust violations. Overall, Solomon (1960) found that under

circumstances where a high level of mutual interdependence was evident, a conditionally cooperative strategy was most advantageous in the transformation from an individualistic player orientation to a cooperative player orientation.

Criticisms of Game Theory

While experimentalist research has contributed greatly to the extant literature on trust, criticisms of game theory exist. Researchers have pointed to several shortcomings in employing prisoner's dilemma simulations and similar types of mixed-motive games to validate the existence of trust and trustworthiness. A number of researchers have challenged the behaviorist proposition that trust can be inferred from cooperative and competitive options exercised by participants in mixed-motive games (Rotter, 1967; Kee & Knox, 1970; Dawes, Van de Kragt, & Orbell, 1990). Rotter (1967) has also indicated that using simulations as a basis for study often fails to identify and account for the effects of personality variables on cooperative behaviors due to the atypical nature of the game situations. In addition, the findings of many two-person non-zero-sum games suggest that participants often react to the situation as a competitive exercise rather than an opportunity to gauge trust and trustworthy behavior. Indeed, these competitive reactions were found to exist even after researchers had provided instructions to the game participants stating otherwise. Critics further contend that "the prisoner's dilemma and similar games produce a relatively specific reaction, characteristic of competitive games but not of other kinds of interpersonal reactions" (Rotter, 1971, p. 444). In response to these criticisms, game theory researchers have noted that participants in PD games often manifest a variety of affective interpersonal behaviors in response to the strategies employed by their opponents (Deutsch, 1958; Solomon, 1960).

The conditional limitations imposed by the strict use of experimental studies as the sole focus of an empirical investigation has also been criticized by researchers. Rotter (1971) posited that a substantial number of conditions worthy of study are not capable of being replicated experimentally and hence go unexplored. Arguably, one of the most pronounced criticisms of mixed-motive experimental research is the possible limitation of generalizability imposed by the parameters of the groups that are involved in the study. Members of groups that have been used in PD studies have not been found to be varied to the extent where the results of the experiments could be generalized to other groups or populations. Lastly, the issue of inference looms large in questioning the validity of mixed-motive game research. Kee and Knox (1970) have challenged the meaningfulness of the incentives and rewards associated with mixed-motive games. Citing that most laboratory studies involving two-person non-zero-sum exercises provide only points or confederate money as rewards, Kee and Knox posited that certain more dynamic reactions of real-life exchange are neglected. Thus, inferences about cooperative and competitive behaviors as well as the specific inferences of these factors to trust and suspicion may be tenuous at best. As Messe and Sawyer (1966) explain,

When rewards are smaller, and their motivating ability less, other motivations more easily enter. . . . Small rewards do not make behavior unlawful, of course; they simply multiply the potential causes, making it more difficult to verify theories based upon responses to the rewards themselves (and hence more difficult to understand altogether). (p. 16)

Overall, the research of Deutsch and other experimentalist researchers has contributed to the understanding of trust behaviors between unfamiliar parties. Many of the studies conducted under mixed-motive conditions have been undertaken to further the understanding of international diplomacy and foreign relations, and have been less

preoccupied with on-going interpersonal relationships. Still, research gleaned from behavioral decision studies has provided scholars with a plethora of empirical data that focuses on determining situational variables that increase or decrease the level of trust (cooperation) or suspicion (competition) between unfamiliar actors participating in mixed-motive games (Lewis & Weigert, 1985).

Dispositional Trust Theory

In the 1960s, psychologists schooled in personality theory conceptualized trust as a psychological construct that individuals manifest in varying degrees, depending on socialization processes and personal experiences. Hence, dispositional trust researchers posit that intrinsic psychological factors manifested as a result of the individual's previous experiences predispose them to trust or distrust others. The main focus of dispositional research is dedicated to the study of individual differences or the variations in group averages over a period of time.

Central to the dispositional model is the question of how an individual's propensity to trust is developed and how this predilection affects a person's thoughts and behaviors (Rotter, 1967, 1971, 1980; Hardin, 1993). Much of the research and theorizing about the influence of dispositional factors on the development of trust was initiated by Rotter (1967, 1971, 1980). In the context of Rotter's (1967) social learning theory, the personality factor of trust is defined as a generalized trait. Rather than gauging trust as an attribute of risking vulnerability and exploitation through a person's willingness (or unwillingness) to make cooperative or competitive choices, social learning theorists maintain that trust is a belief predicated on an individual's extrapolations from previous experiences (Bigley & Pearce, 1998).

As Rotter (1980) explains,

In social learning theory expectancies in each situation are determined not only by specific experiences in that situation but also, to some varying degree, by experiences in other situations that the individual perceives as similar. One of the determinants of the relative importance of generalized expectancies, as opposed to specific expectancies, in a given situation is the amount of experience one has had in that particular situation. (p. 3)

Rotter (1967) postulated that expectancies were developed from specific histories of interactions and that these interaction histories would subsequently generalize to newer and more novel situations. Put simply, as situations become less familiar to individuals, the influence that their trusting dispositions exert over their responses grows. Thus, an individual who hails from an environment where commitment was consistently modeled would tend to place confidence in the commitments of strangers, whereas an individual who has often been exposed to high levels of commitment violation would tend to disbelieve the claims of strangers. Research conducted by Into (1969) seem to reinforce Rotter's notion of generalized expectancy. In an investigation of college students' perceptions of their parent's child-raising behaviors, Into (1969) found that modeling behaviors had the strongest effects on the subjects and the parents of high trusting subjects were more trusting to their children, were more trustworthy, trusted outsiders more, and directly taught trust and trustworthiness. Furthermore, Hardin (1993) has suggested that individuals who have adopted a distrusting predisposition tend to avoid cooperative endeavors and thus are exposed to fewer positive interactions that might serve to remediate their initial distrust levels. Through their own lack of interactive

involvement, these individuals perpetuate their distrusting predispositions and may be expected to limit their organizational participation to positions that are limited in their dependence on others.

Methodologically, dispositional trust research is based primarily on psychometric assessment techniques. The Rotter Interpersonal Trust Scale (Rotter, 1967), a paper and pencil instrument that prompts subjects to assess the trustworthiness of a number of different social groups and people, is one of the more prominent measures used in dispositional trust research. Through the use of the Interpersonal Trust Scale, a number of studies have produced findings that have served to further contribute to the study of dispositional trust. Rotter (1967, 1971, 1980), in seeking to explore various demographic characteristics and individual differences associated with trust and trusting behaviors, has found that those who claim some type of religious affiliation are more trusting than those who claim no religious affiliation, higher socioeconomic status equates with higher trust levels, and the youngest child in a family is less trusting than the oldest child or any of the middle children. His research also indicated that trust significantly correlates with trustworthiness and that high trusters were associated with greater levels of humor and popularity than low trusters. High trusters were also found to be less dependent on others than low trusters and were not found to be more gullible than those who exhibited low trust. In addition, Roberts (1967) noted that high trusters will permit a mistake or two and still trust the violator provided that the mistake is admitted and an apology is issued by the offending party. Arguably, this finding could prove important to politicians who have

lost credibility with the body politic and wish to recapture it. Other dispositional studies (Steinke, 1975; Wright & Kirmani, 1977; Rotter, 1980) have indicated that high trusters are less apt to steal, cheat, or lie than their low trusting counterparts.

Experimental and dispositional trust research has undergirded the study of trust and established the concept as a complex and multi-dimensional framework. The early work of Deutsch (1958) and Rotter (1967) has pioneered a substantial body of research concentrating on the psychological and behavioral aspects of trust development. Notwithstanding the important contributions of these behaviorist and experimentalist researchers, a third prominent approach to investigating trust between unfamiliar actors has emerged—institutional trust theory.

Institutional Trust Theory

Akin to behavioral decision theory, the institutional trust framework also targets the study of situational factors in cultivating trust among strangers. However, researchers investigating institutional trust are typically more preoccupied with the effects of organizational structures and procedures on trust development than monitoring participant choices. Institutional trust theorists recognize the difficulty involved in developing trust between unfamiliar actors in a complex and industrialized society. Since actors consistently find themselves restricted by situations where they are unable to closely scrutinize and evaluate the actions of those upon whom they may be forced to depend, certain social mechanisms serve to maintain trust. Shapiro (1987) refers to these social mechanisms such as procedural norms and choice criteria as the “guardians of trust” and maintains that “the guardians of trust offer a mix of normative prescriptions, socialization practices, institutional arrangements, structural constraints, and networking

strategies designed to maintain the integrity of agency relationships” (p. 635). In addition, Zucker (1986) has postulated that institutional provisions such as regulations, laws and professional certifications assist in the purpose of manufacturing the trust necessary to support large-scale economic systems. Employing an example, Bigley and Pearce (1998) explain that,

Rational bureaucratic organizations generate common expectations (i.e., trust) through written rules and formal hierarchy in order to support transactions within and between organizations. Thus, the bureaucratic organizational form is an example of a trust-producing mechanism for situations where the scale and scope of economic activity overwhelm interpersonal trust relations.

Institutional trust theorists claim that trust can be forwarded in large-scale and complex societies by the implementation of a commonly accepted set of principal-agent social mechanisms. Through voluntary adherence to these mechanisms, unfamiliar actors can engender trust existing in a system where trust contingent upon close monitoring of interpersonal relationships would otherwise be impractical if not impossible to achieve.

Trust Among Familiar Actors

Research on trust conducted over the last two decades has shifted from the area of unfamiliar actors to emphasize the study of organization and organization-related trust among actors who have garnered significant knowledge about one another. This domain represents the largest group of institutional trust and distrust research, and it includes relational studies conducted at many different levels of analysis. Indeed, much of the study of trust among familiar actors has focused on interpersonal relationships (Mayer et al., 1995; McAllister, 1995) and the interactions among different groups, organizations, or classes (Dodgson, 1993; Sabel, 1993). Although the majority of this research has investigated trust constructs, more recent research endeavors have also entertained the

concept of distrust (Bies & Tripp, 1996; Fein & Hilton, 1994; Kramer, 1994; Sitkin & Roth, 1993; Sitkin & Stickel, 1996). Researchers whose works have focused primarily on interpersonal relations in this area have typically conceptualized trust as a state of mind and there has been substantial consensus on this point. However, much debate exists over whether trust is the product of rational decision-making processes or is generated by emotion. The rational choice conceptualization promulgated by Gambetta (1988) and Coleman (1990) contends that trust is the product of an individual's calculative abilities. "The elements confronting the potential trustor are nothing more or less than the considerations a rational actor applies in deciding whether to place a bet" (Coleman, 1990, p. 99). In addition to those who ascribe to the rational choice model, other researchers have argued that trust is largely a manifestation of an individual's emotions (Johnson-George & Swap, 1982; Lewicki & Bunker, 1995a,b; Mayer et al., 1995; Rempel, Holmes, & Zanna, 1985; Ring, 1996).

In sum, conceptualizations of trust and models purporting trust development are extremely diverse and represent many different theoretical perspectives. The continuing application of these various approaches to the study of trust serves to further illustrate the lack of a scholarly consensus regarding the investigation of this highly complex and multidimensional phenomenon. Indeed, trust possesses "distinct cognitive, affective, behavioral, and situational manifestations which may not be co-present at any particular point in time; therefore, it is far too simplistic to ask whether an individual trusts or distrusts another person or governmental agency" (Lewis & Weigert, 1985, p. 976). Obviously, a person may trust in some situations and under some circumstances but not others. Trust is a complex construct and conceptualizing it has been difficult. Scholars

disagree as to a universal definition of trust and the term remains constitutively amorphous. Although researchers have accentuated different aspects of trust in the pursuit of their studies, there does seem to be a scholarly consensus that the concept possesses certain common elements. Thus, identifying and defining these common facets of trust may prove beneficial in further understanding the multidimensional nature of trust.

Trust: Meanings, Facets, and Bases

Identifying a common meaning of trust is like loading mercury with a pitchfork. Each time the subject is probed, evidence of the matter exists, but there is never enough accumulated to declare the task completed. Hosmer (1995), in expressing the definitional ambiguity of trust, has argued that “there appears to be a widespread agreement on the importance of trust in human conduct, but unfortunately there also appears to be an equally widespread lack of agreement on a suitable definition of the construct” (p. 380). However, just as a universal definition of trust has proven elusive, several common facets of trust have been identified in the literature.

Facets of trust

The incredible diversity in conceptualizations of trust has proven frustrating to many researchers in the field. A confusing array of definitions and analytical interpretations have contributed to the uncertainty of investigating the concept. However, Hoy and Tschannen-Moran, (1999) have constructed a definition of trust that encompasses many commonly identified facets of the construct. They assert that “trust is

one party's willingness to be vulnerable to another party based on the confidence that the latter party is (a) benevolent, (b) reliable, (c) competent, (d) honest, and (e) open" (Hoy & Tschannen-Moran, 1999, p. 189).

Vulnerability

Perhaps the most common theme consistently evident in the study of trust is that of vulnerability. When studies of trust and distrust have been conducted in the social and organizational sciences, the idea of actor vulnerability has almost always been present. Indeed, it may be argued that, in the absence of vulnerability, trust is not even necessary since the situational outcomes shared by the trusters are assumed to be unimportant (Mishra, 1996). Most studies of trust involve situations where one party in an interdependent relationship risks something legitimate with the foreknowledge that the potential for betrayal by the other party exists. Thus, "for trust to be relevant, there must be the possibility of exit, betrayal, defection" (Gambetta, 1988, p. 217). In essence, trust provides the opportunity for one party to exploit the other by taking advantage of the trusting party's willingness to risk a valued outcome on the actions of another. Granovetter (1985), in alluding to actor vulnerability, maintains that the basic essence of trust permits the opportunity for trustee malfeasance. Trust research, then, appears to be based on the general notion that actors become, in some form, vulnerable to one another as they engage in various social situations and relationships. As institutional structures become more complex, the depth and span of actors' vulnerabilities to one another may become greater and thus the concept of vulnerability may loom even larger in the study of trust.

Confidence

The connection between trust and confidence is vague in the extant literature on trust. In referencing the motives of why one actor would place their trust in another to produce some desired results, Deutsch (1960) concluded that the “individual must have confidence that the other individual has the ability and intention to produce it” (p. 125). Likewise, Cook and Wall (1980) conceptualize trust as “the extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other people” (p. 39). Are confidence and trust the same? Research conducted by a number of other authors (Coleman, 1990; Frost, Stimpson, & Maughan, 1978; Jones, James, & Bruni, 1975) has failed to clearly distinguish between the two concepts. However, Luhmann (1988) has put forth a distinction that serves to segregate trust from confidence. He argued that trust is separate from confidence in that trust requires the actor to recognize and assume risk whereas confidence does not require one to necessarily consider alternatives. Thus, one party’s uncalculated belief in the attributes of another (confidence) can influence the degree to which that party trusts the other.

Benevolence

One of the most enduring facets of trust is a sense of benevolence, “the confidence that one’s well-being or something that one cares about will be protected by the trusted party or group” (Hoy & Tschannen-Moran, 1999, p. 187). Unmitigated goodwill in a relationship between actors aids in developing an assurance that the vulnerability of one party will not be exploited by the other. Thereby, benevolent behavior on behalf of stakeholders in a relationship may serve as a catalyst in the development and growth of trust. In an on-going relationship, protracted demonstrations

of benevolence by one or both actors can assist in diffusing anxiety about unpredictable future events and thus dilute the “accepted vulnerability to another’s possible but not expected ill will” (Baier, 1986, p. 236).

Reliability

An individual’s sense of trust can be buoyed by knowing that a person, group, or organization with which they are interacting is reliable. Reliability represents the degree to which one person or party in a relationship can depend on the other to provide that which is needed. Although, to a limited degree, trust is predicated on predictability, the prospect of simply knowing how an actor will consistently react to a given situation is insufficient in terms of fully understanding trust. To be meaningful, trust must proceed beyond predictability (Deutsch, 1958). We can trust a person to be angry or upset with certain events. Likewise, we can count on someone to exhibit distracting, coercive, and authoritarian behaviors in order to achieve their goals. It is however, when these predictable actions are perceived to be detrimental to our own personal well-being that trust ebbs. Reliability extends beyond mere predictability by amalgamating predictability with benevolence. In an interdependent environment, reliability insures that when something is required from another person, that individual can be depended on to accommodate the expectation.

Competence

Past research on organizational trust suggests that competence is a key developmental element (Butler & Cantrell, 1984; Butler, 1991; Cook & Wall, 1980; Mishra, 1996; Lieberman, 1981; Kee & Knox, 1970). Without the belief that one party in a relationship possesses the competence to successfully fulfill his or her expected role,

the other party is unlikely to generate trust in that person. Competence forms a conceptual foundation that increases the likelihood that one person will react to trustworthy behavior on the part of the other. For example, an employee may well believe that a manager has the best interests of a business and its employees at heart, but persistent evidence of managerial ineptitude is unlikely to develop trust in the manager on the part of the employee. The increased use of self-managed work teams in organizations emphasizes the salience of competence in the nurturing of trust and productive cooperation in the workplace. Many organizational ventures are predicated on trust that has been conceived by organizational members demonstrating competence in a specific task domain.

Honesty

Honesty conveys straightforwardness of conduct, integrity, and probity to actors in a relationship. Straightforwardness serves to lessen the need for and costs of negotiating trust when interacting with others. Reliable information that represents the factual “bottom line” aids interpersonal actors in understanding those issues that can contribute or detract from organizational productivity. Integrity belies untrustworthiness. Organizational participants who stress integrity in their interactions with others are hard-pressed to knowingly violate a trust, pledge, or responsibility. They can be counted on to exhibit consistent behavior even under conditions of organizational turbulence and change. Probity describes a protracted history of honesty and integrity on the part of an individual. Organizational stakeholders evidence probity by making and honoring commitments. Furthermore, there is a widespread belief that future promises made by

participants will also be kept. Probity implies an adherence to high principles and ideals. Researchers and scholars consistently recognize honesty as a key aspect of trust (Butler & Cantrell, 1984; Cummings & Bromley, 1996; Hoy & Tschannen-Moran, 1999).

Openness

An atmosphere of openness contributes to trust by forwarding a realistic assessment of interpersonal and organizational achievements and problems. “Openness does not mean hostility, nor does it mean sweetness and light” (Ouchi, 1981, p. 100). When people engage in the process of openness they voluntarily share personal information with others and thereby accept a mantle of vulnerability to others (Butler & Cantrell, 1984; Mishra, 1996). Open communication initiates a relational reciprocity between partners in that the exchange of personal information by one party aids the other party in feeling confident to do the same. Hence, both actors enjoy a confidence that neither party will be exploited and consequently the possibility of trust development is enhanced. In organizational settings where openness is present, participants freely exchange thoughts and ideas and perceptions of trust are intensified.

Bases of Trust

A considerable amount of theory and research has focused on uncovering the bases of trust within organizations (Creed & Miles, 1996; Lewicki & Bunker, 1995a,b; Sheppard & Tuckinsky, 1996; Mayer et al., 1995; Zucker, 1986). There exist many factors that influence the pursuit of scholarly work on trust. In some organizational contexts strategic, calculative, or instrumental concerns dominate the investigation of trust. However, in other contexts, the consideration of trust from a relational perspective seems appropriate. Still, other research initiatives probe the multidimensional bases of trust. Whether trust is

approached from a typological, relational, situational, or dimensional perspective researchers and scholars agree that the construct is complex and possesses many different faces.

History-Based Trust

A large battery of research on trust development has indicated that one individual's perception of another's trustworthiness and his or her willingness to indulge in trusting behavior when interacting with them is a history-dependent process (Deutsch, 1958; Solomon, 1960; Pilisuk & Skolnick, 1968; Lindskold, 1978; Boon & Holmes, 1991). Kramer (1999), in alluding to history-based models, argues that "trust between two or more interdependent actors thickens or thins as a function of their cumulative interaction" (p. 575). By scrutinizing and categorizing past interactional events, decision makers are provided with information concerning the motives and intentions of others. This accrued information then provides the basis for making future judgements about whether or not the actions of others can be trusted.

History-based models stress that interactional histories provide both a basis for the early assessment of trust in a relationship and a method of updating trust-related expectations. In essence, history-based trust can be viewed as a salient form of knowledge-based or personalized trust in large-scale organizations (Lewicki & Bunker, 1995a,b; Shapiro et al., 1992). Indeed, although personalized knowledge of others can greatly contribute to foundational trust, it is oftentimes impractical to pursue such information gathering in a complex organization. Put simply, many modern organizations are so large and institutionally diverse that the repeated personal interactions necessary to

develop trust between partners is all but impossible. Thus, an individual's interactional history can substitute for direct and personalized forms of knowledge (Creed & Miles, 1996; Zucker, 1986).

Category-Based Trust

Trust that is dependent on a person's membership or involvement in a particular organization or group is referred to as category-based trust. Sometimes referenced as characteristic-based trust (Zucker, 1986), category-based trust develops among individuals that share common traits and hold membership in a common category. In essence, individuals that share membership in a commonly recognized category bestow a type of depersonalized trust on other in-group members that is solely dependent on awareness of their shared category membership. Brewer (1981) suggested that there are several reasons why membership in a specific group or organization serves to generate a grounding for this type of presumptive trust. He suggests that common membership in a specific category can act as a "rule for defining the boundaries of low-risk interpersonal trust that bypasses the need for personal knowledge and the costs of negotiating reciprocity" when interacting with other members specific to the group (p. 356). In addition, because of the effects of in-group bias, actors are likely to delegate positive attributes such as honesty, cooperativeness, and trustworthiness to other in-group members (Brewer, 1996). To investigate the effects of category-based trust on expectations and choice behaviors, Orbell et al. (1994) conducted a prisoner's dilemma experiment using gender as the shared membership category. In keeping with the assumption that social perceivers hold category-based expectancies, they discovered that both male and female judges expected greater levels of female cooperation in the

simulation than cooperation from males. However, actual rates of cooperation between males and females did not substantially differ. Thus, the expectations of the judges were based more on the gender categories than on the actual gender differences between individual subjects.

Category-based trust judgements can transmit information into an organization that inhibits organizational functioning. As organizations tend to increase in complexity and scale, the development and maintenance of trust within institutions will become more challenging. In-group uncertainty about out-group cultural, racial, and ethnic norms can induce stereotypic biases into the system thereby fueling distrust. Stereotypic biases resulting from category-based trust judgements may also threaten future levels of organizational productivity. Furthermore, category-based trust can prompt in-group members to facilitate high tolerance for in-group leniency in areas of both thought and action. Thus, exaggerated latitude is extended to in-group members in trust sensitive areas that would not normally be accorded to out-group subjects. As a result of this extension of in-group courtesy, overconfidence in the group's judgements can result in faulty organizational decisions (Janis, 1982) and inadequate assessments of group needs.

Role-Based Trust

Another type of presumptive trust found within organizations is represented by role-based trust. Like category-based trust, role-based trust illustrates a form of depersonalized trust whereby trust is extended to an individual that occupies a particular role in an organization rather than being based on specific information about the person's motives, intentions, and capabilities (Kramer, 1999).

Roles can serve as a surrogates for personalized knowledge about other members of an organization in several ways. First, specifically defined organizational roles are typically accompanied by organizational demands of strict compliance and obligatory competence by those who occupy the roles (Barber, 1983). Thus, to the extent that stakeholders in the system are convinced that the role is functional, stakeholders can adopt a kind of presumptive trust based on the knowledge of the position and the role expectations of the person occupying that position, even in the absence of personalized knowledge. Hence, role-based trust emanates from participants' common understandings of the training and socialization processes necessary for an individual to occupy a specific organizational role as well as the institutional constraints and accountability measures accompanying the position. As noted by a number of scholars (Barber, 1983; Dawes, 1994; Meyerson et al., 1996), trust developed in this type of situation is not generated by the person inhabiting the position so much as it is by the system mechanisms that prescribe and perpetuate the role-appropriate behavior of the occupant. In seeking to illustrate this process, Dawes (1994) indicates that "we trust engineers because we trust engineering and believe that engineers are trained to apply valid principles of engineering, moreover, we have evidence every day that these principles are valid when we observe airplanes flying" (p. 24). In addition to establishing presumptive trust via expectations and adherence, roles also serve to reduce uncertainty regarding the role occupant's trust-related motives and intentions. Put simply, roles lessen the perceived transaction costs associated with negotiating interactional trust. Furthermore, roles provide a means through which unilateral acts of cooperation and coordination may occur—even when other psychological prerequisites to establishing trust are absent

(Meyerson et al., 1996). However, a codicil to the proposition of role-based trust forwarding an atmosphere of unilateral cooperation and coordination in organizations is warranted. Role-based trust can also be quite fragile when utilized in organizational environments that are undergoing crises or when unique organizational dilemmas produce a blurring of roles. (Mishra, 1996; Weick, 1993a).

Calculative Trust

Calculative trust, arguably one of the most influential facets of the concept, stems from the perspective of rational choice. The rational choice view, derived substantially from sociological (Coleman, 1990), economic (Williamson, 1993), and political (Hardin, 1993) theory, posits that the decision to trust is the product of rational and calculative processes. Such models assert that choice is encouraged by a “conscious calculation of advantages, a calculation that is in turn based on an explicit and internally consistent value system” (Schelling, 1960, p. 4). In calculative trust, situational actors assess the level of vulnerability that they are willing to assume via calculations based on the perceived costs of initiating, continuing, or terminating a relationship with another party. In large part, calculative trust is influenced by an existing and clearly defined deterrent or punishment factor that is prompted when either party breaches the trust of the other. The possibility of triggering sanctions that may prove costly for both parties in the relationship tends to provide a reinforcement for maintaining trust (Lewicki & Bunker, 1996). In sum, calculative trust involves situations where persons deliberating trust options pursue opportunities and risks in a continuously monitored domain of exchange that is predicated on rational decision-making. Indeed, as Rousseau et al. (1998) point out, calculative trust, which relies in part on the threat of sanctions, loss, or deterrence,

may even be construed by organizational participants as a form of low distrust rather than a mode of trust due to the punitive implications associated with the decision-making process.

Relational Trust

A number of scholars have indicated that an adequate theory of organizational trust must address the relational foundations of trust-related choices (Mayer et al., 1995; McAllister, 1995; Tyler & Kramer, 1996). Accordingly, it is argued that trust needs to be conceptualized as a product of both social orientation toward people and the accumulated knowledge about them. Relational trust is based on the processing of personalized information and, unlike calculative trust, is not manifested through a filter of deterrence. Through repeated examples of positive social exchange, participants generate relational trust. Information garnered over time by the truster is used to assess the trustworthiness of the trustee and the collective interactional history of both parties allows them to develop expectations that trust will be enhanced in the future. Reliability and dependability in previous interactions with the trustee develops positive expectations about the trustee's intentions. As interaction between the parties becomes more frequent and protracted, emotional attachments based upon reciprocated interpersonal concern are formed and relational trust is strengthened (Rousseau, Sitkin, Burt, & Camerer, 1998). Additionally, trust is further cultivated by repeated cycles of exchange, risk-taking, and the successful fulfillment of expectations. At this relational stage, Lewicki and Bunker (1996) suggest that trust is not necessarily damaged by inconsistent actions undertaken by one party or the other. "If people believe that they can adequately explain or understand someone else's behavior, they are willing to accept it (even if it has created costs for

them), ‘forgive’ that person, and move on in the relationship” (Lewicki & Bunker, 1996, p. 122). Even violated expectations can be weathered when high levels of relational trust exist in a relationship, especially if the participants put forth a bona fide attempt to reestablish a sense of good will and fair play in their interactions (Rousseau et al., 1998).

Deference-Based Trust

Another salient area of organizational research has explored the connection between trust and various forms of voluntary deference within hierarchical relationships. Although hierarchical relationships take on a plethora of forms, the importance of trust within these types of relationships has been consistently recognized (Arrow, 1974; Miller, 1992).

There exist a variety of reasons why trust is important to those in positions of authority. First, trust precludes the need for organizational leaders to have to continually explain and justify their actions (Tyler & Degoey, 1996a). Second, trust eliminates the cost associated with performance monitoring. Because authorities cannot formally recognize every credit and fault that exists in an organization, trust permits stakeholders to exercise their feelings of obligation toward the organization, their willingness to comply with its policies and initiatives, and their willingness to voluntarily accede to the wishes of organizational authorities. In addition, trust is important in promoting a common acceptance of conflict resolution procedures and solutions when disputes occur. Research by Tyler (1994) has indicated that people are more likely to tolerate outcomes—even unfavorable ones—when they trust an authority’s motives and intentions.

Highlighting the salience of deference-based trust, researchers have explored the circumstances and attributes under which individuals are likely to assign trustworthiness to authority figures. Pioneering early work in this area, Gabarro (1978) identified certain attributes (perceived integrity, motives, consistency, openness, discreteness, competence, and decision-making judgements) that contributed to perceived trustworthiness between vice-presidents and presidents. In a similar study, Butler (1991) discovered that perceived availability, competence, fairness, integrity, loyalty, openness, overall trust, promise fulfillment, and receptivity affected followers' judgements of a leader's trustworthiness. Likewise, Tyler and Degoe (1996a) found that trust is more important in relationships between authorities and their subordinates when some type of common bond exists in the organization. Other research (Brockner & Siegel, 1996) has indicated that organizational regulations and procedures that are perceived as structurally fair tend to increase trust, whereas those regulations and dictates that are perceived to the contrary generate low levels of trust. More recently, Brockner et al. (1997) investigated circumstances under which trust matters more and found that, all other factors being equal, trust is more important to people in situations where outcomes appear to be unfavorable. Apparently, authority trustworthiness in situations involving unfavorable outcomes warranted the attention of subordinates in that under those circumstances leader behavior is much more scrutinized and much less supported. Therefore, trustworthiness is much more critical to subordinates when both leaders and followers are in a position where support is in doubt.

Third Parties and Trust

The presence of a third party can alter perceptions of trust. Any parent realizes that interactions between siblings are different when parents are present. Students behave differently when the teacher is present in the classroom and ministers are likely to witness the best behavior that their church members have to offer in the presence of their company. Similarly, hostile nations behave differently in the presence of a large and influential United Nations General Assembly. There are times when the mediating actions of a third party can “make or break” trust. Moreover, in organizational settings one party’s trust in another may be contingent upon trust in a third party to validate and enforce an earlier agreement. Building on the assumption that institutions function on a foundation of trust, Coleman (1990), argued that one person’s trust in a second person may be conditional upon the trust in a third person. Trust in a third person may then be contingent upon trust in a fourth person to oversee the actions of the third person, and in a fifth to scrutinize the actions of the fourth, and so on. This system creates, according to Coleman (1990), a “social organization of trust” that is based largely upon contingencies and obligatory compliance under the oversight of third parties. Admittedly, Coleman recognized that a society of monitored trust would be extremely fragile and could suffer significant damage due to the failing of any person in the relationship to perform.

Third party gossip can also serve as a powerful variable in influencing trust. In a study of managers in a high-tech firm, Burt and Knez (1996) found that third parties in organizations are important conduits of trust due to their propensity to disperse trust-related information via gossip. They maintained that gossip represents a valuable source of “second-hand” knowledge about others. However, Burt and Knez found the influence

of gossip on trust options to be complex and not necessarily based on a rational evaluation of other parties' trustworthiness. Specifically, third parties often convey incomplete and biased reports regarding the trustworthiness of a prospective trustee because people possess a general tendency to tell others what they believe the listener wishes to hear. Thus, when a third party has a strong relationship with a prospective trustee, he or she will tend to disseminate gossip to the potential truster which will reinforce the trustworthiness of the trustee. Hence, third parties tend to amplify such trust. Uzzi's (1997) study of the New York apparel industry further buttresses the role that third parties play in the development and cultivation of trust. He found that third parties serve as intermediaries in new relationships by providing the opportunities for new relational partners to assume the expectations of well-established relationships through the common identity of the third party. In essence, Uzzi (1997) argued that third party go-betweens project expectations of existing relationships to newly formed ones and thereby succeed in "furnishing a basis for trust and subsequent commitment to be offered and discharged" (p. 48).

Barriers to Trust: Distrust and Suspicion, Betrayal, and Trust Rehabilitation

A number of scholars and researchers have noted that trust is easier to destroy than create (Barber, 1983; Janoff-Bulman, 1992; Meyerson et al., 1996). Indeed trust is a very fragile and delicate commodity. In organizations, cultivating trust-building relationships and curbing trust-destroying events have proven difficult. Recent research (Slovic, 1993) has unearthed several factors which may continue to exacerbate this dilemma. First, negative events tend to be more visible than positive events. Second, events that destroy trust impact judgements more than trust-building events of the same

magnitude. In addition, contemporary news events carrying bad (trust-destroying) news tend to be perceived as more credible than sources of good (trust-building) news. In general, these factors provide an uneasy backdrop for institutions seeking to develop and maintain future trust. However, researchers are beginning to study the underpinnings of organizational distrust, betrayal, and trust repair.

Distrust and Suspicion

There has been a widespread acknowledgement among organizational theorists that distrust and suspicion are pervasive problems within many organizations (Fox, 1974; PEW, 1998; Sitkin & Roth, 1993). Considerations regarding institutional trust consistently weighs on the minds of stakeholders and the issue permeates all organizational levels. Grovier (1994) has defined distrust as a “lack of confidence in the other, a concern that the other may act so as to harm one, that he does not care about one’s welfare or intends to act harmfully, or is hostile”(p.240). Suspicion has been considered an integral component of distrust (Deutsch, 1958) and has often been identified as a psychological state in which individuals actively conceptualize alternatives about the motives, behaviors, and intentions of others. Suspicion can be initiated by a variety of circumstances including situations where prior warnings about another’s insincerity or untrustworthiness has alerted the subject, the perceiver’s expectations have been violated, and when perceivers are exposed to contextual information that suggests another might have ulterior motives. Studies conducted by Fein and Hilton (1994) reinforce the proposition that suspicion evokes a psychological “red flag” in perceivers and prompts them to intensely scrutinize and evaluate the actions of others.

The categorization of individuals into specific groups may also contribute to organizational trust and suspicion. Recent ethnographic studies (Insko & Schopler, 1997) on in-group bias suggest that in-group members categorize members of out-groups as less honest, reliable, open, and trustworthy than their own group. These findings indicate that simply categorizing an individual or group may well create a climate of presumptive distrust within an organization.

In addition to investigating the antecedents of distrust and suspicion within organizations, researchers have also explored the problem of overall distrust in public and private institutions (Brown, 1994; Carnevale, 1995; Nye et al., 1997). Unfortunately, there is a plethora of evidence that suggests trust in public and private organizations is deteriorating (Carnevale, 1995; Coleman, 1990; Nye et al., 1997; PEW 1996; 1998). Unmet or violated expectations and the erosion of trust via the “suspect” behaviors of leaders acting as institutional role models have been cited as possible explanations of why trust in public institutions has declined over the last several decades. Furthermore, Cappella and Jamisen (1997) have also argued that the public’s distrust and suspicion of its institutions has been abetted by the negative manner in which the media frames the news.

Distrust and trust are elements of social interactions present in all social systems. Although there is widespread agreement that public trust in institutions has declined over the last thirty years, some scholars (Barber, 1983; March & Olson, 1994; Shapiro, 1987) have argued that distrust and wariness about public institutions may represent key aspects of a dynamic and healthy system. They maintain that by periodically evaluating the motives and intentions of institutions, people may actually assume an appropriate and

highly adaptive stance toward public organizations. In other words, distrust reduces complexity by dictating a course of action based on suspicion, monitoring, and initiation of institutional safeguards. Thus, distrust and suspicion may represent very real and powerful forms of social capital.

Betrayal

The concept of trust is very much akin to the economic principle of investing. Just as investing requires that the investor risks something of value for the purposes of greater gain, so the truster risks being exploited by the trustee for what he or she deems to be a greater relational benefit. In both situations the outcome that is desired is not predicated solely on the actions of the risk taker, but includes a certain degree of dependence on others. It is during these vulnerable times that exploitation by others can occur and trust is betrayed. In this analysis, betrayal is defined as “a voluntary violation of mutually known pivotal expectations of the truster by the trusted party (trustee), which has the potential to threaten the well-being of the truster” (Elangovan & Shapiro, 1998, p.548).

There is no single patented response to betrayal. Sometimes single violations are perceived as so severe that trust totally collapses while other incidents simply precipitate a gradual erosion of trust (Lewicki & Bunker, 1996). Regardless of whether betrayal is perceived as catastrophic in nature or is simply regarded as unnerving by the aggrieved party, trust is replaced by distrust (Burt & Knez, 1996). Thus, betrayal creates instability and upsets the recipient, who then proceeds to evaluate the circumstances from both a cognitive and emotional perspective. Cognitively, the individual analyzes the importance of the situation and assesses where the responsibility for its occurrence lies. Emotionally,

trustees often experience powerful feelings of anger, hurt, anxiety, and fear. Frequently these reactions prompt the betrayed party to engage in the process of relationship reassessment.

Although the betrayed party is being bombarded with the thoughts and emotions surrounding the violation, the victim often remains in contact with the party who violated his or her trust. This poses a sort of response dilemma for the individual whose trust has been betrayed. The recipient, depending on how the violator has responded to the reaction of the truster, is predisposed to adopt one of three positions in regards to the situation: to end the relationship, renegotiate the relationship and encourage it to evolve on a different level, or restore the relationship to its former condition. These available options are not only viewed through the previously mentioned cognitive and emotional lenses, but are also reacted to differently according to the depth and span of the trust relationship.

The organizational domain in which people interact can influence incidences of trust violation and betrayal. Research (Lewicki, 1983; Lewicki & Bunker, 1996; Neuman & Baron, 1997; Sarbin, 1994) indicates that most betrayal occurs after the trustee considers the costs and benefits of betrayal versus those of maintaining trust. However, the prevalence of certain organizational norms can encourage or discourage betrayal. Organizational systems that promote high standards of ethical behavior and forward an atmosphere of honesty, trust, integrity, and respect discourage betrayal, whereas organizational environments that evidence political infighting, cronyism, and goal incongruence spawn trust violations. In sum, although acts involving betrayal are

products of a decision-making process rather than spontaneous acts, the culture of an organization may serve as a mediating factor in a participant's choice to indulge in trust violations.

Trust Rehabilitation

Invariably, situations arise where trust is violated. Whether occurring intentionally or by chance, once betrayal is consummated it is difficult to repair. In extreme circumstances the violated party seems confused, hurt, and may even be subject to periodic fits of rage (Bies & Tripp, 1996; Govier, 1992). Can trust be salvaged? Is there any possibility of reconciliation and forgiveness in a relationship that has been damaged by betrayal? In many cases, rehabilitating trust is a long and arduous process. Trust repair is a two-way street in which both parties must determine that the benefits of trust restoration are worth the investment required in the repair process. Furthermore, each person must perceive that the benefits derived from restoring the relationship outweigh the benefits of having those needs satisfied in an alternative manner (Lewicki & Bunker, 1996). In general, the more attractive and accessible the alternatives are to the relational partners the less likely they are to undertake the process necessary for trust repair. Nevertheless, various factors emerge that mitigate the decision to abandon the relationship. The effect on children in a marriage that has suffered broken trust or the overall financial, physical, and emotional costs of leaving one job for another are examples of factors that serve to constrain the decisions of those considering alternatives to repairing the relationship.

In spite of the fact that betrayal is usually perpetrated by one party, trust repair represents a bilateral process. In repairing trust, both the violator and the victim must

engage in a significant amount of work in order to mend the damaged relationship.

According to Lewicki and Bunker (1996), each party involved in the trust restoration process has unique responsibilities. The violator must undertake a series of initiatives designed to identify, acknowledge, and assume some responsibility for the events that caused the damage to the relationship. Once the violator has recognized that trust erosion has occurred, a determination of what prompted the betrayal and how the violator perpetrated the event must be made. After the violator and victim have ascertained that the occurring event was trust-destroying, the violator must then be willing to accept responsibility for the incident. On the other hand, the victim of a trust violation engages in a similar set of steps by recognizing that a breach of trust has occurred, determining the degree that the violator was responsible, and evaluating what type of response to the situation is in his or her best interest.

The next essential step in repairing trust is for the violator to offer, or the victim to request, some sort of forgiveness designed to annul the violation and restore trust.

Lewicki and Bunker (1996) propose that there are four common alternatives for victims of broken trust to pursue:

- The victim refuses to accept any actions, terms, or conditions for reestablishing the relationship.**
- The victim acknowledges forgiveness and specifies “unreasonable acts of reparation and/or trust restoration that must be fulfilled by the violator.**
- The victim acknowledges forgiveness and indicates that no further acts of reparation are necessary.**
- The victim acknowledges forgiveness and specifies “reasonable” acts of reparation and/or trust restoration that must be fulfilled by the violator.**

By offering up a mutually negotiated set of reparation acts, the violator is perceived as making a bona fide attempt at restoring trust in the relationship. In addition, reparatory acts serve as a tacit acknowledgement that the violator is willing to incur a certain amount of personal loss in order to reestablish trust with the victim. In response, the victim exercises the option to either accept or reject the sincerity of these actions and therefore continue or discontinue the process of trust repair.

Just as the study of trust is gaining widespread attention by organizational researchers and scholars, the phenomenon of betrayal and the intricacies of trust repair are also becoming increasingly important in the study of organizational structures. Understanding the dynamic nature of trust, its developmental antecedents, and the conditions and outcomes surrounding the violation of trust in relationships continues to offer fertile ground for those interested in organizational research. A continuing awareness of trust and trust-related issues is important in further comprehending the social structures and cultural environments within organizations.

Trust and Schools

Exploring trust in schools has been challenging, not only because the issue targets two dynamic subjects, but scholarly endeavors pertaining to this area have only recently begun to emerge. However, organizational trust research has a long and varied history and may be exploited to probe the topic of trust in schools. The connection of organizational trust to institutional processes such as climate, communication, collaboration, and effectiveness is the focus of the following section.

Trust and Climate

Climate and trust are both salient aspects of schools. Certain types of school climate can precipitate trust while others cloister its development. In school climates where openness is prominent, trust is buttressed (Hoy, Hoffman, Sabo, & Bliss, 1996; Tarter, Bliss, & Hoy, 1989). Research conducted in secondary schools (Tarter, Bliss, & Hoy, 1989) and middle schools (Tarter, Sabo, & Hoy, 1995) also links openness of school climate and faculty trust (Hoffman, Sabo, Bliss, & Hoy, 1994). Furthermore, Hoy, Sabo, & Barnes (1996) found that faculty trust in the principal and in colleagues was related to healthy interpersonal relationships. School climate and trust research has also indicated that principal behavior and the behaviors of teachers may be differentiated according to their impact on the development of school trust. Supportive behavior on the part of the principal influenced the degree of trust that the faculty evidenced in the principal whereas collegial and engaged teacher behavior tended to manifest trust in colleagues (Hoy, Tarter, & Witkoskie, 1992; Tarter, Bliss, & Hoy, 1989; Tarter, Sabo, & Hoy, 1995; Tschannen-Moran & Hoy, 1998).

Communication and Trust

A critical component of education is understanding and the essence of understanding is promoted by communication. In order to forward a greater degree of open communication within an organization, trust must be established. Individuals who honestly and openly share information about organizational problems and processes are likely to possess high levels of trust. Similarly, people who trust also express their thoughts, feelings, and ideas easily (Zand, 1971). Conversely, those who lack trust are inclined to impede effective organizational communication. When dealing with a

distrusted person, the transmission of accurate and reliable information that might otherwise prove beneficial to the organization is restricted. Under these circumstances communication by both parties is reduced and anxiety levels rise. The participants often engage in “defensive” posturing by delineating only those issues that insure the protection of one’s self interest (Bartolme, 1989, Mellinger, 1956).

A number of research studies confirm that trust is indeed influenced by both the quantity and quality of communication in a relationship. Using a series of mixed-motive games, Deutsch (1958) found that increased levels of accurate communication between participants developed mutual trust. Likewise, Loomis (1959) noted that as communication among players in a mixed-motive simulation increased so did the perceived level of trust between the participants. When Schlenker, Helm, and Tedeschi (1973) manipulated the accuracy of information in a prisoner’s dilemma game, participants tended to select competitive or cooperative choices based on their perceptions of the trust in the relationship. Patterns of communication are also affected by trust that spans different levels of an organizational hierarchy. In a study of superiors and subordinates, Roberts and O’Rielly (1974) found that high levels of subordinate trust in superiors produced high levels of confidence in the accuracy of their superior’s communications as well as a desire for further interaction with the superior. When low levels of trust existed between the parties, subordinates expressed a strong inclination to withhold information.

High trust environments are characterized by open communication and the transfer of reliable and accurate information. Regardless of position or rank, school

stakeholders serve to benefit from a consistent flow of honest and accurate information between concerned parties. The complementarity of trust and communication can indeed promote greater school effectiveness and further enhance the educational process.

Trust and Collaboration

Researchers and practitioners posit that involvement in making decisions contributes to organizational effectiveness. Collaboration can improve a group's effectiveness both by enhancing the quality of its problem-solving and the commitment to implementing its decisions. The efficient and orderly operation of schools is particularly tied to collaboration. Schools function as organizations where teachers face complex issues with a variety of sub-tasks that involve a continuously coordinated effort on the part of the staff (Schmuck, 1972). Collaboration between school personnel in addressing these recurring issues can prove to be extremely beneficial to overall school effectiveness.

Ample evidence of the desirability of involving subordinates in business and educational decision-making exists. (Alluto & Belasco, 1973; Hoy, Newland, & Blazovsky, 1977; Mohrman, Cook, & Mohrman, 1978; Vroom, 1960, 1984). However, collaborative decision making motives in schools have been challenged. Critics charge that teachers are oftentimes delegated shared decision making powers only in cases where administrators perceive no real overall system impact will be affected (Bacharach, Bauer, & Shedd, 1988; Duke, Showers, & Imber, 1980). In essence, teachers are involved in collaborative decision making primarily to buttress organizational loyalty and cultivate

decision acceptance. Thus, collaborative practices were sometimes implemented to placate teachers' calls for greater involvement in the decisions that affected their professional performance.

Recently, calls for a reevaluation of shared decision making among teachers and school administrators have emphasized trust as a critical variable. The collaborative decision making model of Hoy and Tarter (1995) is an example of a shift in the thinking of researchers toward participatory decision making. They argue that principals must trust their teachers prior to engaging in a collaborative venture so as to be completely comfortable with sharing legitimate authority. In a true spirit of reciprocity, principals cultivate a trusting response from their faculties by extending initial trust and thereby encourage bringing valuable knowledge and greater insight into the decision making process.

School Effectiveness and Trust

The ultimate measure of any organization is its effectiveness. Unfortunately, standards for effective schools are far from universal and debate regarding a list of criteria sufficient for assessing the concept continues. Nevertheless, research conducted over the last decade points to the significance of trust in influencing school effectiveness. Faculty trust in colleagues (Hoy, Tarter, & Witkoskie, 1992) as well as faculty trust in the principal (Tarter, Sabo, & Hoy, 1995) have been associated with school effectiveness. Furthermore, student achievement, which is often linked with the effective schools movement, has been found to be influenced by faculty trust (Hoy, Tarter, & Witkoskie, 1992; Goddard & Tschannen-Moran, 1999).

Organizational Trust: A Rationale

The past decade has seen a dramatic rise in both research and interest in the concept of trust within society at large as well as in schools. The salience of trust in producing and maintaining productive social relationships has become an increasingly pervasive subject in organizational effectiveness literature (Gambetta, 1988; Hoy & Kupersmith, 1985; Tartar, Sabo, & Hoy, 1995). Researchers in the field of education have also targeted the importance of trust in improving school-client relationships (Epstein, 1987; Meier, 1995; Shea & Bauer, 1985) and in further enhancing existing levels of trust between the principal and the faculty (Hoy, Tarter, & Witkoskie, 1992; Tarter, Bliss, & Hoy, 1989; Tarter, Sabo, & Hoy, 1995) and teachers and their colleagues (Hoy, Tarter, & Witkoskie, 1992; Tarter, Bliss, & Hoy, 1989; Tarter, Sabo, & Hoy, 1995). However, “the importance of trust is often acknowledged but seldom examined, and scholars tend to mention it in passing, to allude to it as a fundamental ingredient or lubricant, an unavoidable dimension of social interaction, only to move on to less intractable items” (Gambetta, 1988, p. 8).

A critical, yet largely unexamined aspect of trust in schools deals with the relationship between the school faculty and the clients they serve. Just as private businesses strive to cultivate an adequate understanding of their customers in the context of the marketplace, so too must school personnel evaluate their perceptions of critical school stakeholders. Thus, in this study, perceived faculty trust in two key school constituencies, students and parents, is explored. While many opportunities exist for examining the study of trust in schools, pursuing trust from an organizational context involving faculty perceptions of school clients focuses on an area that is becoming

increasingly important in influencing school dynamics. In a day and age where client litigation of schools and school practitioners is becoming commonplace, a further examination of trust as it relates to parents, faculty, and students is warranted. Trust cultivates cooperation while distrust subverts efficiency (Deutsch, 1958, 1960a; Dawes, Van de Kragt & Orbell, 1990). As school populations become more ethnically, cognitively, racially, and socioeconomically diverse, teachers will be asked to educate a more radically defined student population. This poses a problem, for as diversity increases so does both complexity and the potential for miscommunication and misunderstanding between school stakeholders. Increased levels of trust between faculty members and key school clients may serve to mediate these deleterious effects. Indeed, examining trust perceptions of faculty members in relation to parents and students can assist in further understanding the role that the concept plays in encouraging a more efficient and productive educational environment.

Rationale for the Hypotheses

Trust and organizational health are both important aspects of schools. Teachers whose interpersonal interactions with their colleagues are healthy embellish trust. Principals who promote healthy relationships with teachers can expect to cultivate trust. On the other hand, trust serves to encourage the development of healthy organizational dynamics. Thus, even though “the concepts of health and trust are not identical, they are complementary” (Hoy, Tarter, & Kottkamp, 1991, p. 108).

Trust is consistently identified as a critical underpinning of well-functioning organizations (Ouchi, 1981). Although it represents an intricate and multidimensional concept, trust, at its most basic level, assists in promoting organizational efficiency and

reducing routine transaction costs associated with the day to day complexities of organizations. Hence trust, as Parson's (1967) suggests, is an important factor in developing cohesiveness in the workplace. Furthermore, there is ample empirical evidence to support such developments in elementary (Hoy, Tarter, & Witkoskie, 1992), middle (Hoy & Sabo, 1998), and secondary (Tarter & Hoy, 1988) schools. Likewise, research (Hoy, Hoffman, Sabo, & Bliss, 1996; Tarter, Bliss, & Hoy, 1989; Hoffman, Sabo, Bliss, & Hoy, 1994; Hoy, Barnes & Sabo, 1996) has shown that healthy organizational climates spawn work environments where close-knit relationships and trust can flourish. In healthy schools, teachers are encouraged to openly and freely enlist in trusting relationships with colleagues who demonstrate collegial (Hoy, Tarter, & Witkoskie, 1992; Tarter, Sabo, & Hoy, 1995) and engaged behaviors (Tarter, Bliss, & Hoy, 1989). Similarly, administrators who promote supportive leadership toward teachers also engender trust in the principal (Hoy, Tarter, & Witkoskie, 1992; Tarter, Bliss, & Hoy, 1989; Tarter, Sabo, & Hoy, 1995). The extant literature is clear. Stakeholders that interact in healthy schools are encouraged by environmental conditions to trust and moreover, as trust develops, school health is reinforced. The concepts of trust and health are powerful as well as complementary. Principals who forward school health can anticipate trusting and committed teachers. Teachers who extend trust to both their colleagues and the principal can precipitate the development of healthy school relationships.

The extant literature on the reciprocal nature of trust and school health continues to grow. In particular, the research of Hoy and his colleagues (1985, 1988, 1989, 1992, 1994, 1995, 1997, 1998, 1999) has produced some interesting evidence in regards to the

relationship of both faculty and principal trust and the organizational dynamics of schools. However, the need to understand the dimensions and dynamics of faculty trust in students and parents remains relatively unexplored. The aim of the present study is to answer the need for a further exploration of faculty trust and school health in reference to students, colleagues, parents, and the principal.

Hypotheses

This study explores the relationship between trust and organizational health as they are expressed in schools. The general hypothesis of this study is that school health will be positively related to faculty trust; however, school health is viewed from the multi-dimensional perspective and so is faculty trust. Thus, the central research question is what dimensions of organizational health are the best predictors of each dimension of faculty trust? The following hypotheses delineate more specifically this question.

H₁: The elements of organizational health combine to provide a significant set of predictors of trust in colleagues.

The elements of health will form a linear combination that will explain a significant portion of the variance in faculty trust in colleagues. Although it is hypothesized that all the elements of organizational health will provide a significant set of predictors for trust in colleagues, it is likely that some aspects of health will represent better predictors than others. Teachers interacting in a friendly, cooperative, and open school environment will be more inclined to engage other teachers in ways that demonstrate a robust affinity for their job and collegial trust. Thus, morale should emerge as one of the most significant predictors of faculty trust in colleagues. Teachers working together in a highly coordinated learning environment characterized by a quest for

academic excellence can also promote a feeling of teamwork, trust, and common purpose. Therefore, academic emphasis should also be one of the better predictors of faculty trust in colleagues.

H₂: The elements of organizational health combine to provide a significant set of predictors of trust in the principal.

A linear combination of the health elements will explain a significant portion of the variance in faculty trust in the principal. School administrators represent a critical facet of school leadership. Teachers who work in a school where they feel unimpeded by the administrative hierarchy as well as encouraged and supported by the building administrator are likely to develop a more involved and trusting relationship with their principal. In addition, administrators who establish bona fide work expectations and fair work practices for their teachers also forward loyalty and trust. Therefore, principal influence, consideration, and initiating structure should emerge as the best predictors of faculty trust in the principal.

H₃: The elements of organizational health combine to provide a significant set of predictors of trust in parents.

A significant portion of the variance in trust in parents will be explained by a linear combination of these elements of health. Many parents support schools where students strive to meet high but achievable expectations and the learning environment is serious. As a result of this support, teachers trust that parents are “on their team.” Having confidence that parents are school advocates, teachers also feel more inclined to assert

their professional judgments in cases where they believe unreasonable parental demands are lodged. Hence, academic emphasis and institutional integrity will be the best predictors of faculty trust in parents.

H₄: The elements of organizational health combine to provide a significant set of predictors of trust in students.

These elements of health will form a linear combination that will explain a significant portion of the variance in faculty trust in students. Teachers appreciate students who revere academic rigor and strive to do their best. Students who work hard in the classroom and demonstrate respect for others who perform well earn the trust of faculty members. Therefore, academic emphasis will be one of the best predictors of faculty trust in students.

H₅: Faculty trust in students and faculty trust in parents represent two separate but related concepts.

Although faculty trust in students and faculty trust in parents converged into a unitary construct at the elementary school level (Hoy & Tschannen-Moran, 1999), it is problematic whether the parent-student dynamics that prompted this development exist in high schools. Relationships and identities between parents and students at the high school level are much less custodial and much more autonomous than those at the elementary level. Thus, high school teachers will distinguish between the two groups more easily than elementary teachers and henceforth separate their trust perceptions into two distinct constructs.

Conclusion

Health and trust represent important aspects of organizations. Undoubtedly, trust and organizational health are critical variables in the educational process. This chapter has reviewed both the theoretical and historical underpinnings of climate and trust. Salient operational measures designed to assess organizational climate have been discussed along with relevant research findings on organizational climate in schools. In particular, organizational health was targeted for exploration. Furthermore, various denominations of trust have been explored. Extant literature on trust in organizations has been reviewed in the context of both schools and businesses. The dynamics of trust development, cultivation, growth, and expansion within organizations have also been discussed in this chapter as well as an examination of research into the areas of breaches of trust, distrust, and trust rehabilitation. In addition, the reciprocal relationship between trust and school health was deliberated. Finally, a logical argument of how the concepts of trust and health in schools are related was presented and summarized in a statement of rationale that accompanied the proposed hypotheses of the study.

CHAPTER 3

METHODOLOGY

Introduction

In this chapter, a description of the sample, the method of data collection, and the variables employed in the study are considered. Furthermore, detailed descriptions of the operational measures are described. The chapter concludes with a brief explanation of the statistical methods that are employed to analyze the data.

Sample

Schools

The sample for the study was drawn from 98 high schools in Ohio. Although procedures were not used to ensure a random sample from a specified population of schools, care was taken to select urban, suburban, and rural schools from diverse geographic areas of the state. Only schools with 15 or more faculty members were considered candidates for the study. Schools in the sample represented the entire range of socioeconomic status. A multi-dimensional measure of socioeconomic status (SES) was obtained from the Ohio Department of Education and was employed in the study. High schools were identified through their grade configurations and size (student population). Grade span levels included grades 9-12 and grades 10-12.

Teachers

In each of the 98 high schools in the sample, a teacher sample was comprised of staff members who attended a regularly scheduled faculty meeting called by the principal. With the exception of faculty members who were involved in extracurricular duties or were absent from school, virtually the entire certificated staff of each school responded to the instrument. The sample represented a group of educators diverse in age, race, gender, experience and educational level.

Data Collection

Teachers

Data were collected from the faculty of each school at a regularly scheduled faculty meeting. The instruments were administered by a trained researcher. To the greatest extent possible, the researcher controlled the location, time, and conditions under which these surveys were administered to the teachers. Surveys were primarily administered by a researcher to faculty groups during faculty meetings taking place during the mornings before school or the afternoons after school. Two sets of questions were employed. Approximately half of the faculty, selected at random, were administered the Organizational Health Inventory and the other half were administered the Trust Survey. Distribution occurred so that the Trust Survey was alternated with the Organizational Health Inventory. Thus, teachers sitting next to one another completed different surveys. This procedure strengthened the study by establishing methodological independence between the independent and dependent variables. The role of the building administrator was to establish the time and place of the meeting and to introduce the researcher. Prior to distributing the surveys, the researcher read a statement describing the

intent of the study and asked the participants for their frank perceptions. During this time the researcher emphasized that faculty members did not need to respond to any item that made them feel uncomfortable. The teachers were also requested not to include their names on the questionnaire so as to assure anonymity and confidentiality. The administration of the instruments took approximately 20 minutes.

Variables

The dependent variables in this study were Faculty Trust in Students, Faculty Trust in Parents, Faculty Trust in Colleagues, and Faculty Trust in the Principal. The independent variables were aspects of organizational health: Institutional Integrity, Principal Influence, Consideration, Initiating Structure, Resource Support, Morale, and Academic Emphasis. The decision to explore the relationship between these referents of trust and elements of school health was based on the relationships discovered in prior research (Hoy, Hoffman, Sabo, & Bliss, 1996; Hoy, Barnes, & Sabo, 1996; Hoffman, Sabo, Bliss, & Hoy, 1994; Tarter, Bliss, & Hoy, 1989) and the need to expand the work to Ohio high schools as well as to include a full range of trust measures.

Operational Measures

In order to test the hypotheses, operational measures of school health and faculty trust were required. The Organizational Health Inventory (OHI) was developed to operationally define student-teacher, teacher-teacher, teacher-principal, and principal-superior interactions (Hoy & Feldman, 1987). Faculty perceptions of Trust in the Principal, Colleagues, and Clients (parents and students) were operationally defined by the Trust Survey (Hoy & Tschannen-Moran, 1999).

Organizational Health Inventory

Organizational health is a general phrase used to describe teachers' perceptions of their work environment. As previously noted, the bulk of the conceptual framework used in understanding the health of a school is based upon the work of Parsons, Bales, and Shils (1953). Recall that Parsons and his colleagues referred to the imperative functions of adaptation, goal attainment, integration, and latency as the four fundamental problems of all social systems if they are to survive, grow, and flourish.

The organizational health of the secondary school was measured by the Organizational Health Inventory (OHI). Conceived at Rutgers University by Hoy and Feldman (1987), the OHI was designed to reflect the uniqueness of secondary school environments. This 44-item instrument maps the organizational health of secondary schools along seven dimensions. Alpha coefficients of reliability were computed on the seven factors. The seven dimensions and their reliabilities are:

<u>Scale</u>	<u>Number of items</u>	<u>Reliabilities</u>
Institutional Integrity	7	.91
Principal Influence	5	.87
Consideration	5	.90
Initiating Structure	5	.89
Resource Support	5	.95
Morale	9	.92
Academic Emphasis	8	.93

Construct validity of the Organizational Health Inventory (OHI) was supported by several studies (Hoy, Tarter, & Kottkamp, 1991; Hoy & Sabo, 1998). The factor structure

of the construct has also remained consistent across samples. Moreover, a set of theoretically driven hypotheses have been consistently supported (Hoy, Tarter, & Kottkamp, 1991; Hoy & Sabo, 1998).

The seven dimensions of the OHI and the items measuring each dimension were selected to represent each of the fundamental needs of all social systems as well as the levels of organizational control. At the technical level, Morale and Academic Emphasis are viewed as key elements of healthy schools. Morale is the collective sense of friendliness, openness, enthusiasm, and trust among members of the teaching staff while Academic Emphasis represents the extent to which the school is driven by a quest for academic excellence. At the managerial level, Consideration, Initiating Structure, Principal Influence, and Resource Support are viewed as key leadership dimensions. Consideration is principal behavior that is genuinely collegial, friendly, open, and caring toward the faculty. Initiating Structure is principal behavior that is oriented toward both tasks and achievements through clearly articulated work expectations and performance standards. Principal Influence describes the principal's ability to influence superiors. Resource Support is the ability of the principal to obtain adequate classroom materials and supplies requested by teachers. Finally, at the institutional level the dimension of Institutional Integrity refers to the school's ability to remain independent from environmental factors which could prove to be distracting.

Teachers described faculty behaviors along a four-point Likert-type scale defined by the categories "rarely occurs," "sometimes occurs," "often occurs," or "very frequently occurs." Sample items from the Institutional Integrity scale include: "Teachers are protected from unreasonable community and parental demands," and "Teachers feel

pressure from the community” (score reversed). Items representing Principal Influence are: “The principal is able to influence the actions of superiors,” and “The principal gets what he or she asks for from superiors.” Sample items from the Consideration dimension include: “The principal is friendly and approachable,” and “The principal looks out for the personal welfare of faculty members.” Sample items from the Initiating Structure subtest include: “The principal schedules work to be done,” and “The principal lets faculty know what is expected of them.” Items representing Resource Support are: “Teachers receive necessary classroom supplies,” and “Extra materials are available if requested.” Morale is represented by such items as: “Teachers identify with the school,” and “Teachers do favors for each other.” The Academic Emphasis dimension is represented by items such as: “The school sets high standards for academic performance,” and “The learning environment is orderly and serious.” The Organizational Health Inventory is presented in Appendix A.

Trust Survey

Trust is a term that refers to an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open (Hoy & Tschannen-Moran, 1999). School trust has been previously explored from the perspective of faculty trust in the principal and faculty trust in colleagues using the Trust Scales developed by Hoy and Koppersmith (1985). Building on that effort, the conceptual formulation of trust employed in this study was expanded to include Faculty Trust in Parents and Faculty Trust in Students and is based

upon the work of Hoy and Tschannen-Moran (1999). Along with a willingness to risk, Hoy and Tschannen-Moran refer to benevolence, reliability, competence, honesty, and openness as salient facets of trust.

To investigate the construct of trust the Trust Survey was employed. Developed at The Ohio State University by Hoy and Tschannen-Moran (1999), the Trust Survey was designed to measure teachers' collective perceptions of trust in the context of school. This 34-item questionnaire measures three dimensions of faculty trust including: Trust in the Principal, Trust in Colleagues, and Trust in Clients. Alpha coefficients of reliability were computed on the three factors. The three dimensions and their reliabilities are:

<u>Scale</u>	<u>Number of items</u>	<u>Reliabilities</u>
Trust in the Principal	11	.98
Trust in Colleagues	9	.98
Trust in Clients	15	.97

These dimensions and the items measuring each subscale were selected to represent three principal referents of faculty trust. The initial conceptualization of the instrument contained four primary referents of faculty trust including: Trust in The Principal, Trust in Colleagues, Trust in Parents, and Trust in Students. However, following the initial validation test (Hoy & Tschannen-Moran, 1999) the instrument was subjected to a principal-axis factor analysis with varimax rotation and a three-factor solution emerged. Along with Trust in Colleagues and Trust in the Principal, two sets of items—Trust in Students and Trust in Parents —combined to form a single factor called Trust in Clients. Hence, the original four referent groups were reduced to three. In

addition, each of the three trust subscales contains items that measure all five facets of trust and belong to an overall conception of trust that is coherent. The factor structure for the Trust Survey was very similar to that found in the pilot study and the reliabilities for the three subscales were even higher than those found in the pilot study. In sum, the Trust Scales represent reasonably valid and reliable measures of trust at three levels.

Teachers responding to the Trust Survey described faculty behaviors along a six-point Likert-type scale ranging from “strongly agree” to “strongly disagree.” Sample items from the Trust in the Principal subscale include: “The principal in this school is competent in doing his or her job,” and “Teachers in this school can rely on the principal.” Representative items from the Trust in Colleagues dimension are: “Teachers in this school do their jobs well,” and “Even in difficult situations, teachers in this school can depend on each other.” The Trust in Clients dimension is represented by items such as: “Students in this school are reliable,” and “Teachers think most of the parents do a good job.” The items from the Trust Survey are presented in Appendix B.

Data Analysis

The focus of this study was on the aggregate—the collective faculty perceptions of trust in various salient groups and the influence of health dimensions on trust. Therefore, the unit of analysis was the school, not the individual teachers. Thus, analyses were performed on school means rather than on teachers; that is, individual responses were aggregated for each instrument at the school level.

Descriptive statistics including means, standard deviations, and range were calculated for all variables entered. Scatterplots were constructed to ensure that distributions were linear and that correlational analysis was appropriate (Guilford, 1965;

Minium, Clarke, & Coladarci, 1999). Moreover, because Likert-type scales were used, interval measures were assumed and a correlation matrix of Pearson product-moment correlation coefficients was constructed to determine whether patterns emerged among the pairs in the set of variables. For example, does the health aspect of consideration relate to faculty trust in the principal or does consideration have a significant relationship to a particular trust referent?

One of the hypotheses contained in the study deals with the issue of whether faculty trust in parents and faculty trust in students represented a unitary construct or would break up into two separate but related concepts. In the initial validation study conducted in elementary schools, Hoy & Tschannen-Moran (1999) submitted the Trust Survey to a principal-axis factor analysis with varimax rotation to test whether the items loaded strongly and as expected. Although they had mapped four initial factors, the factor structure that emerged included only three strong factors. Along with the factors of Trust in the Principal and Trust in Colleagues, Trust in Parents and Trust in Students collapsed into one factor that was called Trust in Clients. Apparently, teachers did not distinguish between trusting students and trusting parents at the elementary school level. However, relationships between parents, students, and teachers are much more complex in high schools. Faculty perceptions of trust in both parents and students at the high school level may well be different. Hence, a principal-axis factor analysis with varimax rotation was performed to examine the factor structure of teacher trust at the high school level and to determine whether Trust in Clients remained a unitary construct (as in the elementary school model) or separated into two facets. In addition, if the principal-axis factor analysis with varimax rotation performed on the Trust Survey had produced a four-factor

solution including Trust in Parents and Trust in Students, intercorrelations between these two factors would have been computed. Finally, multiple regression analysis was used to examine the relationship between the individual health variables and each referent of trust. All variables were entered using the method of simultaneous entry.

Conclusion

Schools face challenging and complex problems. Increasing institutional tensions prompted by rapidly changing social and demographic conditions highlight the importance of cultivating trust relationships in healthy schools. This study explored the salience of trust and organizational health in Ohio high schools. Descriptive statistics, principal-axis factor analysis with varimax rotation, and multiple linear regression were employed to promote a more comprehensive understanding of the proposed research.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

The data collected in this study were presented and analyzed in this chapter. First the factor structure of the trust measures was analyzed using principal-axis factor analysis with varimax rotation. Similarly, a principal-axis factor analysis with varimax rotation of the health measures was performed to assess the factor stability of the Organizational Health Inventory for high schools. Then the hypotheses guiding the study were tested, first using simple correlational techniques and then using multiple regression analysis to get a more refined picture of the relationships.

Factor Analysis of the Trust Inventory

The first phase of the data analysis was to assess the factor structure and reliability of the trust measures for use in secondary schools. Hoy and Tschannen-Moran (1999) developed the trust measures for use in elementary schools, but they were used here to study high schools. The earlier elementary research led to the identification of three separate dimensions of trust—Trust in Clients, Trust in Colleagues, and Trust in Principals. These results were surprising to Hoy and Tschannen-Moran because they had predicted four aspects of trust—Trust in Students, Trust in Colleagues, Trust in Principals, and Trust in Parents. In their sample of elementary schools, Trust in Students and Trust in Parents formed a single factor, which they labeled Trust in Clients.

Apparently teachers did not distinguish between trusting students and trusting parents at school level, teachers might separate trust in students and trust in parents; in fact, it was predicted that two separate but related aspects of trust would emerge—Trust in Students and Trust in Parents. To test the factor structure of the trust items, a principal-axis factor analysis with varimax rotation was performed on all 34 items of the trust inventory. A four-factor and a three-factor solution were performed. The three-factor solution was superior. Indeed, there were only three factors with eigenvalues greater than one. The three factors were Trust in Colleagues, Trust in the Principal, and Trust in Clients. Items measuring Trust in Students and Trust in Parents loaded on one factor, Trust in Clients. The results were nearly identical to the Hoy and Tschannen-Moran findings in elementary schools. The three trust factors explained 68% of the variance and loaded on the appropriate factor. Only one item did not load as theoretically expected. Item 51, a Trust in Parent item, did not load strongly on any of the factors including Trust in Clients. Hence, the item was deleted from the measure. The factor analysis is summarized in Table 4.1. The hypothesis that Faculty Trust in Students and Faculty Trust in Parents would represent two separate concepts was not supported; the two combined to form a single dimension of Faculty Trust in Clients.

Next the three measures of trust were computed by adding the values of the appropriate items. Trust is an organizational variable; that is, the interest was in the average degree of trust for each of the three dimensions. Alpha coefficients of reliability were computed for each of the scales. All the reliabilities were high; Trust in Clients was .94, Trust in Colleagues was .93, and Trust in Principal was .98.

Item number	Factor I Trust in Clients	Factor II Trust in Principal	Factor III Trust in Colleagues
1	.90049		
2	.89378		
3	.88942		
4	.88763		
5	.83251		
6	.83213		
7	.81634		
8	.81147		
9	.79776		
10	.72542		
11	.71494		
12	.61325		
13	.53011		
14	.29824		
15	.29600		
16		.96717	
17		.96673	
18		.93959	
19		.92317	
20		.91259	
21		.90874	
22		.88401	
23		.84468	
24		.84358	
25		.84191	
26			.84811
27			.83211
28			.78333
29			.74259
30			.73335
31			.65687
32			.63119
33			.42744
34	.15932	.21598	.10762
Eigenvalue	12.93398	7.72694	2.48951
Cumulative Variance	38.0	60.8	68.1

Table 4.1: Factor analysis of the Faculty Trust Inventory.

The intercorrelations among the trust scales were about as expected. Trust in Colleagues was related to Trust in Clients (parents and teachers) ($r=.57, p<.01$). Trust in Colleagues was related to Trust in Principal ($r=.34, p<.01$). If there was any surprise, it was that Trust in Clients was not related to Trust in the Principal ($r=.15, p>.05$). The intercorrelations among the trust scales and their reliabilities are summarized in Table 4.2.

<i>Scale</i>	Trust in Clients	Trust in Colleagues	Trust in Principal
Trust in Clients (TC)	(.94) ^a	.57*	.15
Trust in Colleagues (TCOL)		(.93) ^a	.34*
Trust in Principal (TP)			(.98) ^a

^aAlpha coefficients of reliability for the subtests are displayed in the parentheses

* $p<.01$

Table 4.2: Correlations among the Trust Scales.

Factor Analysis of the Organizational Health Inventory

The second phase of the data analysis was to examine the factor structure of the Organizational Health Inventory (OHI) and determine its stability. Hoy and Tarter (1991) report a stable structure for 78 high schools in New Jersey. The expectation was that the factor structure of the 98 high schools studied in this investigation would be essentially the same. The 44 items of their OHI were predicted to fall into the seven subtests of the instrument. That is, the items were expected to fall into the appropriate subscales:

Institutional Integrity, Initiating Structure, Consideration, Principal Influence, Resource Support, Academic Emphasis, and Morale. The average school items were subjected to a principal-axis factor analysis with varimax rotation, which called for seven factors.

A principal-axis factor analysis with varimax rotation of the health items confirmed the factor structure of the Organizational Health Inventory for this sample. Without exception, the 44 items loaded on the appropriate factors. The seven health factors explained 67.5% of the variance and each item loaded on the appropriate factor, which supported the construct validity of organizational health. The factor analysis is summarized in Table 4.3.

Moreover, the alpha coefficients of reliability were computed for each of the subtests of the OHI. All the reliabilities were high: Institutional Integrity=.88, Principal Influence=.88, Consideration=.94, Resource Support=.96, Initiating Structure=.87, Academic Emphasis=.91, and Morale=.86. Similar to the Hoy, Tarter, and Kottkamp (1991) study, most of the intercorrelations among the subtests of the OHI were not strong. The correlations and alpha coefficients are summarized in Table 4.4.

Second-order Factor Analysis of the OHI

Next, the underlying structure of the seven dimensions of the OHI was examined. Hoy and his colleagues found a single, general underlying factor of the OHI, which they called School Health. A second-order factor analysis of the subtests should reveal that all the subtests load on the first factor. Accordingly, a principal-axis factor analysis with varimax rotation was performed on the correlation matrix of the seven subtests. As expected

Item Number	Factor 1 Institutional Integrity	Factor 2 Principal Influence	Factor 3 Consideration	Factor 4 Resource Support	Factor 5 Initiating Structure	Factor 6 Academic Emphasis	Factor 7 Morale
1	.81913						
2	.76463						
3	.73982						
4	.72196						
5	.70124						
6	.53584						
7	.38976						
8		.87203					
9		.82389					
10		.77692					
11		.63724					
12		.61250					
13			.88554				
14			.82750				
15			.80996				
16			.79213				
17			.78993				
18				.89035			
19				.86300			
20				.85715			
21				.84984			
22				.79896			
23					.56787		
24					.43586		
25					.42046		
26					.40869		
27					.39874		
28						.81739	
29						.79630	
30						.77436	
31						.75955	
32						.69134	
33						.66021	
34						.58669	
35						.49634	
36							.82128
37							.78385
38							.76996
39							.68341
40							.51865
41							.49382

Table 4.3: Factor loadings of the Organizational Health Inventory.

(Continued)

Table 4.3 (Continued)

42							.48026
43							.46615
44							.23456
Eigenvalue	13.01	5.11	3.97	2.70	2.35	1.60	.95
Cumulative Variance	29.6	41.2	50.2	56.3	61.7	65.3	67.5

all the subtests loaded on the first factor and explained 45 percent of the variance; the factor loadings are as follows: Institutional Integrity (.47), Principal Influence (.46), Consideration (.76), Resource Support (.47), Initiating Structure (.78), Academic Emphasis (.58), and Morale (.61). Hence, an index of health was created by summing the seven subtest scores.

<i>Subtest</i>	II	PI	C	RS	IS	AE	M
Institutional Integrity (II)	(.88)*	.43	.41	.21	.34	.13	.22
Principal Influence (PI)		(.88)	.33	.29	.38	.12	.20
Consideration (C)			(.94)	.32	.69	.38	.41
Resource Support (RS)				(.96)	.23	.51	.23
Initiating Structure (IS)					(.87)	.13	.22
Academic Emphasis (AE)						(.91)	.54
Morale (M)							(.86)

*Alpha coefficients of reliability for the subtests are displayed in the parentheses.

Table 4.4: Correlations among the seven subtests of the Organizational Health Inventory.

Next, descriptive statistics for each variable were computed (See Table 4.5). This sample of high schools is similar to the population of high schools in Ohio in terms of school size, SES, and rural and urban schools. The average SES and rural-urban composition for the sample were almost identical to the population; the state scores for all schools are standardized with a mean of zero and a standard deviation of one. The mean school size for Ohio High Schools is 785 students, and the mean for this sample was 727.

Variable	Mean	Standard Deviation	Minimum	Maximum
Institutional Integrity	2.56	.30	1.86	3.33
Principal Influence	2.71	.38	1.68	3.42
Consideration	2.92	.40	1.61	3.67
Resource Support	2.64	.44	1.63	3.62
Initiating Structure	2.97	.30	1.94	3.52
Academic Emphasis	2.76	.26	2.21	3.37
Morale	3.01	.22	2.51	3.52
Trust in Colleagues	4.40	.36	3.37	5.13
Trust in Principal	4.50	.67	2.76	5.63
Trust in Clients	3.64	.35	2.79	5.13
SES	-.01	.91	-1.21	3.59
School Size	727	465	150	2156
Rural-Urban	-.03	.96	-2.07	2.09

Table 4.5: Descriptive statistics of research variables.

Dimensions of Organizational Health and Aspects of Faculty Trust

It was predicted that organizational health would be related to aspects of faculty trust. The first step was to correlate each aspect of trust with each health dimension, including the general health index. Scatterplots were graphed using the elements of health as the independent variables and aspects of trust as dependent variables. The results demonstrated linear relations between the variables; hence, correlational analyses were performed. As predicted, the overall index of school health was positively and significantly related to faculty trust; the healthier the school climate, the stronger the degree of Trust in Colleagues ($r=.36, p<.01$), Trust in Principal ($r=.56, p<.01$), and Trust in Clients ($r=.43, p<.01$). Next, each separate dimension of health was correlated with each aspect of faculty trust. Most of the individual elements of school health were correlated significantly with faculty trust; however, there were some exceptions. Resource Support was not related to Faculty Trust in Colleagues ($r=.10, p>.05$); Institutional Integrity was not related to Faculty Trust in Clients ($r=.09, p>.05$); and Principal Influence was not related to either Faculty Trust in Colleagues or Faculty Trust in Clients ($r=.13, p>.05$ and $r=.09, p>.05$), respectively). All the other relationships were statistically significant. These results are summarized in Table 4.6

<i>Health Variables</i>	Faculty Trust in Colleagues	Faculty Trust in Principal	Faculty Trust in Clients
Overall Health	.36**	.56**	.43**
Institutional Integrity	.21*	.30**	.09
Principal Influence	.13	.24**	.09
Consideration	.22**	.76**	.17*
Resource Support	.10	.18**	.43**
Initiating Structure	.35**	.61**	.27**
Academic Emphasis	.32**	.21*	.66**
Morale	.55**	.23*	.37**

* $p < .05$, ** $p < .01$

Table 4.6: Correlations between health dimensions and faculty trust aspects.

Demographic Characteristics and Aspects of Faculty Trust

Three demographic characteristics of the schools in this study were—socioeconomic status (SES), school size, and the degree to which schools varied along an urban-rural index—as defined by the Ohio Department of Education. SES was a composite measure of inhabitant's typical income, their overall level of college education, and their professional leanings. School size was measured as the number of students in the school, and the rural-urban index was measured as indicated by population density. The intercorrelations among the demographic variables were not strong. Not surprisingly, school size was negatively related to Faculty Trust in the Principal; the larger the school, the less the Faculty Trust in the Principal ($r = -.25$, $p < .05$).

Similarly, the greater the population density, the less the Faculty Trust in the Principal ($r = -.22$, $p < .05$). Finally, SES was positively related to Faculty Trust in Clients ($r = .20$, $p < .05$); the higher the SES, the greater the Faculty Trust in Clients. The data are summarized in Table 4.7.

Aspects of Faculty Trust	<u>Demographic Characteristics</u>		
	SES	School Size	Rural-Urban
Trust in Colleagues	-.06	-.15	-.15
Trust in Principal	-.10	-.25*	-.22*
Trust in Clients	.20*	-.15	-.18

* $p < .05$

Table 4.7: Correlations between faculty trust aspects and demographic characteristics.

Multiple Regression Analysis

Next, multiple regression analysis was used to provide a more refined picture of the school health and faculty trust relationships as well as to test the hypotheses of the study. It was hypothesized that different aspects of school health would predict different aspects of faculty trust.

First, Faculty Trust in Colleagues was regressed on all seven school health variables as well as SES and school size. Because both SES and school size are often related to school climate, they were entered simultaneously with the health variables as controls. The overall hypothesis was supported; elements of organizational health formed a linear combination that explained a significant portion of the variance in Faculty Trust

in Colleagues ($R=.58$, $p<.01$, with an adjusted R Square of .26); that is, the health variables explained 26 percent of the variance. It was expected that both Academic Emphasis and Morale would make significant independent contributions to the variance, but Morale was the only school health variable to make a significant independent contribution to Faculty Trust in Colleagues ($\beta=.48$, $p<.01$). Thus, the health dimension of Morale explains the largest portion of Faculty Trust in Colleagues variance.

Second, Faculty Trust in Principal was regressed on all seven school health variables as well as SES and school size. The overall hypothesis was supported; elements of organizational health formed a linear combination that explained a significant portion of the variance in Faculty Trust in Principal ($R=.79$, $p<.01$, with an adjusted R Square of .59); that is, the health variables explained 59 percent of the variance. It was expected that Principal Influence, Initiating Structure, and Consideration would be the strongest predictors of Faculty Trust in the Principal, but only Initiating Structure and Consideration were significant predictors. In fact, both Initiating Structure ($\beta=.31$, $p<.01$) and Consideration ($\beta=.68$, $p<.01$) made significant, independent contributions to the variance. Moreover, Consideration was by far the strongest predictor of Faculty Trust in the Principal.

Finally, Faculty Trust in Clients (parents and students) was regressed on all seven school health variables as well as SES and school size. The overall hypothesis, the relationship between school health and Faculty Trust in Clients, was supported; elements of organizational health formed a linear combination that explained a significant portion of the variance in Faculty Trust in Clients ($R=.71$, $p<.01$, with an adjusted R Square of .45); that is, the health variables explained 45 percent of the variance. It was expected

that both Institutional Integrity and Academic Emphasis would be the strongest predictors of Trust in Clients (students and parents), but only Academic Emphasis was a significant predictor of Faculty Trust in Clients ($\beta=.51$, $p<.01$). School size also made a significant contribution to the variance in Faculty Trust in Clients ($\beta=-.23$, $p<.05$); the larger the school size, the less the Faculty Trust in Clients was found. The regression data are summarized in Table 4.8.

<i>Health Dimensions</i>	Faculty Trust in Colleagues		Faculty Trust in Principal		Faculty Trust in Clients	
	r	beta	r	beta	r	beta
Institutional Integrity	.21*	.10	.30**	-.02	.09	.08
Principal Influence	.30**	-.01	.24*	.00	.09	-.06
Consideration	.22*	-.14	.76**	.68**	.17*	-.18
Resource Support	.10	-.06	.19*	.00	.43**	.17
Initiating Structure	.35**	.14	.61**	.31**	.27**	.03
Academic Emphasis	.32**	.08	.21*	-.04	.66**	.51**
Morale	.55**	.48**	.23*	-.17	.37**	.10
SES	-.06	-.02	-.10	-.02	.20*	.19
School Size	-.15	-.07	-.25*	-.02	-.15	-.23*
		R=.58 Adjusted R ² =26		R=.79 Adjusted R ² =59		R=.71 Adjusted R ² =45

* $p<.05$, ** $p<.01$

Table 4.8 Regression of aspects of faculty trust on dimensions of school health.

In brief, all but one of the hypotheses of the study were supported, and the regression analyses provided a refined picture of the school health-trust relationships. Only hypothesis number five, which posited that Faculty Trust in Students and Faculty Trust in Parents would separate into two distinct but related concepts, was not supported by the findings of this research.

CHAPTER 5

SUMMARY, DISCUSSION, AND IMPLICATIONS

The focus of this research was on school health and faculty trust. It was hypothesized that school health would be positively related to faculty trust; however, school health is viewed from the multi-dimensional perspective and so is faculty trust. Thus, the overall research question was “what dimensions of organizational health are the best predictors of each dimension of faculty trust?” In this chapter, findings of the study are summarized. Then, the results are discussed and examined in the context of the extant literature. Finally, conclusions and implications are drawn for both practitioners and researchers. The chapter concludes by suggesting further research issues and questions, and introduces avenues for future study.

Summary

1. The trust scale was found to have a stable factor structure consistent with the theoretical underpinnings of the construct developed by Hoy and Tschannen-Moran (1999).
2. Like the earlier study at the elementary school level (Hoy & Tschannen-Moran, 1999), Faculty Trust in Parents and Faculty Trust in Students formed a single, unidimensional factor, Trust in Clients.

3. **The Organizational Health Inventory (OHI) was also found to have a stable factor structure consistent with the structure first identified by Hoy, Tarter, and Kottkamp (1991) in their research. A second-order factor analysis of the dimensions of the OHI confirmed a single, general underlying factor called School Health; that is, all seven dimensions of the instrument loaded high on the health factor.**
4. **A correlational analysis of the all the dimensions of school health supported the general hypothesis of positive relationships between school health and aspects of faculty trust.**
5. **In order to get a finer picture of school health, each aspect of faculty trust was regressed on the dimensions of school health. Faculty Trust in Colleagues was best predicted by teacher Morale; that is, the higher the teacher morale, the stronger the faculty trust in colleagues.**
6. **Faculty Trust in the Principal was best predicted by Initiating Structure and Consideration; principals who were both high in initiating structure and consideration garnered greater faculty trust.**
7. **Faculty Trust in Clients was best predicted by Academic Emphasis; the stronger the academic emphasis of the school, the greater the faculty trust in clients.**
8. **Not unexpectedly, the smaller the school, the greater the faculty trust in the principal was found to be.**
9. **Socioeconomic status was related to faculty trust in clients; the higher the SES, the greater the faculty trust in clients.**

One caveat is in order. Although organizational health was used as the independent variable, the direction of causality is not clear. In fact, it is suspected that the

relationships between school health and faculty trust are reciprocal. That is, school health facilitates high faculty trust, but faculty trust also promotes school health.

Discussion

In general, the hypothesis that school health would be positively related to faculty trust was supported; each aspect of faculty trust was significantly related to the overall index of school health. However, as expected, different dimensions of health were more or less important depending on which aspect of faculty trust was the focus.

School Health and Faculty Trust in Colleagues

The results with respect to faculty trust were not wholly anticipated. Although it was hypothesized that both teacher Morale and Academic Emphasis, the two components of school health at the teacher level, would be predictors of Faculty Trust in Colleagues, only Morale made a strong, independent contribution to the explanation of Trust in Colleagues. These results are similar to earlier ones that examined school climate and faculty trust in colleagues (Hoy, Tarter, Kottkamp, 1991; Hoy, Tarter, & Witkoskie, 1992). Nevertheless, it was assumed that Academic Emphasis would be related to Faculty Trust in Colleagues, and it was ($r=.32$, $p<.01$), but it does not have an independent effect on Trust in Colleagues ($\beta=.08$, n.s.). Teacher Morale and Academic Emphasis are substantially correlated with each other ($r=.54$, $p<.01$), but controlling for the influence of each other, it is only teacher Morale that is significantly related to Faculty Trust in Colleagues. Schools in which teachers have high morale are those in which they trust each other, and it is suspected that faculty trust in colleagues promotes high morale. In fact, trust in colleagues may be an integral aspect of morale, that is, high morale does not happen without trust.

School Health and Faculty Trust in Principal

It was predicted that Initiating Structure, Consideration, and Principal Influence would be strong predictors of Faculty Trust in the Principal. It was assumed that the factors that promote principal trust were those directly related to the actions of the principals, a proposition generally supported by the literature (Hoy, Tarter, Kottkamp, 1991; Hoy, Tarter, & Witkoskie, 1992). Only Initiating Structure ($\beta=.31$, $p<.01$) and Consideration ($\beta=.68$, $p<.01$), however, made strong independent contributions to the explanation of the variance in Faculty Trust in the Principal. Dynamic principals, ones who are both considerate and initiate actions to achieve goals and solve problems, seem to garner the trust of their teachers. The finding is consistent with studies at the elementary school level (Hoy, Tarter, & Witkoskie, 1992) as well as the early Ohio State studies of leadership (Halpin, 1955; Halpin, 1966). If principals are to earn the trust of their teachers, it seems that they must be supportive and considerate as they lead teachers toward the accomplishment of the important tasks of schooling. The results suggest that the role of the principal is to develop a supportive workplace in which teachers can make mistakes and not feel the wrath of the principal (Hoy, Tarter, & Witkoskie, 1992). The conclusion seems clear; principal consideration, support, and structure work together to promote trust in the principal.

School Health and Faculty Trust in Clients

This study was the first to examine school health and faculty trust in clients. It was theorized that parents support schools where students strive to meet high but achievable expectations and the learning environment is serious, and as a result of this support, teachers trust that parents are “on their team.” The results support this argument.

Academic Emphasis had a strong, independent effect on Faculty Trust in Clients ($\beta=.51$, $p<.01$). As predicted, schools that set high standards for student achievement, have orderly learning environments, and have teachers who believe that their students will succeed are schools that have teachers who trust both students and their parents. Initially, it was also expected that schools with high Institutional Integrity would also facilitate Faculty Trust in Clients, but that was not the case. The findings suggest that such schools have no need to buffer themselves from parents because when there is a strong press for academic achievement, parents and students alike respect and trust teachers to lead them toward that end. Moreover, when parents and students trust teachers, it seems likely that teachers will trust students and parents, a hypothesis that merits further study.

Faculty Trust in Parents and Students

One of the questions about faculty trust in parents and students was whether the concept was unitary. Earlier research on elementary teachers (Hoy & Tschannen-Moran, 1999) had surprisingly found that Faculty Trust in Parents and Faculty Trust in Students formed one unitary construct, Faculty Trust in Clients. Notwithstanding that finding, it was theorized that at the high school level, teachers would differentiate their trust in students from their trust in parents. That was not the case. Faculty who trust students also trust the students' parents. Indeed, the factor analysis of high school faculty trust demonstrated one unitary concept of Faculty Trust in Clients. Thus, high school teachers did not distinguish between the parents and students more readily than elementary teachers ; their trust perceptions, like their elementary counterparts, were unified into one concept—Trust in Clients.

Faculty Trust

Trust has many meanings (Baier, 1986, Deutsch, 1958, Mishra, 1996, Rotter, 1967). The conceptual perspective employed in this study came from Hoy and Tschannen-Moran (1999), who defined faculty trust as a group's willingness to be vulnerable to another group based on the confidence that that latter group is benevolent, reliable, competent, honest, and open. Thus, faculty trust has six aspects including vulnerability. Their research at the elementary level confirmed the assumption that these six facets of trust were important aspects of each of three dimensions of trust—Faculty Trust in Colleagues, Faculty Trust in Principal, and Faculty Trust in Clients. The research with the current sample provides confirming support for that assumption.

What is common among most definitions of trust, either implicitly or explicitly, is a willingness to risk or to be vulnerable. In addition, the construct of trust used in this research emphasizes the notion that teachers who trust another group believe that the other group is concerned about their well being and will act reliably to promote their best interests. Yet there are times when good intentions are not enough. When skill is involved, it is difficult to trust another party unless the party is judged to be competent as well as honest. Finally, openness is a characteristic of trusting relationships. Individuals make themselves vulnerable by openly sharing, not withholding information.

The factor analysis of the faculty-trust data in this sample demonstrates that vulnerability, benevolence, reliability, competence, honesty, and openness are aspects of each dimension of faculty trust. Thus, if teachers and administrators are to build trust among various groups, it is important that they neglect none of these vital aspects of trust.

Organizational Health Inventory (OHI) and the Trust Scales

The data of this study offer additional support for the validity and reliability of the OHI. The factor analysis of the items of the OHI support the theoretical foundations of the instrument. Every item loaded in the theoretically appropriate dimension of school health. Moreover, the results supported the factor stability of the OHI among high schools (Hoy, Tarter, & Kottkamp, 1991). Finally, each dimension of school health was measured by a highly reliable subtest; the alpha coefficients ranged from .86 to .96. In brief, the OHI appears to be a reliable and valid measure of the organizational health of high schools.

Similarly, the factor analysis of the trust items showed a stable and predictable factor structure. The items loaded appropriately and yielded three factors, each of which was measured by a reliable scale; the reliabilities ranged from .93 to .98.

The school health and trust scales used in this study seem to be sound research tools for other researchers who are interested in studying these variables in high schools. Both faculty trust and school health are important aspects that likely affect the overall performance of schools (Hoy, Tarter, & Kottkamp, 1991; Hoy & Sabo, 1998; Hoy, Tarter, & Witkoskie, 1992; Tarter & Hoy, 1988; Goddard & Tschannen-Moran, 1999). Future studies of trust concerned with organizational effectiveness and student achievement should assess the impact of both faculty trust and school climate.

Implications

The findings of this study have implications for both practice and research. The practical implications revolve around the issues of building a climate of trust and health in schools, while the research implications are wide and varied.

Practical Implications

For administrators interested in building trusting and healthy relations, the research provides two reliable and valid diagnostic tools. The OHI is a simple descriptive questionnaire that takes less than ten minutes to complete. Teachers do not object to responding to the inventory; in fact, personal observation in all the schools led this researcher to the conclusion that they rather enjoy the opportunity to describe anonymously the interpersonal relations in their school. Teacher responses to the OHI produce seven important aspects of school life.

Administrators can use the OHI to map their own leadership style as perceived by teachers and the interpersonal interactions among teachers and between teachers and students. Subsequently, a health profile of the school can be drawn and principals and teachers can decide if the general health and climate of the school are in need of attention. For example, principals are often surprised to see that their perceptions of the school climate are quite different than those of their teachers (Hoy & Tarter, 1997a). In fact, it is not unusual for principals to describe their schools in more favorable terms than their teachers. The issue then is not who is correct, but rather why the discrepancy. If teachers perceive the school as unhealthy in interpersonal relations, it is important for principals to come to know why that is the case, and then take appropriate action. The OHI simply provides a snapshot of the school health; it does not provide an explanation. Hence, the OHI can be used a tool to identify symptoms of interpersonal problems in schools.

One useful method for improving school health is a joint effort on the part of teachers and administrators, sometimes referred to as an organizational development. An

organizational development perspective addresses both personal and institutional needs and is a planned effort to make people and schools more productive (Hanson & Lubin, 1995). It is an approach that principals can couple with the use of the OHI and the Trust Scales to recognize difficulties and assume responsibility for solutions. Teachers and the principal must both recognize the problem and want change. The instruments used in this study can be employed to identify discrepancies in perceptions between the principal and teachers, but that is only the first step in changing things. A problem-solving team must then be established, one that typically is composed of teachers. The team must take on the problem, diagnose its causes, develop an action plan, implement the plan, and assess its success (Hanson & Lubin, 1995; Hoy & Tarter, 1997a).

Labeling a problem as poor health or a lack of trust is not the same as solving it. Only the participants themselves can solve the problem; there are likely no quick fixes. The instruments at hand are merely tools; they cannot solve the problems. But they do provide a basis for examining important features of the school that may be in need of change. Armed with such knowledge, both teachers and principals should be in a position to engage in a positive strategy of change.

A healthy and trusting climate is likely a means to many other positive organizational outcomes such as student achievement, teacher satisfaction, improvement of instruction, teacher efficacy, and accurate communication. But a healthy climate with a trusting faculty is not merely a means to an end, it is an end-in-itself. People want to work in organizations imbued with trust and healthy interpersonal dynamics.

Research Implications

This study was a modest attempt to define and measure two important aspects of school life. It is a beginning, not an end. There are a host of other research questions that need to be addressed. For example, there is some preliminary evidence that certain aspects of school health are critical in promoting student achievement (Hoy & Hannum, 1997; Hoy & Sabo, 1998), but much remains to be learned. Academic emphasis seems critical in promoting higher levels of achievement, but questions remain:

- 1. What are the mechanisms that translate a high level of academic emphasis into higher levels of student performance?**
- 2. To what extent is collective efficacy related to the academic emphasis of a school?**
- 3. To what extent does a high level of academic emphasis in a school promote teacher persistence to learning goals?**
- 4. To what extent does a high level of academic emphasis in a school promote planning and overcome setbacks?**
- 5. Do schools with high academic emphasis overcome the disadvantage of low socio-economic status with respect to student achievement?**

Trust is also an important aspect of school life. Like school health, trust is an important end-in-itself, but it is also likely related to other important organizational outcomes.

- 6. To what extent is faculty trust in clients an important aspect of collaboration and cooperation with parents?**
- 7. To what extent is faculty trust in the principal related to teachers' propensity to innovate and take risks?**

8. To what extent is faculty trust in the principal related to teacher efficacy? Collective efficacy? Principal efficacy?
9. To what extent is teacher trust in colleagues related to organizational citizenship? Teacher efficacy? Collective efficacy?
10. To what extent does faculty trust in colleagues promote professionalism? Teacher motivation? Teacher leadership?

The current study focused on faculty trust, but what about principal trust, student trust, and parental trust? Since the client cannot confirm the competence of the professional, initially the most viable client response is trusting in the expertise and good will of the professional. Recall that Parsons identifies four conditions that generate trust: (1) all participants must acknowledge that action is dedicated to common values such as education; (2) the common values espoused must be “translatable into common goals,” such as educating a student; (3) each person’s expectations must position into his or her general set of solidary involvement since each person is more than a mere student or teacher; (4) trust of the participants must be reasonable in light of relevant empirical information.

In the school setting these four conditions serve to complement each other and to produce a type of trust that forwards a sense of autonomy and regulates the behavior of both the student and the teacher. When students believe that teachers are truly concerned with their education, it seems reasonable to expect they will more readily trust the teacher. A climate or culture of trust readily translates itself into common learning goals, which are embraced by teachers and students alike. Indeed academic emphasis seems to foster such a shared culture where the focus is on quality teaching and efficacious

learning. The solidarity of such a climate should bolster the teaching and learning expectations of the school and reinforce the basic nature of the trust relationships. Faculty trust and student trust, however, do not exist in a vacuum. The feedback that teachers and students get from each other either facilitates or hinders the development of the trust relationships. In other words, trust probably requires empirical verification of some kind, but such relationships in schools need to be examined systematically; hence, the following set of research questions are proposed.

11. Is there a reciprocal relationship between faculty trust and student trust? Between faculty trust and parental trust?
12. To what extent does parental trust in teachers trigger more open and healthy interpersonal relationships?
13. To what extent does faculty trust in clients promote a more humanistic pupil control orientation?
14. To what extent does student trust in teachers promote open communication between students and teacher?
15. To what extent does principal trust in teachers promote innovation? Teacher empowerment?

These are only a few of the general research questions that can be addressed using the heuristic concepts of school climate and trust. The current research was simply a beginning on the road to understanding more about the dynamic relationships between schools, administrators, teachers, parents, students, and achievement.

APPENDIX A
Organizational Health Inventory

OHI-S

DIRECTIONS: THE FOLLOWING ARE STATEMENTS ABOUT YOUR SCHOOL.
PLEASE INDICATE THE EXTENT TO WHICH EACH STATEMENT
CHARACTERIZES YOUR SCHOOL BY CIRCLING THE APPROPRIATE RESPONSE.

RO=RARELY OCCURS SO=SOMETIMES OCCURS O=OFTEN OCCURS VFO=VERY FREQUENTLY OCCURS

1. Teachers are protected from unreasonable community and parental demands..... RO SO O VFO
2. The principal gets what he or she asks for from superiors..... RO SO O VFO
3. The principal is friendly and approachable..... RO SO O VFO
4. The principal asks that faculty members follow standard rules and regulations....RO SO O VFO
5. Extra materials are available if requested.....RO SO O VFO
6. Teachers do favors for each other..... RO SO O VFO
7. The students in this school can achieve the goals that have been set for them.....RO SO O VFO
8. The school is vulnerable to outside pressures..... RO SO O VFO
9. The principal is able to influence the actions of his or her superiors..... RO SO O VFO
10. The principal treats all faculty members as his or her equal.....RO SO O VFO
11. The principal makes his or her attitudes clear to the school..... RO SO O VFO
12. Teachers are provided with adequate materials for their classrooms.....RO SO O VFO
13. Teachers in this school like each other..... RO SO O VFO
14. The school sets high standards for academic performance..... RO SO O VFO
15. Community demands are accepted even when they are not
consistent with the educational program..... RO SO O VFO
16. The principal is able to work well with the superintendent..... RO SO O VFO
17. The principal puts suggestions made by the faculty into operation.....RO SO O VFO
18. The principal lets faculty know what is expected of them..... RO SO O VFO
19. Teachers receive necessary classroom supplies..... RO SO O VFO
20. Teachers are indifferent to each other..... RO SO O VFO

21. Students respect others who get good grades.....	RO	SO	0	VFO
22. Teachers feel pressure from the community.....	RO	SO	0	VFO
23. The principal's recommendations are given serious consideration by his or her superiors.....	RO	SO	0	VFO
24. The principal is willing to make changes.....	RO	SO	0	VFO
25. The principal maintains definite standards of performance.....	RO	SO	0	VFO
26. Supplementary materials are available for classroom use.....	RO	SO	0	VFO
27. Teachers exhibit friendliness to each other.....	RO	SO	0	VFO
28. Students seek extra work so they can get good grades.....	RO	SO	0	VFO
29. Select citizen groups are influential with the board.....	RO	SO	0	VFO
30. The principal is impeded by the superiors.....	RO	SO	0	VFO
31. The principal looks out for the personal welfare of faculty members.....	RO	SO	0	VFO
32. The principal schedules the work to be done.....	RO	SO	0	VFO
33. Teachers have access to needed instructional materials.....	RO	SO	0	VFO
34. Teachers in this school are cool and aloof to each other.....	RO	SO	0	VFO
35. Teachers in this school believe that their students have the ability to achieve academically.....	RO	SO	0	VFO
36. The school is open to the whims of the public.....	RO	SO	0	VFO
37. The morale of the teachers is high.....	RO	SO	0	VFO
38. Academic achievement is recognized and acknowledged by the school.....	RO	SO	0	VFO
39. A few vocal parents can change school policy.....	RO	SO	0	VFO
40. There is a feeling of trust and confidence among the staff.....	RO	SO	0	VFO
41. Students try hard to improve on previous work.....	RO	SO	0	VFO
42. Teachers accomplish their jobs with enthusiasm.....	RO	SO	0	VFO
43. The learning environment is orderly and serious.....	RO	SO	0	VFO
44. Teachers identify with the school.....	RO	SO	0	VFO

APPENDIX B
Trust Items by Level

Faculty Trust in the Principal

1. Teachers in this school trust the principal.
2. The teachers in this school are suspicious of most of the principal's actions.
3. The teachers in this school have faith in the integrity of the principal.
4. The principal in this school typically acts with the best interests of the teachers in mind.
5. The principal of this school does not show concern for the teachers.
6. Teachers in this school can rely on the principal.
7. The principal in this school is competent in doing his or her job.
8. The principal in this school keeps his or her word.
9. The principal doesn't tell teachers what is really going on.
10. The principal openly shares personal information with teachers.

Faculty Trust in Colleagues

1. Teachers in this school trust each other.
2. Teachers in this school typically look out for each other.
3. Teachers in this school are suspicious of each other.
4. Even in difficult situations, teachers in this school can depend on each other.
5. Teachers in this school do their jobs well.
6. Teachers in this school have faith in the integrity of their colleagues.
7. When teachers in this school tell you something you can believe it.
8. Teachers in this school are open with each other.

Faculty Trust in Clients

1. Teachers in this school trust their students.
2. Teachers in this school trust the parents to support them.
3. Students in this school care about each other.
4. Students in this school are reliable.
5. Parents in this school are reliable in their commitments.
6. Students in this school can be counted on to do their work.
7. Teachers can count on parental support.
8. Teachers here believe students are competent learners.
9. Teachers think most of the parents do a good job.
10. Teachers in this school believe what students say.
11. Students in this school cheat if they have the chance.
12. Teachers can believe what parents tell them.
13. Parents of students in this school encourage good habits of schooling.
14. Teachers in this school show concern for their students.
15. Students here are secretive.
16. Teachers are guarded in what they say to parents.

APPENDIX C

The Seven Subtests of the Organizational Health Inventory

The Items that Compose the Seven Subtests of the OHI

INSTITUTIONAL LEVEL

Institutional Integrity (Alpha = .88)

Questionnaire #

*1. The school is vulnerable to outside pressures.	(C-53)
*2. Select citizens groups are influential with the board.	(C-13)
*3. A few vocal parents can change school policy.	(C-26)
*4. Teachers feel pressure from the community.	(C-39)
*5. Community demands are accepted even when they are not consistent with the educational program.	(C-64)
*6. The school is open to the demands of the public.	(C-50)
7. Teachers are protected from unreasonable community and parental demands.	(C-22)

MANAGERIAL LEVEL

Principal Influence (Alpha = .88)

Questionnaire #

8. The principal's recommendations are given serious consideration by his or her superiors.	(C-67)
9. The principal is able to work well with the superintendent.	(C-65)
10. The principal gets what he or she asks for from superiors.	(C-60)
*11. The principal is impeded by superiors.	(C-70)
12. The principal is able to influence the actions of his or her superiors.	(C-62)

Consideration (Alpha = .94)

Questionnaire #

13. The principal treats all faculty members as his or her equal.	(C-42)
14. The principal puts suggestions made by the faculty into operation.	(C-7)
15. The principal looks out for the personal welfare of faculty members.	(C-34)
16. The principal is willing to make changes.	(C-12)
17. The principal is friendly and approachable.	(C-2)

Resource Support (Alpha = .96)

Questionnaire #

18. Teachers are provided with adequate materials for their classrooms.	(C-37)
19. Extra materials are available if requested.	(C-58)
20. Supplementary materials are available for classroom use.	(C-38)
21. Teachers receive necessary classroom supplies.	(C-24)
22. Teachers have access to needed instructional materials.	(C-72)

Initiating Structure (Alpha = .87)

Questionnaire #

23. The principal asks that faculty members follow standard rules and regulations.	(C-61)
24. The principal schedules the work to be done.	(C-71)
25. The principal maintains definite standards of performance.	(C-68)
26. The principal makes his or her attitudes clear to the school.	(C-63)
27. The principal lets faculty know what is expected of them.	(C-10)

TECHNICAL LEVEL

Academic Emphasis (Alpha = .91)

Questionnaire #

28. Students respect others who get good grades.	(C-5)
29. Teachers in this school believe that their students have the ability to achieve academically.	(C-28)
30. Students try hard to improve on previous work.	(C-21)
31. The school sets high standards for academic performance.	(C-4)
32. Students extra work so they can get good grades.	(C-15)
33. Students in this school can achieve the goals that have been set for them.	(C-14)
34. Academic achievement is recognized and acknowledged by the school.	(C-30)
35. The learning environment is orderly and serious.	(C-52)

Morale (Alpha = .86)

Questionnaire #

36. Teachers in this school like each other.	(C-27)
37. There is a feeling of trust and confidence among the staff.	(C-40)
38. Teachers do favors for each other.	(C-59)

Morale Items (Continued)

Questionnaire #

39. Teachers exhibit friendliness to each other.	(C-69)
40. The morale of teachers is high.	(C-49)
41. Teachers identify with the school.	(C-57)
42. Teachers accomplish their jobs with enthusiasm.	(C-32)
*43. Teachers are indifferent to each other.	(C-66)
*44. Teachers in this school are cool and aloof to each other.	(C-73)

* Score is reversed.

APPENDIX D

The Three Subtests of the Faculty Trust Inventory

The Items that Compose the Three Subtests of the Trust Inventory

FACULTY TRUST IN CLIENTS

Trust in Client (Alpha = .94)

Questionnaire #

1. Teachers think most of the parents do a good job.	(A-24)
2. Parents of students in this school encourage good habits of schooling.	(A-11)
3. Teachers in this school trust the parents.	(A-37)
4. Students in this school are reliable.	(A-44)
5. Students in this school can be counted on to do their work.	(A-22)
6. Teachers can count on parental support.	(A-7)
7. Teachers here believe students are competent learners.	(A-46)
8. Parents in this school are reliable in their commitments.	(A-36)
9. Students in this school care about each other.	(A-23)
10. Teachers in this school trust their students.	(A-4)
11. Teachers in this school believe what parents tell them.	(A-9)
12. Teachers in this school believe what students say.	(A-3)
13. Teachers in this school show concern for their students.	(A-12)
*14. Students in this school cheat if they have the chance.	(A-10)
*15. Students here are secretive.	(A-45)

FACULTY TRUST IN THE PRINCIPAL

Trust in the Principal (Alpha = .98)

Questionnaire #

16. Teachers in this school can rely on the principal.	(A-40)
17. Teachers in this school trust the principal.	(A-20)
18. The principal in this school typically acts with the best interest of the teachers in mind.	(A-6)
19. The teachers in this school have faith in the integrity of the principal.	(A-5)
20. The principal in this school is competent in doing his or her job.	(A-41)
*21. The teachers in this school are suspicious of most of the principal's actions.	(A-31)

Trust in the Principal Items (Continued)

Questionnaire #

22. The principal openly shares information with the teachers.	(A-14)
23. The principal in this school keeps his or her word.	(A-32)
*24. The principal of this school does not show concern for the teachers.	(A-21)
*25. The principal doesn't tell teachers what is really going on.	(A-15)

FACULTY TRUST IN COLLEAGUES

Trust in Colleagues (Alpha = .93)

Questionnaire #

26. Teachers in this school trust each other.	(A-2)
27. Teachers in this school typically look out for each other.	(A-1)
28. Even in difficult situations, teachers in this school can depend on each other.	(A-8)
29. Teachers in this school are open with each other.	(A-33)
30. Teachers in this school have faith in the integrity of their colleagues.	(A-18)
*31. Teachers in this school are suspicious of each other.	(A-19)
32. When teachers in this school tell you something you can believe it.	(A-28)
33. Teachers in this school do their jobs well.	(A-27)
**34. Teachers are guarded in what they say to parents.	(A-51)

* Score is reversed.

** Item deleted.

APPENDIX E
Trust Research Instrument

Social Processes in Schools - Form A

Directions: Indicate your level of agreement with each of the following statements.

	Strongly Disagree					Strongly Agree
1. Teachers in this school typically look out for each other.	☐	☐	☐	☐	☐	☐
2. Teachers in this school trust each other.	☐	☐	☐	☐	☐	☐
3. Teachers in this school believe what students say.	☐	☐	☐	☐	☐	☐
4. Teachers in this school trust their students.	☐	☐	☐	☐	☐	☐
5. The teachers in this school have faith in the integrity of the principal.	☐	☐	☐	☐	☐	☐
6. The principal in this school typically acts with the best interests of the teachers in mind.	☐	☐	☐	☐	☐	☐
7. Teachers can count on parental support.	☐	☐	☐	☐	☐	☐
8. Even in difficult situations, teachers in this school can depend on each other.	☐	☐	☐	☐	☐	☐
9. Teachers in this school believe what parents tell them.	☐	☐	☐	☐	☐	☐
10. The students in this school cheat if they have the chance.	☐	☐	☐	☐	☐	☐
11. Parents of students in this school encourage good habits of schooling.	☐	☐	☐	☐	☐	☐
12. Teachers in this school show concern for their students.	☐	☐	☐	☐	☐	☐
13. The opportunities in this community help ensure that these students will learn.	☐	☐	☐	☐	☐	☐
14. The principal openly shares information with teachers.	☐	☐	☐	☐	☐	☐
15. The principal doesn't tell teachers what is really going on.	☐	☐	☐	☐	☐	☐
16. Teachers in this school really believe every child can learn.	☐	☐	☐	☐	☐	☐
17. Teachers here are confident they will be able to motivate their students.	☐	☐	☐	☐	☐	☐
18. Teachers in this school have faith in the integrity of their colleagues.	☐	☐	☐	☐	☐	☐
19. Teachers in this school are suspicious of each other.	☐	☐	☐	☐	☐	☐
20. Teachers in this school trust the principal.	☐	☐	☐	☐	☐	☐
21. The principal of this school does not show concern for the teachers.	☐	☐	☐	☐	☐	☐
22. Students in this school can be counted on to do their work.	☐	☐	☐	☐	☐	☐
23. Students in this school care about each other.	☐	☐	☐	☐	☐	☐
24. Teachers think most of the parents do a good job.	☐	☐	☐	☐	☐	☐
25. Students respect others who get good grades.	☐	☐	☐	☐	☐	☐
26. Students here just aren't motivated to learn.	☐	☐	☐	☐	☐	☐
27. Teachers in this school do their jobs well.	☐	☐	☐	☐	☐	☐
28. When teachers in this school tell you something you can believe it.	☐	☐	☐	☐	☐	☐
29. The learning environment here is orderly and serious.	☐	☐	☐	☐	☐	☐
30. Teachers in this school have frequent contact with parents.	☐	☐	☐	☐	☐	☐
31. The teachers in this school are suspicious of most of the principal's actions.	☐	☐	☐	☐	☐	☐
32. The principal in this school keeps his or her word.	☐	☐	☐	☐	☐	☐
33. Teachers in this school are open with each other.	☐	☐	☐	☐	☐	☐
34. Parent involvement supports learning in this school.	☐	☐	☐	☐	☐	☐
35. Teachers in this school are able to get through to difficult students.	☐	☐	☐	☐	☐	☐

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
36. Parents in this school are reliable in their commitments.					
37. Teachers in this school trust the parents.					
38. Teachers here don't have the skills needed to produce meaningful student learning.					
39. Community involvement facilitates learning in this school.					
40. Teachers in this school can rely on the principal.					
41. The principal in this school is competent in doing his or her job.					
42. If a child doesn't want to learn, then teachers here give up on him or her.					
43. These students come to school ready to learn.					
44. Students in this school are reliable.					
45. Students here are secretive.					
46. Teachers here believe students are competent learners.					
47. Home life provides so many advantages that students here are bound to learn.					
48. Learning is more difficult at this school because students are worried about their safety.					
49. Drugs and alcohol abuse in the community make learning difficult for students here.					
50. Teachers in this school do not have the skills to deal with student disciplinary problems.					
51. Teachers are guarded in what they say to parents.					
52. More and more I feel powerless in my job.					
53. No one listens to my ideas.					
54. This school is run by a few people in power and there is not much I can do about it.					
55. No matter how hard I work, it really makes little difference.					
56. No matter what I do, my students do not seem to be moving forward.					
57. I am able to get through to even the most difficult student.					
58. I am confident that I can motivate my students.					
59. I believe every child can learn.					
60. Even if a child doesn't want to learn, I never give up.					
61. I lack the skills I need to be effective with some students.					
62. My students come to school ready to learn.					
63. Home life provides so many advantages that my students are bound to learn.					
64. My students just are not motivated to learn.					
65. Learning is more difficult here because my students are worried about their safety.					
66. I do not have the skills to deal with my students' disciplinary problems.					
67. When I really try, I can get through to most difficult students.					
68. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.					
69. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.					
70. If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.					
71. If I really try hard, I can get through to even the most difficult and unmotivated students.					

APPENDIX F
Health Research Instrument

Social Processes in Schools - Form C

Directions: The following are statements about your school. Please indicate the extent to which each statement characterizes your school.

1. Teachers provide strong social support for colleagues.
2. The principal is friendly and approachable.
3. The principal explores all sides of topics and admits that other opinions exist.
4. The school sets high standards for academic performance.
5. Students respect others who get good grades.
6. Parents exert pressure to maintain high standards.
7. The principal puts suggestions made by the faculty into operation.
8. Teachers respect the professional competence of their colleagues.
9. The principal responds to pressure from parents.
10. The principal lets faculty know what is expected of them.
11. Teachers help students on their own time.
12. The principal is willing to make changes.
13. Select citizens groups are influential with the board.
14. Students in this school can achieve the goals that have been set for them.
15. Students seek extra work so they can get good grades.
16. The principal accepts questions without appearing to snub or quash the teacher.
17. The principal discusses classroom issues with teachers.
18. Teachers waste a lot of class time.
19. Teachers schedule personal appointments at times other than during the school day.
20. Teachers 'go the extra mile' with their students.
21. Students try hard to improve on previous work.
22. Teachers are protected from unreasonable community and parental demands.
23. Teachers are rarely absent.
24. Teachers receive necessary classroom supplies.
25. Teachers help and support each other.
26. A few vocal parents can change school policy.
27. Teachers in this school like each other.
28. Teachers in this school believe that their students have the ability to achieve academically.
29. The interactions between faculty members are cooperative.
30. Academic achievement is recognized and acknowledged by the school.
31. Teachers voluntarily help new teachers.
32. Teachers accomplish their jobs with enthusiasm.
33. Teachers volunteer to serve on committees.
34. The principal looks out for the personal welfare of faculty members.
35. Teachers volunteer to sponsor extra-curricular activities.
36. Teachers arrive to work and meetings on time.

	Very Frequently Occurs	Often Occurs	Sometimes Occurs	Rarely Occurs
1	☐	☐	☐	☐
2	☐	☐	☐	☐
3	☐	☐	☐	☐
4	☐	☐	☐	☐
5	☐	☐	☐	☐
6	☐	☐	☐	☐
7	☐	☐	☐	☐
8	☐	☐	☐	☐
9	☐	☐	☐	☐
10	☐	☐	☐	☐
11	☐	☐	☐	☐
12	☐	☐	☐	☐
13	☐	☐	☐	☐
14	☐	☐	☐	☐
15	☐	☐	☐	☐
16	☐	☐	☐	☐
17	☐	☐	☐	☐
18	☐	☐	☐	☐
19	☐	☐	☐	☐
20	☐	☐	☐	☐
21	☐	☐	☐	☐
22	☐	☐	☐	☐
23	☐	☐	☐	☐
24	☐	☐	☐	☐
25	☐	☐	☐	☐
26	☐	☐	☐	☐
27	☐	☐	☐	☐
28	☐	☐	☐	☐
29	☐	☐	☐	☐
30	☐	☐	☐	☐
31	☐	☐	☐	☐
32	☐	☐	☐	☐
33	☐	☐	☐	☐
34	☐	☐	☐	☐
35	☐	☐	☐	☐
36	☐	☐	☐	☐

	Very Frequently Occurs				Often Occurs				Sometimes Occurs				Rarely Occurs			
37. Teachers are provided with adequate materials for their classrooms.																
38. Supplementary materials are available for classroom use.																
39. Teachers feel pressure from the community.																
40. There is a feeling of trust and confidence among the staff.																
41. Teachers take the initiative to introduce themselves to substitutes and assist them.																
42. The principal treats all faculty members as his or her equal.																
43. Teachers begin class promptly and use class time effectively.																
44. Teachers leave immediately after school is over.																
45. Teachers give colleagues advance notice of changes in schedule or routine.																
46. Teachers are committed to helping students.																
47. Teachers in this school are knowledgeable.																
48. Parents press for school improvement.																
49. The morale of teachers is high.																
50. The school is open to the demands of the public.																
51. Teachers give an excessive amount of busy work.																
52. The learning environment is orderly and serious.																
53. The school is vulnerable to outside pressures.																
54. Teacher committees in this school work productively.																
55. Teachers in this school exercise professional judgment.																
56. Teachers make innovative suggestions to improve the overall quality of our school.																
57. Teachers identify with the school.																
58. Extra materials are available if requested.																
59. Teachers do favors for each other.																
60. The principal gets what he or she asks for from superiors.																
61. The principal asks that faculty members follow standard rules and regulations.																
62. The principal is able to influence the actions of his or her superiors.																
63. The principal makes his or her attitudes clear to the school.																
64. Community demands are accepted even when they are not consistent with the educational program.																
65. The principal is able to work well with the superintendent.																
66. Teachers are indifferent to each other.																
67. The principal's recommendations are given serious consideration by his or her superiors.																
68. The principal maintains definite standards of performance.																
69. Teachers exhibit friendliness to each other.																
70. The principal is impeded by superiors.																
71. The principal schedules the work to be done.																
72. Teachers have access to needed instructional materials.																
73. Teachers in this school are cool and aloof to each other.																

APPENDIX G
School Solicitation Script

Telephone Solicitation for Participation in the Social Processes in Schools Study

Hello, my name is _____. I am working with Dr. Wayne Hoy, the Novice Fawcett Chair in Educational Administration in the College of Education at The Ohio State University. We are conducting a large study of high schools in Ohio. This research concerns the quality of the social relationships in schools and how they are related to student achievement. The study attempts to identify factors related to well-functioning schools. It is hoped that greater understanding of the human dynamics in schools will lead to better training of future administrators and the cultivation of greater productivity in schools.

The Human Subjects Institutional Review Board at The Ohio State University has reviewed the research application and has given approval to conduct research.

The surveys take about ten minutes to complete and are administered at a regularly scheduled faculty meeting. There are three forms of the survey. Each teacher completes only one form so that we can be in and out in a total of about 15 minutes. All teachers' responses are anonymous. Data gathered about the school will be completely confidential. Data will be compiled at the school level and will be used for a statistical analysis of the relationships between the variables. We are not interested in ranking or rating individual schools. You will be sent a summary of the results of the study.

Can we include your school in our study?

If the answer is no, politely thank him or her for her time, acknowledging that schools are faced with a great many competing demands, and hang up.

If the answer is yes, schedule the data collection.

Is there a faculty meeting scheduled in the next three month that I or another researcher on this project could come and administer the surveys?

I will send you a letter of confirmation, along with a summary of the project. If you have any questions, my number will be on the letter.

Thanks for your help. We'll see you on (the date arranged).

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