The Relationship Among the Conflict Management Styles Utilized by the Elementary School Administrators, the Organizational Climate of an Elementary School, and the Pupil Control Orientation of the Elementary Teachers

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by

Karen Johnson Schilling

A Dissertation Submitted to the Faculty of the Graduate School of the College of Education of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

January
1988
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VITA

The author, Karen Johnson Schilling, is the daughter of Elmer W. Johnson and Elvie (Larson) Johnson. She was born in Ishpeming, Michigan, on January 4, 1942.

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE PAGE</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>CONTENTS OF APPENDICES</td>
<td>ix</td>
</tr>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>I. PRESENTATION OF THE PROBLEM.</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem and</td>
<td>4</td>
</tr>
<tr>
<td>Subproblems</td>
<td></td>
</tr>
<tr>
<td>Definition of the Terms</td>
<td>6</td>
</tr>
<tr>
<td>Conflict</td>
<td></td>
</tr>
<tr>
<td>Conflict Management</td>
<td></td>
</tr>
<tr>
<td>Conflict Situations</td>
<td></td>
</tr>
<tr>
<td>Conflict Handling Modes</td>
<td></td>
</tr>
<tr>
<td>Organizational Climate</td>
<td></td>
</tr>
<tr>
<td>OCDQ-RE</td>
<td></td>
</tr>
<tr>
<td>PCI Form</td>
<td></td>
</tr>
<tr>
<td>Pupil Control Ideology</td>
<td></td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>11</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>13</td>
</tr>
<tr>
<td>Underlying Theory and Assumptions</td>
<td>16</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>19</td>
</tr>
<tr>
<td>Procedures of the Study</td>
<td>21</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>21</td>
</tr>
<tr>
<td>II. REVIEW OF THE RELATED LITERATURE</td>
<td>23</td>
</tr>
<tr>
<td>Introduction</td>
<td>23</td>
</tr>
<tr>
<td>Conflict Management</td>
<td>25</td>
</tr>
<tr>
<td>Organizational Climate</td>
<td>57</td>
</tr>
<tr>
<td>Pupil Control Ideology</td>
<td>111</td>
</tr>
<tr>
<td>Summary</td>
<td>136</td>
</tr>
</tbody>
</table>
### III. DESIGN OF THE STUDY

- Restatement of the Problem .................................................. 141
- Population and Sample ......................................................... 143
- Sources of the Data .............................................................. 145
- Procedures for Collecting the Data ......................................... 145
- Description of the Data Collecting Instruments .......................... 146
- Discussion of the Basic Statistical Design Used .......................... 152
- Summary .................................................................................... 163

### IV. REPORT OF THE FINDINGS .................................................. 166

- Presentation of the Data ......................................................... 166
- Analysis of the Data ............................................................... 180

### V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .................. 186

- Restatement of the Problem ..................................................... 186
- Summary of the Procedures Used .............................................. 188
- Principle Findings and Conclusions ........................................... 189
- Recommendations for Further Study and Research ..................... 197

### REFERENCES .............................................................................. 202

### APPENDICES ............................................................................. 271
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EXPLANATION OF NOTATIONS.</td>
<td>154</td>
</tr>
<tr>
<td>2. UNIVERSE OF POSSIBLE INTERCORRELATIONS AND ATTENDANT NULL HYPOTHESES</td>
<td>155</td>
</tr>
<tr>
<td>3. COLUMNS AND ROWS FOR ANOVA INDEPENDENT SAMPLES</td>
<td>156</td>
</tr>
<tr>
<td>4. AVAILABLE INTERCORRELATIONS TO ASSESS INTERNAL VALIDITY</td>
<td>157</td>
</tr>
<tr>
<td>5. ANALYSIS OF VARIANCE AMONG INTERCORRELATIONS OF FACULTY OPENNESS, PRINCIPAL OPENNESS</td>
<td>172</td>
</tr>
<tr>
<td>6. CORRELATIONS OF FACULTY OPENNESS AND PRINCIPAL OPENNESS ACROSS MEASURES OF PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES</td>
<td>173</td>
</tr>
<tr>
<td>7. ANALYSIS OF VARIANCE AMONG INTERCORRELATIONS OF ELEMENTARY SCHOOL CLIMATES AND PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES</td>
<td>174</td>
</tr>
<tr>
<td>8. CORRELATIONS OF ELEMENTARY SCHOOL CLIMATES ACROSS MEASURES OF PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES</td>
<td>175</td>
</tr>
<tr>
<td>9. CORRELATIONS OF TEACHERS' PUPIL CONTROL IDEOLOGY ACROSS MEASURES OF PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES</td>
<td>176</td>
</tr>
<tr>
<td>10. CORRELATIONS OF TEACHERS' PUPIL CONTROL IDEOLOGY ACROSS MEASURES OF ELEMENTARY SCHOOL CLIMATES</td>
<td>176</td>
</tr>
<tr>
<td>11. INTERCORRELATIONS AMONG MEASURES OF PRINCIPALS CONFLICT MANAGEMENT STRATEGIES</td>
<td>177</td>
</tr>
<tr>
<td>12. INTERCORRELATIONS AMONG MEASURES OF ELEMENTARY SCHOOL CLIMATES</td>
<td>178</td>
</tr>
<tr>
<td>13. INTERCORRELATIONS TO ASSESS SECONDARY NULL HYPOTHESES NUMBERS 5, 6, 7, 8, AND 9</td>
<td>179</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. THE CONFLICT PROCESS AS IT RELATES TO INTERPERSONAL SITUATION</td>
<td>29</td>
</tr>
<tr>
<td>2. TYPOLOGY OF SCHOOL CLIMATES</td>
<td>75</td>
</tr>
</tbody>
</table>
## CONTENTS FOR APPENDICES

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. COPY OF CONTRACT AUTHORIZING USE OF THOMAS-KILMANN CONFLICT MODE INSTRUMENT.</td>
<td>271</td>
</tr>
<tr>
<td>B. SCORING AND INTERPRETING THE THOMAS-KILMANN CONFLICT MODE INSTRUMENT</td>
<td>274</td>
</tr>
<tr>
<td>C. THOMAS-KILMANN CONFLICT MODE PROFILE GRAPH</td>
<td>277</td>
</tr>
<tr>
<td>D. COPY OF LETTER GRANING PERMISSION TO USE OCDQ-RE</td>
<td>280</td>
</tr>
<tr>
<td>E. COPY OF OCDQ-RE INSTRUMENT</td>
<td>282</td>
</tr>
<tr>
<td>F. SCORING AND INTERPRETING THE OCDQ-RE</td>
<td>284</td>
</tr>
<tr>
<td>G. COPY OF PCI</td>
<td>291</td>
</tr>
<tr>
<td>H. COPY OF PRINCIPAL DATA SHEET</td>
<td>293</td>
</tr>
<tr>
<td>I. PERMISSION TO REPRODUCE FIGURE 1</td>
<td>295</td>
</tr>
<tr>
<td>J. PERMISSION TO REPRODUCE FIGURE 2</td>
<td>297</td>
</tr>
</tbody>
</table>
CHAPTER I

PRESENTATION OF THE PROBLEM

Introduction

Conflict is an inevitable truism of life itself. It is a natural part of human existence judgmentally being neither totally good nor totally detrimental. John Lindelow (1981, p. 275) has stated that "it is as surely a companion of life as change, death, and taxes." Present-day society, as realized by the public schools, can be expected to experience more conflict in various forms rather than less. According to studies by Rensis and Jane Likert (1976, p. 4), the need to manage such conflict will increase in importance each year. Their studies have reviewed sources of conflict intensifying as human rights become expanded in orientation and realized in expectation. In addition research in sciences and engineering are forcing the society which desires to benefit from such advances to undergo social and economic changes. These changes will inevitably be accompanied by increased tension, anxiety, and resistances resulting in conflict.

Within society and specifically the society of a school, such conflict exists on different levels and
tends to concentrate on various focal points. The school principal as administrator and leader is destined to become one of these focal points. James Lipham and James Hoeh, Jr. (1974) in studying this role have stated that all institutional roles, particularly public ones, are prone to conflict, but that none seem so fraught with conflict potential as that of the public school principal. Because of this role pervasiveness, the principal must learn to effectively manage conflict and constructively channel its potential. To do this according to Lindelow (1981, p. 275), "principals must understand conflict--what it is, where it comes from, and how it develops and dissipates, and they must possess the skills necessary to manage conflict effectively."

One of the major factors influencing the direction of conflict is that of personality. Just as the personalities of individuals interact to determine conflict manifestations so does the personality of the school itself reflect in this conflict. Andrew Halpin and Don Croft (1963, p. 1) defined the climate of an organization or school as this personality. The climate is the product of every aspect of the total organization centering on the personnel. Eugene Howard (1974, p. 12) has defined climate as "the aggregate of social and cultural conditions which influence individual behavior in the school--all the forces to
which the individual responds, which are present in the school environment." Many research studies have been completed to determine what impact the individual roles of teachers and principals have in determining this climate. Pioneer work by Halpin and Croft (1963, p. 4) concentrated on the impact of the behavior of the teacher and the principal. Their efforts resulted in the development of the Organizational Climate Description Questionnaire in which they focused their efforts on the "social interactions that occur between the teachers and the principal."

If the school climate, the cumulative effect of social factors including conflicts, does indeed influence the outcomes of the school, then understanding school climate with the goal for improvement is essential. Principals need to first gain an understanding of the cyclical and self-perpetuating nature of organizational climate. This needs to be followed with a sound understanding of the change process itself as well as the individual administrator's role and group dynamics. According to John Lindelow and Jo Ann Mazzarella (1981, p. 178), "improving a school's climate depends on understanding the norm-behavior cycle and how to intervene in it properly with behavior modification or organizational development techniques."

advocated that "another way to conceptualize the social climate of the school is in terms of dominant control patterns that teachers and principals use to control students." Work completed at Penn State University found that pupil control ideology was a salient feature of both teacher-teacher and teacher-administrator relations. Willower, Eidell, and Hoy (1973, p. 3) found in their research that "pupil control was important in both structural and normative aspects of the school culture." Their subsequent development of the PCI or Pupil Control Ideology form allowed another view of school climate and insight into school personnel relationships.

Statement of the Problem

As the field of educational administration moves toward the development of a well-defined theoretical framework, the role of the school administrator seems to be found increasingly as a common thread weaving throughout the research. It is this individual who seems to not only be instrumental in school effectiveness but is also the one person who serves to influence through management, leadership, and informational skills. Carl Welte (1978, p. 630) has defined management as the "mental and physical effort to coordinate diverse activities to achieve desired results." He saw leadership as "natural and learned
ability, skill, and personal characteristic to conduct interpersonal relations which influence people to take desired actions." A review of the research conducted reveals many areas for this leadership to be asserted; among these are the conflict management styles utilized by elementary school administrators, the pupil control orientation of the elementary teachers, and the organizational climate of an elementary school.

The major problem of this research was to determine whether any significant relationships exist among the organizational climate of an elementary school, the pupil control orientation of the elementary teachers forming the professional staff of that school, and the conflict management styles utilized by the administrator of that elementary school.

Subproblems

The subproblems of the study were:

1. To determine whether there is any relationship between the organizational climate of an elementary school and the conflict management strategies used by the elementary school administrator.

2. To determine whether there is any relationship between the six dimensions of climate of an elementary school: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, and principal restrictive, and the
administrators' use of each of the five areas of conflict management: competing, collaborating, compromising, avoiding, and accommodating.

3. To determine whether there is any relationship between the pupil control ideology of the elementary teachers and the conflict management strategies used by the school administrator.

4. To determine whether there is a relationship between the six dimensions of climate of an elementary school: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, and principal restrictive and the elementary teachers' orientation toward pupil control ranging from humanistic to custodial.

**Definition of Terms**

Terms which have specific meanings in the literature of education and educational administration are defined in this section. These definitions apply to terms as they are used throughout this report.

**Conflict**

The use of this term in this research will be limited to social disharmony between individuals or groups of individuals common to the school environment. The definition by Robbins (1974, p. 23) of conflict including all kinds of opposition or antagonistic interaction between individuals or groups of
individuals will be used in this study. The use of the term conflict will be limited to interpersonal conflict which Johns (1983, p. 414) has explained as a "process of antagonism that occurs when one person or organizational subunit frustrates the goal attainment of another." The joint occurrence of antagonism and blocked goals must be present.

Conflicts Management

This refers to the styles used by the administrator to deal either with resolving the conflict or with channeling potentially destructive conflict into constructive conflict (Lindelow, 1981, p. 283).

Constructive conflict is functional conflict which, as Robbins (1974, p. 24) stated, "supports the goals of the organization and improves performance." Robbins continued to explain that "destructive or dysfunctional conflicts hinder organizational performance and should be eradicated" (1974, p. 24).

Conflict Situations

These are situations in which the concerns of two or more people or groups appear to be incompatible (Thomas & Kilmann, 1986, p. 9). In such situations a person's behavior can be described along two basic dimensions: assertiveness and cooperativeness. Assertiveness is the extent to which the individual attempts to satisfy his or her own concerns.
Cooperativeness is the extent to which the individual attempts to satisfy the other person's concerns.

**Thomas-Kilmann Conflict MODE Instrument**

This will be used throughout the study to refer to Management of Differences Exercise instrument developed in 1977 and revised in 1986 by Ralph Kilmann and Kenneth Thomas.

**Conflict Handling Modes**

These are the specific methods which can be used in dealing with conflict. The two basic dimensions of behavior, assertiveness and cooperativeness, as defined above, can be used to define the modes: competing, collaborating, compromising, avoiding, accommodating (Thomas & Kilmann, 1986, p. 10).

**Competing** is assertive and uncooperative—an individual pursues his own concerns at the other person's expense. This is a power-oriented mode, in which one uses whatever power seems appropriate to win one's own position— one's ability to argue, one's rank, economic sanctions.

**Accommodating** is unassertive and cooperative—the opposite of competing. When accommodating, an individual neglects his own concerns to satisfy the concerns of the other person; there is an element of self-sacrifice in this mode.

**Avoiding** is unassertive and uncooperative—the individual does not immediately pursue his own concerns or those of the other person. He does not address the conflict.

**Collaborating** is both assertive and cooperative—the opposite of avoiding. Collaborating involves an attempt to work with the other person to find some solution which fully satisfies the concerns of both persons. It means digging into an issue to identify the underlying concerns of the two individuals and to find an alternative which meets both sets of concerns.
Compromising is intermediate in both assertiveness and cooperativeness. The objective is to find some expedient, mutually acceptable solution which partially satisfies both parties. It falls on a middle ground between competing and accommodating. Compromising gives up more than competing but less than accommodating. Likewise, it addresses an issue more directly than avoiding, but doesn't explore it in as much depth as collaborating.

Organizational Climate

Taguiri and Litwin (1968, p. 2) defined climate as the "set of internal characteristics that distinguishes one school from another and influences the behavior of its members." Halpin and Croft (1963, p. 1) defined climate as the organizational personality of the school.

OCDQ-RE

This will be used throughout the study to refer to The Revised Organizational Climate Description Questionnaire for Elementary Schools.

The Six Dimensions of the OCDQ-RE

Principal's Behavior

(1) Supportive behavior reflects a basic concern for teachers. The principal listens and is open to teacher suggestions. Praise is given genuinely and frequently, and criticism is handled constructively. Supportive principals respect the professional competence of their staffs and exhibit both a personal and professional interest in each teacher.

(2) Directive behavior is rigid, close supervision. Principals maintain close and constant control over all teacher and school activities, down to the smallest details.

(3) Restrictive behavior hinders rather than facilitates teacher work. The principal burdens teachers with paper work, committee requirements, routine duties, and other demands that interfere with their teaching responsibilities.
Teachers' Behavior

(4) **Collegial** behavior supports open and professional interactions among teachers. Teachers are proud of their school, enjoy working with their colleagues, and are enthusiastic, accepting, and mutually respectful of the professional competence of their colleagues.

(5) **Intimate** behavior reflects a cohesive and strong network of social support among the faculty. Teachers know each other well, are close personal friends, socialize together regularly, and provide strong support for each other.

(6) **Disengaged** behavior refers to a lack of meaning and focus to professional activities. Teachers are simply putting in time and are non-productive in group efforts or team-building; they have no common goal orientation. Their behavior is often negative and critical of their colleagues and the organization. (Hoy & Clover, 1986, p. 101)

The OCDQ-RE has two general factors: one a measure of openness of teacher interactions and the other a measure of openness of teacher-principal relations. Each is independent with a result of four patterns of climate prototypes. These terms as will be used in the study are defined as follows (Hoy & Clover, 1986, p. 107):

**Open Climate**
The distinctive features of the open climate are the cooperation and respect that exist within the faculty and between faculty and principal. The behavior of both the principal and faculty is open and authentic.

**Engaged Climate**
The engaged climate is marked by ineffective attempts of the principal to control and by high professional performance of the teachers. The teachers are productive professionals in spite of weak principal leadership; the faculty is cohesive, committed, supportive, and open.
Disengaged Climate

The disengaged climate stands in stark contrast to the engaged climate. The principal's behavior is open, concerned, and supportive. The faculty is simply disengaged from the task. Although the principal is supportive, concerned, flexible, facilitating, and noncontrolling, the faculty is divisive, intolerant, and uncommitted.

Closed Climate

The closed climate is the antithesis of the open climate. Closed climates have principals who are nonsupportive, inflexible, hindering, and controlling, and a faculty that is divisive, intolerant, apathetic, and uncommitted.

PCI Form

PCI will refer to the Pupil Control Ideology Form developed by Willower, Eidell, and Hoy in 1967.

Pupil Control Ideology

This term will be used to refer to how the school professional staff view the students ranging on a continuum from humanistic to custodial.

Custodial. The custodial school is the "traditional school which provides a rigid and highly controlled setting in which maintenance of order is primary" (Hoy & Miskel, 1987, p. 242). Teachers do not attempt to understand student behavior but view it as a personal affront.

Humanistic. The humanistic orientation is the "school conceived of as an educational community in which students learn through cooperative interaction and experience" (Hoy & Miskel, 1987, p. 242). This leads to a democratic atmosphere where the individual is important and student needs are met.
Purpose of the Study

The purpose of this study was to determine the conflict management styles utilized by the principals of thirty elementary schools, to assess the organizational climate of each of the same thirty schools, and to examine the pupil control ideology of the teachers in these same thirty elementary schools. Then, utilizing statistical analysis procedures, the purpose was to determine if there were significant relationships among these three variables: conflict management styles, organizational conflict, pupil control ideology.

The investigation was conducted to specifically determine the following:

1. Whether there is any relationship between the organizational climate of an elementary school and the conflict management styles used by the elementary school administrator.

2. Whether there is any relationship between the six dimensions of organizational climate: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, principal restrictive of an elementary school and the administrator's use of each of the five areas of conflict management: competing, collaborating, compromising, avoiding, accommodating.

3. Whether there is any relationship between the
pupil control ideology of the elementary teachers and the conflict management styles used by the school administrators.

4. Whether there is a relationship between the six dimensions of organizational climate: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, principal restrictive of an elementary school and the elementary teachers' orientation toward pupil control ranging on a continuum from humanistic to custodial.

**Significance of the Study**

Hoy and Miske! (1987, p. 78) advocated that "the opportunity for conflict exists in and among all of the major dimensions of the school as a social system." They further suggested that a number of potential conflicts are possible in the organizational life of the school. Lindelow (1981, p. 275) stated that "because conflict is such a pervasive and unavoidable part of the principal's role, it is important that the principal learn to manage conflict effectively and turn it toward constructive ends." Exerting such leadership will necessitate a thorough comprehension of conflict itself and the acquisition of skills for the actual conflict management.

A school leader must be conscious of the organizational climate of school in order to improve
the learning experiences for the student; this climate is highly significant to all of the functions of the school. If the atmosphere is not conducive to the growth of the individual, willingness to perform assigned tasks will be ineffective and a negative atmosphere will hinder learning (McGregor, 1960, p. 207). Lonsdale (1964, p. 166) has stated that organizational climate is the global measurement of the interaction between the task-achievement dimension and the needs-satisfaction dimension with the organization. He further stated that needs-satisfaction is a feeling of the participants in an organization evolving from a combination of perceived productivity and perceived role satisfaction through the interaction of the participant in his role within the group and the total organization (p. 165). Hoy and Clover (1986, p. 94) advocated that these perceptions are strongly influenced by the school administrator. They stated that "the single most important individual in affecting the climate of the school is the principal" (p. 94). Halpin and Croft (1962, p. 9) indicated that the key to creating an appropriate organizational climate depended upon the ability of the principal. They stated, "an essential determinant of the school's effectiveness as an organization is the principal's ability--or his (or her) lack of ability--to create a climate."

Willower and Jones have described pupil control
"as 'the dominant motif' within the school social system, the integrative theme that gives meaning to patterns of teacher-teacher and teacher-principal relations" (1967, p. 424). Carlson (1964, p. 262) stated that the mandatory nature of the pupil's participation suggests the schools are of necessity dealing with clients whose motivations and desires for its services cannot be assumed. Therefore, Lunenburg and O'Reilly stated that "it seems reasonable that control of pupils would be a major concern" (1974, p. 31). They further stated that "each school appears to have a prevailing pupil control ideology which has an influence on its members" (p. 31). Hoy and Miskel (1987, p. 43) stated, "Schools can be ordered in terms of their relative emphasis on normative and coercive control of students."

A review of the research indicated many studies have been undertaken on each of these three variables: conflict management styles, organizational climate, and pupil control ideology. Some were correlational studies relating each single variable with some other characteristic as the dependent variable. Some of the studies related two of the above-mentioned variables with each other. A perusal of existing research, however, found no study with the main purpose of investigating the relationship among the three variables. In addition few studies were based on
research in the area of conflict management as the independent variable. If the principal is indeed a key figure in conflict management, organizational climate, and pupil control ideology, as he or she must be either directly or indirectly through the school leadership role, then the findings from this research study should be useful for increasing the knowledge base of each of the three variables within the framework of educational administration. The knowledge may add to the existing relationship theory for increasing the organizational effectiveness of the building administrator at the elementary school level.

**Underlying Theory and Assumptions**

The theoretical framework of this study was based upon the work of Halpin and Croft who completed original research on organizational climate and developed the OCDQ instrument in 1962 and on the work of Donald J. Willower, Terry L. Eidell, and Wayne K. Hoy who undertook the Penn State Studies of 1973 and studied pupil control ideology. They subsequently developed and tested the PCI Form. Theory on conflict was based on original research by Blake and Mouton in 1964 and reinterpretations by Thomas in 1976. Thomas and Kilmann then developed the Conflict MODE instrument in 1977.

Halpin and Croft (1962, p. 1) stated that the
"Organizational climate can be construed as the organizational personality of the school; figuratively, personality is to the individual what climate is to the organization." Halpin refined these ideas in 1966 when he explained that the "concept of openness versus closedness in organizational climate is directly related to similar concepts about the openness or closedness of the individual's personality" (p. 236). He felt that the mechanisms which produce neurotic responses in human individuals appear to operate in much the same way within the group. Since Halpin and Croft developed the OCDQ as a means of mapping the organizational climate of schools almost two decades ago, Hoy and Clover (1987, p. 93) maintained that it is still the most well-known conceptualization and measure of this concept.

Willower, Eidell, and Hoy (1973, p. 4) maintained that control was essential for group life and necessitated requirements for and restraints upon behavior. They further adapted the work of Gilbert and Levinson in mental hospitals to public schools and developed prototypes of custodial and humanistic orientations toward pupil control (p. 5). Such empirical studies of pupil control led to the development of an instrument designed to measure the pupil control ideology of an individual school, the PCI Form.
The elementary school, with its principal and professional staff, was the unit of analysis in this research. Relationships among each of the three major variables, conflict management styles of the administrator, organizational climate of the school, and pupil control ideology of the professional staff, were determined. The three research instruments used in the study were based on the underlying theory of the originator. In an attempt to use a revised instrument, the OCDQ-RE was used to measure climate. The instrument was designed by Hoy and Clover (1986) and was closely based on the original research.

The conflict management styles utilized by each school administrator were measured by the Thomas-Kilmann Conflict MODE Instrument. Climate was determined by the OCDQ-RE for each school and for the assessment of the six dimensions of climate: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, principal restrictive. The PCI Form was used to study the pupil control ideology of the professional staff.

Assumptions are stated within the text throughout this study. They are, however, restated here:

1. Conflict is inevitable in the school as an organization.

2. The elementary school principal is in a key position to resolve and channel conflict.
3. Individual principals utilize different conflict management styles.

4. The individual conflict management style can be measured.

5. Elementary schools do have individual and unique organizational climates.

6. The organizational climate of an individual school can be measured.

7. The professional staff within an elementary school has an ideology related to pupil control.

8. The individual school pupil control ideology can be measured.

**Hypotheses**

The null research hypotheses in this study were based upon a comparison of the climate of the school as a unit of measurement and the conflict management styles utilized by the building administrator, a comparison of the pupil control ideology of the professional staff of a school and the conflict management styles of the building administrator, and a comparison of the organizational climate of a school as the unit of analysis and the pupil control ideology of the professional staff. In each case a review and an analysis of the related research dealing with organizational climate, pupil control ideology, and conflict management as reported in Chapter 2 were made.
To effect such comparisons four major hypotheses were examined. The hypotheses have been stated in the null form and are listed in the order in which they were tested and reported.

**Null Hypothesis I**

There is no significant relationship between the organizational climate of an elementary school and the conflict management strategies used by the elementary school administrator.

**Null Hypothesis II**

There is no significant relationship between the six dimensions of the climate: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, principal restrictive and the administrator's use of the five areas of conflict management: competing, collaborating, compromising, avoiding, accommodating.

**Null Hypothesis III**

There is no significant relationship between the pupil control ideology of the elementary teachers and the conflict management strategies used by the elementary school administrator.

**Null Hypothesis IV**

There is no significant relationship between the six dimensions of the organizational climate of an elementary school: teacher collegial, teacher
intimate, teacher disengaged, principal supportive, principal directive, principal restrictive and the elementary teachers' orientation toward pupil control ranging from humanistic to custodial.

Procedures of the Study

Thirty schools from a three-state geographical area were randomly selected. The teachers from each school were asked to complete the OCDQ-RE and the PCI Form. The principal of each school was asked to complete a short biographical information form to assess background data and the Thomas-Kilmann Conflict MODE Instrument.

On the basis of the data obtained from these instruments, relationships among the conflict mode styles of the principals, the organizational climate of the schools as a unit of analysis, and the pupil control ideology of the professional staff were analyzed. Conclusions were drawn, and recommendations for further study were made.

Limitations of the Study

1. This research study will be limited to a determination of the relationships among three variables: conflict management styles of the elementary school administrator, organizational climate of an elementary school, the pupil control ideology of the professional staff.
2. The schools included in this study will be limited to those serving students in grades kindergarten through grade six.

3. The schools included in the study will be limited to those in a geographic orientation of a three state Midwestern United States area: Illinois, Iowa, Wisconsin.

4. The schools included will have a full-time administrator and will have a minimum of ten full-time teaching personnel.

There are many other variables of the individual schools which cannot be assessed in a sampling study such as this research. Included are socio-economic levels of each individual school attendance area, administrative policies, salary of the teachers, and support help for both teacher and administrator. The personal variables of the staff were not assessed. Limited use was made of the biographical data supplied by the principals. Statistical relationships between this data and the results of the measurement instruments were not computed. No attempt was made to relate the variables to higher level administration within each school system. Lastly, the test instruments themselves were subject to both external and internal limitations because of sampling and validity and reliability measurements.
CHAPTER II

REVIEW OF THE RELATED LITERATURE

Introduction

"Revolutions generally occur when threads of the past are consciously loomed into a serviceable fabric by master weavers whose arts are in tune with the time" (Wayson, 1965, p. 10). According to Owens (1970, p. 1) it is probably an exaggeration to say that recent developments in educational administration constitute a revolution, but the last ten to twenty years have witnessed profound changes which seem to forecast extensive research and developments in the near future. In the past the impact of such studies was felt only by university professors in the field of educational administration or by independent research students. By the middle of the sixties, increasing numbers of school principals and administrators began to be aware of conceptualizations and subsequent theory formation.

Much of the "new" in educational administration involves new knowledge which leads to new insights into administrative behavior with consequent hope for increasing the professional capability of school administrators to meet the challenges that lie ahead in American education (Owens, 1970, p. 1).

Owens concluded that since the mid-1960's educational
administration has been taking the lead in making original discoveries about the field through research (1970, p. 22).

This review of the literature reports the results of past studies relative to a conceptualization and rationale for the hypotheses under investigation. The areas of conflict management, organizational climate, and pupil control ideology are examined. Conflict management is the predominant focus for this study forming the independent variable in three of the four hypotheses under investigation. Therefore, an indepth study was made of this topic. Because the study was based on the work of Thomas and Kilmann, their work has been reviewed in some detail. Extensive examinations of the theory of organizational climate by Halpin and Croft and pupil control ideology as expounded by Willower, Eidell, and Hoy were also felt necessary to include to provide supportive background for this study.

With a few exceptions, the research reported in this review was completed from 1967 to the present. The research and literature reported are by no means exhaustive. An attempt was made to review a variety of research projects and techniques and to select those materials judged to be the most relevant to the investigation.
Conflict Management

When the formal organization is depicted as a social system, a number of potential conflicts are possible. Hoy and Miskel (1987, p. 78) stated that "theoretically, the opportunity for conflict exists in and among all of the major dimensions of the system." These authors advocated that the school does not exist as a vacuum, but rather it is influenced by the environment in which it finds itself. An integral part of that environment is the culture and the subsequent values of both society and community which are imparted through the culture (1987, p. 80). Included as a result of these forces are role conflicts, norm conflicts, personality conflicts, and goal conflicts as well as conflicts between the system components.

One of the theoretical frameworks of recent origin is this system theory, which, applied to the study of large organized social aggregates, views conflict as an interplay of forces, pressures, or stresses inherent in the structure and dynamics of such aggregates (Swingle, 1970, p. 1).

Deutsch (1973, p. 8-9) stressed the positive functions of conflict. "It prevents stagnation; it stimulates interest and curiosity; it is the medium through which problems can be aired and solutions arrived at, and it is the root of personal and social change." "Although conflict is most often discussed with a negative connotation, social change in a democratic society occurs as a consequence of conflict"
Conflict commonly leaves an organization stronger than before. "Franklin D. Roosevelt deliberately created a 'web of tension' among his subordinates to release the motivation and creativity which he regarded as the lifeblood of successful administration" (Wynn, 1977, p. 4).

It seems to be increasingly important that both teachers and administrators explore conflicts and learn approaches to resolving them.

Given their different perspectives, administrators and teachers often develop opposing views about the goals and procedures of the school and the distribution of benefits. These conflicts, when inappropriately managed, disrupt their cooperative efforts and hinder the learning of students (Tjosvold, 1978, p. 138).

It is not the presence of conflict which causes psychological distress, violence, social disorder, breakdown of authority, and termination of relationships; it is the harmful and ineffective management of conflicts (Johnson, Johnson & Johnson, 1976, p. 46).

"Analysis of conflict can give the administrator a different perspective on both events and the people involved in conflict" (Schofield, 1975, p. 9). Instead of viewing the opposition negatively, the administrator can see them as human beings subject to both the same internal and external forces to which he or she is subject. Peter Coleman concluded that:

"...coping with conflict is increasingly the most important, interesting, challenging, and rewarding aspect of the work of the administrator. Educational organizations are peculiarly subject to entropy, the natural tendency to revert to chaos, and any aspect of the organization which attracts one's attention is likely to be improvable, and any
attempt to change things can become an issue, a new source of conflict (Coleman, 1976, p. 25).

The area of interpersonal conflict, conflict between persons or groups, is that which will most directly be influenced by the management strategies advocated by the elementary school administrator. Johns (1983, p. 414) has defined interpersonal conflict as "a process of antagonism that occurs when one person or organizational subunit frustrates the goal attainment of another." According to Blake, Shephard, and Mouton (1964, p. 15), "The behavior of organization members in relation to each other is, at least, determined by the set of complex forces acting on them by virtue of their active memberships in different groups." As a group member the individual represents his or her group whenever he or she interacts with others in different groups providing that the different groups are in some ways interdependent. According to Bailey, three types of conflict may occur.

Subordinate conflict occurs between the administrator and a person or group over which he or she has authority. Superordinate conflict occurs between an administrator and those who have control over him or her. Lateral conflict occurs between the administrator and the person or group with which he or she has equal authority (Bailey, 1977, p. 233).

Filley (1985, p. 8-9) has explained the conflict process as it relates to interpersonal situation through a six-step process:

1) Antecedent conditions are the characteristics of a situation which generally lead to conflict,
although they may be present in the absence of conflict as well.

2) Perceived conflict is a logically and impersonally recognized set of conditions which are conflictive to the parties.

3) Felt conflict is a personalized conflict relationship, expressed in feelings of threat, hostility, fear, or mistrust.

4) Manifest behavior is the resulting action-aggression, competition, debate, or problem-solving.

5) Conflict resolution or suppression has to do with bringing the conflict to an end either through agreement among all the parties or the defeat of one.

6) Resolution aftermath comprises the consequences of the conflict. (See Figure 1)

From an historical perspective, conflict has been acknowledged since the beginnings of administrative theory, but only recently has the view of conflict as destructive begun to change to one of value and constructiveness. In 1961 Ephron stated that "in so far as administrators have been troubled by conflict within their organization, they have sought not so much to understand its origins as to find ways of reducing it" (p. 53). Robbins (1974, p. 19) stated, "Those administrators who naively succeed in eliminating conflict dramatically increase the probability that their organization will not survive."

Any attempt by an administrator to manage conflict necessitates that he or she be knowledgeable about the origin of the conflict. Four categories have been identified by Nebgen (1978, p. 2): communication problems, structural factors, human factors, and interactions. Poor communication is frequently cited.
Figure 1. The conflict process as it relates to interpersonal situation

"Communication difficulties can arise from semantic differences, insufficient exchange of information, and distortion of communications on the part of the sender or receiver" (p. 2). Although Kielinen agrees with the importance, she maintains that "it is a fallacy to insist that communication is always the key; it is usually insufficient to resolve all conflicts" (1978, p. 13). Structural causes arise out of variables which are controllable within the organization such as size, reward systems, or differential power. Human factors include personality, interactions, role satisfaction, status, and goals. Based on these factors,

two paths seem to open for the study of conflict: an attempt to study conflict at the level of action and the study of para-conflict, which is predominantly self- and socially-reflexive in nature and focuses upon human symbolic processes of labeling, categorizing, and abstracting, and the behavioral consequences of these symbolic processes (Rubin, 1978, p. 209-210).

The former has been the focus for those interested in communication forces.

In 1979 Putnam, Birkmeyer, and Jones completed a study limited to research involving communication and conflict. "Although the research on communication and organizational conflict is in a state of infancy, it has amassed a sizable following of researchers who believe that communication influences the outcomes of conflict" (p. 17). These researchers felt that:

an expansion of the current theoretical framework and methodological directions to include more research on perceived conflict, interactional
analysis, and evolution of conflict episodes provides promise for understanding the way communication defines and influences conflict processes in organizations (p. 17).

Lindelow (1983, p. 276) stated that:

the effective school administrator should not seek simply to resolve all conflicts that arise in the school; rather, he or she should attempt to manage conflict by maximizing constructive and minimizing destructive conflict.

Functional or constructive conflict represents any confrontation which ultimately benefits or supports the goals of the organization. Conflict which works in opposition to this goal is dysfunctional and destructive and should be minimized. Deutsch (1973, p. 17) stated that "conflict clearly has destructive consequences if its participants are dissatisfied with the outcomes and feel they have lost as a result of the conflict." Robbins added, "Managing conflict is the nucleus of successful administration, but planning and evaluating conflict intensity makes administration one of the most difficult professions" (1974, p. 20).

The problem lies, however, in the fact that the management science has not been perfected. Jane and Rensis Likert (1976, p. 45) stated that "the management of conflict appears to be reaching a state of readiness for rapid and substantial improvement." Social science research is close to providing the necessary methodology and research-based theory. Managing conflict is a task which is well-suited under
administration because it involves both art and science. The art is found in the ability to determine a planned level of conflict intensity and in the perceptual measurement of actual conflict. "It is the creative administrator who can accurately select the optimum techniques and implement them in such a manner as to bring actual conflict intensities into alignment with those desired" (Robbins, 1974, p. 111).

Duke has studied conflict and power in administration and summarized conflict theory. "Conflicts are normal, inevitable, and ubiquitous to social life" (1976, p. 235). No group exists in society which does not possess conflicts of interest. "In every society, some people gain more power and control than others" (p. 238). As a result, power tends to become consolidated with a few. Once a group gains power in one social sphere, they attempt to extend their influence to other spheres. "Power structures in which power is utilized effectively are outwardly characterized by order, consensus, conformity, and integration" (p. 248). This resultant theory explains social organization and disorganization, stability and change, and conformity as well as revolution.

"Conflict management models provide guidelines for constructive assistance for breaking the cycle of conflict and opening the door to cooperative endeavors"
(Roark, 1978, p. 401-402). Learning about the process of management seems equally as important as learning the resolution styles. Frey and Young (1978) have developed a process involving eight steps. The first step involves analyzing one's own strengths and using these to build strengths in the others involved in the conflict. The second step involves establishing trust and acceptance. The third step involves active listening and clarification which is followed by the fourth step, reality testing. Establishing goals is the fifth step with focus on alternatives being the sixth step. The last steps are alternative selection and implementation (p. 19-20).

Major research was completed by Blake, Shephard, and Mouton on managing intergroup conflict in the industrial situation in 1964. That work will be reviewed here because Thomas and Thomas with Kilmann based the development of their MODE instrument on the original findings of Blake, Shephard, and Mouton. The latter conducted a series of intergroup competition experiments under artificially constructed conditions. The situations were psychologically real for the participants and permitted measurement of psychological and social aspects of win-lose conflict (Blake, Shephard & Mouton, 1964, p. 31). "A win-lose orientation to conflict is characterized by one basic element: the contesting parties see their interests to
be mutually exclusive with no compromise possible" (Blake, Shephard & Mouton, 1964, p. 18).

Collaboration is a win-win approach while competition is a win-lose method. Compromise is a lose-lose approach. Accommodation is a yield-lose style while avoiding is lose-leave approach (Weider-Hatfield, 1981, p. 266).

In the lose/leave, every effort is made to avoid or withdraw from conflict. Win/lose is characterized by the feeling that accomplishing the task is considered more important than the relationships involved. Yield/lose avoids conflicts and maintains relationships but yields a false sense of cooperation (Rosenberg, 1986, p. 230-231).

Win-win strategies focus on ends or goals with problem solving or the development of superordinate goals, one to which all efforts are ultimately directed (Labovitz, 1980, p. 33).

Ideally then, effective managers not only win conflict situations, but they "win the peace" as well; it is important to effect constructive closure after conflict episodes while demonstrating that the conflict was situational rather than personal, or if personal, that it be confronted honestly and openly (Wilson & Jerrell, 1981, p. 113).

The Blake-Mouton instrument on conflict consisted of five statements, each describing one mode of handling conflict; as used in Managerial Grid labs, subjects had been asked to select the single statement which best described them (Thomas & Kilmann, 1978, p. 140).

Through their examinations of the behavior of individuals and groups, Blake and Mouton uncovered nine basic patterns toward conflict: third party judgments, fate, withdrawal, isolation, indifference, compromise, peaceful coexistence (p. 13). "All of these patterns
of coping represent coming to terms with conflict; they are, however, dysfunctional because they do not solve the problems of intergroup conflict" (p. 13). They concluded that "problem solving is an orientation founded on the belief that, although conflict can and does erupt between parties, it is a sound basis for achieving mutually rewarding and satisfying agreement" (p. 154).

Thomas (1976) reinterpreted the five-category scheme for classifying interpersonal conflict-handling modes as first introduced by Blake and Mouton (1964). These five modes included competing, collaborating, compromising, avoiding and accommodating (Kilmann & Thomas, 1977, p. 309). One of the advantages of Thomas' classification is that the five specific modes reflect independent dimensions of interpersonal conflict behavior.

The scheme is based upon the two separate dimensions of cooperation (attempting to satisfy the other person's concerns) and assertiveness (attempting to satisfy one's own concerns). Competing is assertive and uncooperative; collaborating is assertive and cooperative; avoiding is unassertive and uncooperative; accommodating is unassertive and cooperative, and compromising is intermediate in both cooperativeness and assertiveness (Thomas, 1977, p. 310).

Research and the subsequent development of instruments exploring the relationships between the five conflict-handling modes and social organizational variables were completed by Blake and Mouton (1964),
Lawrence and Lorsch (1967), and Hall (1969). However, work by Thomas and Kilmann (1973, 1975) raised some major issues concerning the validity of these instruments "which purport to measure subjects' dispositions towards the five conflict-handling modes" (Kilmann & Thomas, 1977, p. 311).

The results by Thomas and Kilmann indicate that the instruments are strongly susceptible to social desirability biases, that the scores on the Hall and Lawrence-Lorsch instruments are nonipsative, that reliabilities are modest, that the Blake-Mouton scores on competing and compromising are unstable, that the accommodating scores on the three instruments measure somewhat dubious constructs, and that the measures of compromise are of dubious constructs, and that the measures of compromise are of dubious validity (p. 310).

Of all of these findings, those concerning the social desirability were of greatest interest to Thomas and Kilmann. They found that:

a sample's average responses were overwhelmingly responsive to the social desirability of the conflict-handling modes and their phrasing; on the average, more than eighty percent of the variance on items and over ninety percent of the variance on mode scores could be accounted for in terms of social desirability values of the three instruments, as rated independently by another group (p. 310).

Because of these concerns and conclusions, Thomas and Kilmann sought to develop an instrument which would more validly assess the five modes and minimize the social desirability factor.

Unless such an instrument could be developed, the authors felt that further research investigations in the field of conflict management would be severely limited since most substantive findings would be subject to social desirability or the halo effect (Thorndike, 1920, p. 311).
At this time conflict was growing in importance and recognition in the academic setting. Conflict theory was undergoing some changes at the same time. Perhaps the most basic change is reflected in the emergence of the term conflict management which has been gradually displacing the early idea of conflict resolution (Thomas, 1976, p. 889-935).

The newer term reflects the growing realization that conflict can be perceived as having a number of benefits as well as costs, and that it, therefore, needs to be managed within the academic unit rather than necessarily resolved or eliminated (Darling & Brownless, 1984, p. 244).

They subsequently developed and validated the Thomas-Kilmann Conflict MODE Instrument (Management of Differences Exercise) between 1973 and 1977. To control for social desirability, they utilized a strategy advocated by Edwards (1953) where items of different traits were paired according to their standing on the social desirability scale. "If the subject is then forced to choose between the two items, his choice cannot be upon the basis of the greater social desirability of one of the items" (Edwards, 1953, p. 91). Because of the difficulty in reality of finding items identical in values, a stepwise pairing system was used where items selected as nearly equal were identified, paired, tested, and then paired again.

The lists of items for the instrument were generated and then operationalized in the five
conflict-handling modes.

Competing items were generated to reflect an individual trying to win his own position; collaborating items were related to an individual involving the other in working out a solution, getting concerns out in the open, and being concerned with satisfying both his own and the other’s wishes; avoiding was operationalized as an individual trying to avoid creating unpleasantness for himself, and trying to postpone or not worry about issues; accommodating was related to either an individual trying to find a middle ground position, or to an exchange of concessions (Kilmann & Thomas, 1977, p. 312).

Reasonable support for the substantive validity for the MODE instrument, criteria of internal consistency, and test-retest reliabilities were found. In addition, the forced-choice format appears to contribute to the instrument’s structural validity (p. 322).

Other studies utilized the MODE instrument in research. Jamieson and Thomas (1974) administered a preliminary version to students at three different levels of education: high school, undergraduate, and graduate. The directions were modified so the students responded to their conflict behavior toward teachers. They found that students at all three levels rated themselves higher in avoiding. While graduate students also rated higher in accommodating, they were low in competing and collaborating. The scores for male versus females were consistent with Thomas and Kilmann’s findings in that males rated competing significantly higher than females while the latter rated compromising significantly higher than males (p. 336).

Ruble and Thomas (1976) conducted two
investigations to study the two-dimensional scheme for classifying the five conflict-handling modes according to assertiveness and cooperativeness and the related meaningfulness. In the first study, one hundred and fifty subjects were given a negotiations exercise where they rated the opponent's use of the five conflict-handling modes. These were then configured into indices of cooperativeness and assertiveness based on their hypothesized location along the two dimensions. The two underlying dimensions appeared to have relatively independent connotational meaning. In the second study, sixty-five subjects responded to hypothetical conflict-handling behaviors used by another person. The responses were again divided on the basis of the two factors. The mean ratings were consistent with the expectations (p. 152-155).

Thus, two studies using different designs yielded rather consistent results supporting the two-dimensional model and providing some construct validity for the meaningfulness of these two dimensions and the five conflict-handling modes (Kilmann & Thomas, 1977, p. 321).

A three-year research project by Zeigler, Kehoe, and Reisman in 1983 compared the conflict management behavior of school superintendents and city managers. Data for the study, funded by the National Institute of Education, was gathered via interviews and the Thomas-Kilmann Conflict MODE instrument on one hundred and four superintendents and city managers in two large
metropolitan areas. The findings indicated that the "dominant styles for superintendents were collaborating and competing; the dominant styles for the city managers were accommodating and competing" (Demo, 1986, p. 195). Both groups anticipated potential conflict, and some conflict avoidance existed.

Two studies used the MODE instrument in 1983. Chester studied the effects of a participatory learning model on the conflict-handling styles of adult learners. A secondary purpose was to examine the influence of factors of age, sex, race, marital status, origin of birth locale, educational level, birth order, and family size and structure. The findings revealed that the learning treatment did change the conflict-handling in the area of competing with a significant increase noted. The factors of sex and rural or urban background were found to be of significant influence. Gagliarducci's study had as the major focus to determine what relationship existed between an elementary school principal's attitudes toward teacher collective bargaining agreements and his or her conflict-handling modes. Twenty principals were interviewed and responded to the Thomas-Kilmann Conflict MODE instrument. The data then compared the attitudes toward the contracts with the conflict modes. The findings showed that principals felt the contracts had affected their handling of conflict. Attitudes and
perceptions toward the bargaining process did tend to be related to conflict handling modes.

In 1984 Dickson developed a six-page in-service program syllabus to promote staff effectiveness in conflict situations using the Thomas-Kilmann Conflict MODE Instrument.

The objectives for the program were to identify natural conflict management styles for each staff member, to identify job functions in which natural and adaptive conflict management styles were effective and ineffective, and to identify conflict management styles that stimulated or reduced conflict in staff relationships (p. 167).

Two other research studies using the Thomas-Kilmann Conflict MODE Instrument were completed that same year. Revilla compared the conflict management styles of men and women administrators in higher education. She found no significant differences between the conflict management styles of males and females. She did find some correlation in the level of experience. The more experienced administrators were found to be more competing, less compromising, and more assertive than less experienced administrators. Erickson just studied female administrators and their use of conflict management in both the school setting and in the home. She found that sex bias was not a reported problem. Females did not use the same conflict modes as professional managers reported except in the areas of compromising. Women seem to be inhibited in addressing conflict directly.
Goodwyn compared conflict management styles used by supervisors with those used by principals. She found no significant differences using the Thomas-Kilmann Conflict MODE instrument. Principals seemed to prefer the use of avoiding while supervisors indicated a preference for collaborating (1985).

The last study to be reported here using the Thomas-Kilmann Conflict MODE instrument was completed in 1986 investigating the current practices of school principals for the management of conflict in general and in specific educational situations. Content (1986) found mixed results in this study. As hypothesized, collaboration and compromising showed high usage while avoiding was preferred in a moderate number of cases. Content had also predicted a low use of the latter.

"The research and literature on conflict is tremendously varied—just as varied as human conflict itself" (Schofield, 1977, p. 8). Because conflict which the elementary principal faces is found at so many different levels, administrator, school board, teacher, parent, student, public, there is a "corresponding body of literature and research arising from particular academic disciplines" (p. 8). Schofield concluded that "the variety of conflict and the approaches to its study can be slightly bewildering with a lack of coordination and cross-reference strikingly evident in the literature and research"
(p. 15). The reason is not found in the academic disciplines, but rather is attributed to the fact that human conflict is essentially complex. Research focusing on conflict as a variable, but not utilizing the MODE instrument will be reported next.

In 1967 Lawrence and Lorsch studied the use of confrontation as a win-win type method, forcing which was defined as resorting to the use of authority or coercion, and smoothing which was agreeing on an intellectual or nonthreatening level in six different organizations. "The Lawrence-Lorsch instrument consisted of twenty-five proverbs describing the five modes of handling conflict; subjects rated the proverbs on how well they described the behavior of people within their organization" (Thomas & Kilmann, 1978, p. 114). They found that the managers of the two organizations rated highest in performance used confrontation more often than those of the other four organizations.

Settle conducted research in 1968 to analyze the relationship between the elementary principal and the parent who brings problems to provide a conflict instrument useful in school administration. She found that doing nothing was the least desired method of handling conflict. Parents and principals differed more about the most desirable than the least desirable method. Both parents and principals saw more than one solution to any conflict problem.
A study in 1969 by Dempsey was made to assess the bureaucracy of a school system and teacher professionalism relating these forces to conflict within the school system. A case study approach was utilized along with Ronald Corwin's "Measures of Bureaucratic Characteristics." Dempsey found that a long-range plan for resolution of conflict was necessary. The study also provided a model by which one can assess conflict within a school district. Also in 1969 a study was conducted by Wallace where he examined the expectations teachers had for elementary principals. The perceptual base was to study the potential for conflict. No evidence was found to support the notion that teacher identification of a potential for conflict is related to teacher expectations.

Wahlund conducted an investigation in 1970 in which he compared conflict management strategies employed by a group of principals perceived to be effective with those utilized by a randomly selected sample. He also studied the differences in strategies employed and the extents to which the strategies employed by each group affected school operations. Domination strategies accounted for the highest percentage in both groups of principals, and compromise strategies were used less frequently by the randomly selected group. No statistically significant
difference was found in the proportion of perceived favorable effects between the two groups.

Burke (1970) conducted several studies where he compared methods of conflict resolution. His first study asked seventy-four managers and their superiors to describe conflicts between them. He found that the more effective supervisors used confrontation and smoothing most often and withdrawal least often. The least effective supervisors used confrontation also followed by forcing and then withdrawing. This group utilized compromise the least often. The least effective supervisors used confrontation also followed by forcing and then withdrawing. This group utilized compromise the least often. He concluded that individuals use force or confrontation when they see stakes as high and withdrawal or soothing when they see stakes as low. In a second study, Burke compared fifty-three descriptions of effective conflict resolution with fifty-three descriptions of ineffective conflict resolution. Here he found that fifty-eight and one-half percent of the effective statements were classified as confrontation while seventy-nine percent of the ineffective statements were classed as forcing.

Using staff conflict and bureaucratic organization, Gerhardt (1971) postulated that specific conflicts might be related to specific dimensions of bureaucracy. It was also proposed that when the
teacher's position is not the central life interest of
the individual, he or she experiences less conflict.
He found that the higher the bureaucratic orientation
in the organization, the greater the intensity of
conflict reported. He also found specific correlations
between conflict and bureaucracy. The level of
individual satisfaction was a reliable predictor of
conflict. Another study was made in 1971 by McNamara
who wanted to test the relationship between conflict
and authority relationships and between conflict and
goal setting. He found that authority and goals did
induce conflict in organizations. He also found that
little was being done to develop constructive machinery
to resolve conflicts. Last, he found that the goals of
subgroups predominate and induce conflict when the
groups differ.

The original doctoral research by Thomas was also
completed in 1971. He used an industrial setting to
explore the use of the five conflict-handling modes
which he later incorporated into the Kilmann-Thomas
MODE instrument (1977). A portion of the study focused
on the impressions of conflict handling behaviors by
supervisors and coordinates; another portion of
analysis dealt with those factors which influenced a
manager's choice of conflict-handling modes. Conflict
of interest was determined to be a strong influence
upon the choice. This was associated with competitive
behavior, negative statements, and inefficient decision making.

A study by Weart in 1972 was made to determine if teachers and principals differed in their preference for conflict management techniques and to determine if interpersonal relations orientations were related to the preference. Problem solving as a management technique appeared to subsume the other four techniques considered. The data indicated strong preferences for techniques based on four variables: age, years of service in the present position, years of service in the present school, and instructional level.

Jones (1974) found that "leadership training for those who will hold responsibility for decision making activities can be enhanced by participation in a small group exercise in conflict reduction" (p. 1). He prepared the exercise at the University of Illinois to provide participants opportunities to apply strategies for conflict reduction, applications for specific conflict disruptions, and evaluation and participation. How teachers view their own conflict and job satisfaction does affect their interactions with their administrator and impact upon the resultant use of conflict management strategies used by that administrator. A study of the factors of conflict in the teachers' environment and the subsequent effect upon organizational conflict was made by Hooks in 1975.
He found that teachers with high conflict and low job satisfaction used militancy to resolve their own conflicts; those with low conflict and high job satisfaction used cooperation. External variables were found to have little or no influence on teacher conflict. Teachers needed other reward systems that maximized efficiency and effectiveness.

Stephen P. Robbins proposed an interactionist approach to conflict management through a model which he offered as a conceptual framework for managing organizations (1974, p. 99). The interactionist philosophy "recognizes the absolute necessity of conflict, explicitly encourages opposition, defines conflict management to include stimulation as well as resolution methods, and considers the management of conflict as a major responsibility of all administrators" (p. 13-14). Within the model, sources of conflict are grouped into three categories, communication, structure, and personal-behavior. These same categories then serve as the routes by which dysfunctional conflict can be converted to functional.

In 1975 two sociologists, Beck and Betz, analyzed conflict "as a function of the organizational conditions of school size, specialization, and centralization of authority using data from thirty-eight elementary and fifteen secondary schools" (p. 59). They found support for the idea that
organizational conflict is predictable from social structural variables. "As levels of conflict are linked to size and complexity measures, conflicts are believed to be endemic to formal organizing arrangements apart from the personalities who member the system" (p. 70). School size was the most important variable at the secondary level while centralization of authority was most influential at the elementary level. Teaching specialization was inversely related to organizational conflict at both levels.

Two different studies were conducted in 1977 on the impact of collective bargaining and the administrator's use of conflict resolution strategies. Kirschenstein found that administrators at all levels were of the opinion that collective bargaining did intensify conflicts and limit administrative power. Parshall found no significant differences in the conflict resolution styles used by administrators with or without bargaining units. He did find that there was a significant difference in the styles used by male and female administrators with the latter using win-win styles more frequently. He found no significance in resolution style related to level of experience, administrative position, or years of experience.

A study by Pope in 1978 was made to analyze conflict and conflict resolution in supervisory
conferences between principals and teachers. The hypotheses tested were supported in finding that if conflict was unresolved during the conferences, both the principals and teachers felt that the conference was not as successful as when the conflict was determined to have been resolved.

Three studies were completed in 1979. Knapp studied perceptions of principals' optimal and actual conflict-handling styles. Significant differences existed between building principals and teachers in their perceptions. That diagnostic conferences tended to reduce conflict and produced higher levels of satisfaction were the findings of Duffy in a study to analyze conflict and conflict resolution in relation to effectiveness and efficiency in such conferences.

Zammuto, London, and Rowland studied the impact of sex on conflict resolution, commitment, and their relationship. They used the five conflict resolution strategies originally identified by Blake and Mouton. "The results showed that the relation between the commitment measures and conflict resolution strategies depended on the sexual composition of the supervisor-subordinate dyad" (p. 227). Smoothing, compromise, and confrontation were used by males reporting to females but avoided by females reporting to females.

Canahan studied organizational structure, work values, and conflict in 1980. She surveyed sixty
schools and found that organizational structure and work values do not influence the amount of perceived conflict in a school. She did not find conflict between administrator and teachers in her sample to be a significant problem. In that same year, Howat and London studied the extent to which measures of conflict management and interpersonal relations are attributed to individuals who perceive conflict.

The results supported the conclusion that perceived conflict frequency is associated with attributions of conflict; supervisors who perceived higher conflict frequency tended to be seen by each other as using force, a strategy indicative of conflict intention (p. 172).

A constructive replication of the Lawrence and Lorsch conflict resolution methodology was conducted in 1980 by Fry, Kidron, Osborn, and Trafton.

Using a different sample and more recent developments in factor analysis, an attempt was made to develop a consistent operational taxonomy of conflict resolution modes using the original Lawrence and Lorsch questionnaire with slightly different factoring and rotational techniques (p. 9).

They concluded that the scale does not provide a valid and reliable measurement of conflict resolution modes. It apparently cannot be used to detect underlying conflict resolution modes across organizations.

An exploratory study was conducted in 1981 by Howell where he sought to identify, describe, and analyze the competencies needed for conflict management. He found the following skills essential:
describing the nature of conflict and analyzing personal conflict style, demonstrating responding, assertiveness and conflict resolution skills, demonstrating team building skills, and reducing intergroup conflict. Length of time and position showed equal needs for skill development in all categories.

Also in 1981 was a study conducted by Thompson where he compared Machiavellianism and the perceived strategies superintendents used to manage conflict. He found that superintendents who described themselves as high on Machiavellianism were perceived by their principals as using problem solving and withdrawing significantly more often than low Machiavellian superintendents. Secondary principals were significantly more satisfied with the way high Machiavellian superintendents managed conflict while elementary principals showed no such significance.

Ross developed and evaluated a self-report instrument to measure conflict-management style in 1982. She analyzed verbal messages used in conflict and based her instrument on Blake and Mouton's original research where they proposed a two-dimensional framework for determining conflict management style, yielding five styles. Her result was an eighteen item test based on a five point Likert scale.
Reisman studied the conflict management behaviors of one hundred three school superintendents and city managers in two major cities. She found that superintendents were more professionalized than city managers, but when dealing with the public, were less likely to use the analytic-technical conflict management methods. The city managers tended to use these methods both when resolving intraorganizational conflict and when resolving issues involving the public (1982, p. 1).

Another study conducted in 1982 was a comparative analysis of the programs of Likert and Wehr. Bailey found that Likert's was the more widely tested with several research studies incorporated to form a program called "System 4." This program measures causal, intermediate, and end-result variables in the area of conflict. Wehr's program focused on skillful intervention with a step-by-step procedure for mapping and regulating conflict. Both seem promising for use in the schools.

Faria surveyed all assistant principals in the State of Massachusetts in 1982 to assess the relationships between their backgrounds, training, values and concepts of, preparedness for, and processes for dealing with conflict situations. He had his one hundred twenty-two respondents complete the Sexton-
Bowerman conflict handling inventory. He found that the subjects indicated a high willingness to intervene in conflict situations, but engaged in a wide variety of styles while actually intervening. He also found they intervened less often than they expressed intentions to do so. He did not find support for his hypothesis that willingness would be correlated to specific style.

That principals do not change either their leadership style or their conflict management style as situations change was found in a study by Romero in 1983. This study further found that years of experience, number of hours of management training, or number of hours of conflict management training were not related to the management styles chosen by the administrators.

Another study in 1983 compared conflict resolution situations with French and Raven's five power bases. Benzel found a significant difference at each level of conflict in the power base preference. Referent power was the preferred power base preference in subordinate and lateral conflict while expert power was used in superordinate conflict. A significant difference was also found in the choice of power base for dealing with conflict based on educational level in the area of subordinate conflict. Another study on the
role of power in conflict management was conducted in 1984 by Case. She found that power was a consistent dimension of conflict which was best resolved when such power was used as influence or when control of events did not shift to another person. The results suggested that empowering of low power persons was essential to effecting conflict management.

The last research studies to be reviewed here are those which attempted to correlate conflict management with the next area to be reviewed in this study, organizational climate. In 1970 Kelley analyzed the role of morale, organizational climate, and conflict in a study of secondary school environments. Through a case study approach, he concluded that the pattern of organizational climate does not appear to be related to whether or not the school is experiencing identifiable conflict. Weeks (1978) tried to determine the relationship between conflict management behaviors of principals and organizational climate as perceived by principals and teachers in one selected school district. He found no significant correlations except in the way teachers perceived the conflict management behaviors and the organizational climate of their school.

In 1982 Kowalski studied organizational climate, conflict, and collective bargaining. Collective bargaining is widely recognized as a source of
organizational conflict. "Within an open climate, conflict is viewed as a neutral catalyst whose ultimate value will be significantly affected by the quality of management" (p. 28). He concluded that "the demand to widen the scope of bargaining to encompass governance issues appears to be most likely in closed organizational climates" (p. 30). Another study was made to determine the relationship between organizational climate and conflict management as perceived by teachers and principals in selected school districts. There was no correlation between the teachers' perceptions and those of the principals. The area showing a correlation between conflict perception was in the area of avoiding. There was no significant correlation between the organizational climate and the conflict management as perceived by the principals. There was a significant correlation as perceived by the teachers in one area of conflict management only, integrating (Keenan, 1984).

Argyris stated that an individual who is dissatisfied with his situation is not likely to engage wholeheartedly in the group's activities. Such a condition will lead to conflict among members of the group, decreased cohesiveness and have a significant impact on the group (Sacks, 1979, p. 31).

Thus it can be concluded that:

to the extent that conflict is intelligently approached and fairly resolved, it may remove irritants, reduce misunderstandings and ambiguity, reinforce goals, quicken commitment, establish individual and organizational integrity, and otherwise refine the attributes of wholesome organizational climate (Wynn, 1977, p. 4).
Organizational Climate

The concept of organizational climate was originally conceived by Argyris when he attempted to order the complex, reciprocal network of variables that comprise organization (1958, p. 501-520). To his initial listing of three interrelated systems of variables including formal organizational, personality, and complicated informal variables, he added a new and fourth level of analysis, that of organizational climate. He saw climate as adding a meaningful pattern for the variables resulting from the interaction of individuals, formal, and informal levels of analyses. He went on to define climate as the "homeostatic state of an organization composed of elements representing many different levels of analysis" (p. 516). From this beginning Argyris created a model to study the organizational behavior and climate in a bank. Group morale was included in the broad concept of climate. His model subsequently provided a realistic basis for executive development, organizing thoughts, and for providing knowledge upon which to plan the impact of future changes.

The concept of climate was soon extended to the school as an organization. Halpin in 1963 stated,

As any teacher or school executive moves from one school to another, he is inexorably struck by the differences he encounters in organizational
climates. He voices his reaction with such remarks as, "you don’t have to be in a school very long before you feel the atmosphere of the place" (Halpin & Croft, 1963, p. 4).

Experienced principals can quickly sense the individuality of a school. "Sometimes this individuality is called the atmosphere of a school; other labels include the tone of the school, the school’s climate, or the school’s personality" (Owens, 1970, p. 167). Whatever term is used, the reference is to that intangible quality that lets one know that every school is different from every other school just as people differ one from another. Halpin states, "Personality is to the individual what organizational climate is to the organization" (Halpin, 1966, p. 131).

In the broadest sense of the word, organizational climate is the product of every aspect of an organization—the nature of the work that goes on there, the people, the architecture and surroundings, the history of an organization, the administrative policies in effect, and, especially, the patterns of interaction and communication among the members of the organization (Lindelow & Mazzarella, 1981, p. 169).

Most of the research and administrative discussions, however, focus on the social aspects which appear to be the major contributors to climate. Phi Delta Kappa released a study in 1973 on School Climate Improvement. The editors suggested eight factors which comprise school climate and determine its quality. "The results form an interaction of the school’s programs, processes, and physical conditions" (Fox, 1973, p. 7).
Ideally, there should be evidence of: respect, trust, high morale, opportunities for input, continuous academic and social growth, cohesiveness, school renewal, caring with centricity of school goals of productivity and satisfaction (p. 10).

Basic to these goals and school climate indicators are the school climate determinants of program, process, and material.

Hoy and Miskel have stated that:

organizational climate is a broad term that refers to perceptions of the general work environment of the school; it is influenced by the formal organization, informal organization, personalities of participants, and organizational leadership. It is the set of internal characteristics that distinguishes one school from another and influences the behavior of its members (Hoy & Miskel, 1987, p. 225).

Jorde stated that "organizational climate can also be viewed as both a process and an end product" (1985, p. 4). Climate is something to work toward achieving as well as the means by which that goal is reached. She also discussed the conceptual dimensions of climate in three domains: the interpersonal relations among the people, those factors which measure the professional growth and work orientation, and the structure of the work environment itself. The sum total of these conceptualized factors forms the climate of the school or organization.

Positive and healthy organizational climates are most often characterized by high energy, openness, trust, a collective sense of confidence, and a shared vision; unhealthy, negative climates are characterized by poor communication, divisiveness, conflict, and low staff morale (p. 4).
This environment has a profound effect upon both the satisfaction and achievement of both teachers and students.

Schools with positive climates are places where the school projects a feeling that fosters both caring and learning; people exhibit a strong sense of pride, ownership, and personal productivity that comes from helping to make the school a better place (Keefe, Kelley & Miller, 1985, p. 70).

Norton has advocated that several considerations serve to underline the paramount importance of organizational climate in the school. These considerations include the concepts that the climate of a school sets the tone for the approach that school uses to achieve its goals and solve its problems as well as to determine effective communication. Climate also determines the direction of creativity and personal growth and development. "In a direct way, the school environment serves a crucial role in determining what the school is and what it might become" (Norton, 1984, p. 43).

Research has supported the fact that it is important for administrators to be able to "determine what the staff feels about other people in the school and how they feel about the management of the school" (Zigarmi, 1981, p. 100). Coughlan found in 1978 that:

there is a strong relationship between organizational climate and job satisfaction; the research is inconclusive as to which comes first, the climate or the satisfaction, but job satisfaction seems to be higher in relatively open climate schools (p. 130-139).

Climate is also a key factor which influences the
acceptance of innovations as well as the motivation of participants. "Key elements to an innovation's success are higher teacher morale, support from the principal and district administrators, and teachers' willingness to make extra efforts" (Berman, et al, 1975). Schmuck and Runkle found that climate assessment is important because in order to more effectively solve problems and handle conflicts, the school must have a climate which supports open confrontation of differences, receiving and giving feedback, and generally fosters an atmosphere that invites open interaction and discussion (1972). As further support for the importance of climate research, Brookover found when he and others studied elementary school achievement by students and school climate, that more of the differences in achievement could be attributed to the differences found in school climate than could be attributed to differences in socio-economic status or racial composition (1976).

Wiggins has implied that "social systems theory represents the theoretical framework from which one can derive a conceptualization of the climate of a school" (1971, p. 57). Londsdale used the terms task-achievement dimension and need-satisfaction dimension synonymously with the terms nomothetic and ideographic when he wrote of organizational climate:

Indeed, organizational climate might be defined as the global assessment of the interaction between
the task-achievement dimension and the need-satisfaction dimension within the organization or in other words, of the extent of the task-needs integration (1964, p. 166).

In role theory every individual within the system occupies a position with specified norms for behavior and duties in the performance of their roles.

Conceptually, organizational climate is that state of the organization which results from the interaction that takes place between organizational members as they fulfill their prescribed roles while satisfying their individual needs (Wiggins, 1971, p. 57).

Organizational climate can then be operationalized when referring to the resulting condition in the school setting from social interaction between staff and administration.

Such social systems theory is important when viewing the position of the administrator. He or she functions within the system and is influenced by the roles and expectations of the school. "In the systems sense the principal is an interdependent force in a school, and his behavior is analyzable only in the perspective of other forces both external and internal which make up the social system" (Wiggins, 1971, p. 59). Success in educational administration is dependent upon the adaptation of behavioral characteristics of the administrator with existing organizational forces such as climate. The school administrator can, however, make the difference. "If a school is to be both productive and satisfying, it is
essential to have a principal who supports the establishment and maintenance of this type of climate" (Keefe, et al, 1985, p. 71). The recent British study, *Fifteen Thousand Hours*, made it clear that a positive school climate was the most important single expression of educational leadership. "Differences from school to school, according to this study, center upon the principal’s ability to build a supportive, challenging, and positive school climate" (Rutler, 1979, p. 31-34).

Halpin and Croft began their work on organizational climate as a direct outgrowth of their work with the Leader Behavior Description Questionnaire. They saw that "some sort of matching had to be made between a leader’s style and how ready the group members were to accept his style" (Halpin, 1966, p. 132). This followed along with the observation of how schools differed in their organizational climate and provided the major impetus for the pioneering research they completed in 1962 as part of a United States Office of Education research grant. They knew that schools differed in their personality or feel, but they wanted "to get beyond that to actually map the dimensions of climate and measure them in a dependable way which would minimize those limitations that necessarily inhere in every instrument and rely on some form of subjective judgement (Halpin, 1966, p. 132). In addition they
were dissatisfied with the concept of morale in school studies. Their study served as a preliminary investigation to the development of an instrument that could be used to measure the organizational climate and subsequently categorize organizations into different climates.

They identified the important aspects of teacher-teacher and teacher-principal interactions (Hoy & Miskel, 1987, p. 226). Each of the items was categorized to a specific cell on the basis of common sense; this was done three different times using different taxonomies describing group interaction each time. From the original bank of one thousand Likert-type items, they screened the number down to six hundred which made up Form I of the Organizational Climate Description Questionnaire. Seventeen schools were chosen to complete this first form on the basis of heterogeneity. Following an item analysis to determine which items differentiated by schools, cluster analysis was used to identify potential subtests. The 160 items remaining were used in Form II and grouped according to the cluster analysis into the categories of "thrust, production emphasis, aloofness, esprit, disengagement, consideration, intimacy, and hindrance" (Halpin & Croft, 1963, p. 25). Form II was developed and tested and led to the final refined Form IV composed of sixty-four items and eight categories. These subtests
were intended to be separate batteries with no intention of combining them to form a composite score. The eight dimensions of organizational climate from these subtests are as follows:

**Teachers' Behavior**

1. **Disengagement** refers to the teachers' tendency to be "not with it." This dimension describes a group which is "going through the motions," a group that is "not in gear" with respect to the task at hand. In short, this subtest focuses upon the teachers' behavior in a task-oriented situation.

2. **Hindrance** refers to the teachers' feeling that the principal burdens them with routine duties, committee demands, and other requirements which the teachers construe as unnecessary "busywork." The teachers perceive that the principal is hindering rather than facilitating their work.

3. **Esprit** refers to morale. The teachers feel that their social needs are being satisfied, and that they are, at the same time, enjoying a sense of accomplishment in their job.

4. **Intimacy** refers to the teachers' enjoyment of friendly social relations with each other. This dimension describes a social-needs satisfaction which is not necessarily associated with task-accomplishment.

**Principal's Behavior**

5. **Aloofness** refers to behavior by the principal which is characterized as formal and impersonal. He "goes by the book" and prefers to be guided by rules and policies rather than to deal with the teachers in an informal, face-to-face situation.

6. **Production Emphasis** refers to behavior by the principal which is characterized by close supervision of the staff. He is highly directive and plays the role of a "straw boss." His communication tends to go in only one direction, and he is not sensitive to feedback from the staff.

7. **Thrust** refers to behavior by the principal which is characterized by his evident effort in trying to "move the organization." Thrust behavior is marked not by close supervision, but by the principal's attempt to motivate the teachers through the example which he personally sets.
8. Consideration refers to behavior by the principal which is characterized by an inclination to treat the teachers "humanly," to try to do a little something extra for them in human terms (Halpin, 1966, p. 150-151).

After school profile scores were completed, mean scores were computed and standardized normatively so as not to confound the inter-school or intra-school variances. Loading factors were sought and six different climate types resulted. The schools were placed into one of the six climates; mean scores were computed by subtests for each of the schools falling within the subtest, and a prototypic profile was completed for each of the six climates. The social interactions which characterize these six climates are summarized as follows:

1. The Open Climate describes an energetic, lively organization which is moving toward its goals, and which provides satisfaction for the group members' social needs. Leadership acts emerge easily and appropriately from both the group and the leader. The main characteristic of this climate is the "authenticity" of the behavior that occurs among all the members.

2. The Autonomous Climate is described as one in which leadership acts emerge primarily from the group. The leader exerts little control over the group members; high Esprit results primarily from social-needs satisfaction. Satisfaction from task achievement is also present, but to a lesser degree.

3. The Controlled Climate is characterized best as impersonal and highly task-oriented. The group's behavior is directed primarily toward task accomplishment, while relatively little attention is given to behavior oriented to social-needs satisfaction. Esprit is fairly high, but it reflects achievement at some expense to social-needs satisfaction. This climate lacks openness, or "authenticity" of behavior, because the group is disproportionately preoccupied with task achievement.
4. The Familiar Climate is highly personal, but undercontrolled. The members of this organization satisfy their social needs, but pay relatively little attention to social control in respect to task accomplishment. Accordingly, Esprit is not extremely high simply because the group members secure little satisfaction from task achievement. Hence, much of the behavior within this climate can be construed as "inauthentic."

5. The Paternal Climate is characterized best as one in which the principal constrains the emergence of leadership acts from the group and attempts to initiate most of these acts himself. The leadership skills within the group are not used to supplement the principal's own ability to initiate leadership acts. In short, little satisfaction is obtained in respect to either achievement or social needs; hence, Esprit among the members is low.

6. The Closed Climate is characterized by a high degree of apathy on the part of all members of the organization. The organization is not "moving"; Esprit is low because the group members secure neither social-needs satisfaction nor the satisfaction that comes from task achievement. The members' behavior can be construed as "inauthentic" (Halpin & Croft, March 1963, p. 2-3).

These six climates were ranked from open to closed using the model of Rokeach in distinguishing between open and closed belief systems. He used dogmatism and opinionation scales to measure the openness or closedness of an individual's personality in much the same way as Halpin and Croft measured organizational climate (Rokeach, 1961, p. 55-80). "The distinctive feature of the open climate is its high degree of thrust and esprit and low disengagement; the behavior of both the principal and faculty is authentic" (Hoy & Miskel, 1987, p. 227). "At the other
end of the spectrum, the closed climate is the least
genuine one where thrust and esprit are low while
disengagement is high" (Lindelow & Mazzarella, 1981, p.
173).

The OCDQ has become the most popular and widely
used technique for assessing organizational climate
"partly because of the clarity with which Halpin
described his concept of climate, and partly because of
the relative simplicity with which the instrument can
be used in a practical school situation" (Owens, 1970,
p. 174). It has a number of limitations, however, and
has been criticized because it may not be well-suited
to study large, urban, or secondary schools (Carver &
Sergiovanni, 1969, p. 71-81). "The six climate types
are arbitrary with other researchers identifying both
fewer and more types" (Owens, 1970, p. 183). Halpin,
himself, questioned whether the instrument can be used
for evaluating a school's effectiveness or whether open
climates can be obtained in large, inner city schools
(Halpin & Croft, August, 1963, p. 112-113). Few
attempts have been made to validate the OCDQ
instrument.

Studies in North America have tended to support the
factorial structure of the instrument, but because
of their doubtful statistical basis and misleading
nature, the six global categories of climate have
come under considerable suspicion (Thomas, 1976,
p. 450).

Andrews (1965) attempted to conduct validity
studies on the OCDQ. "Assessment of the evidence presented supports the conclusion that the overall climate categorizations may be considered only as descriptions of commonly occurring patterns of principal-staff interactions" (p. 332). He concluded that "the subtests provided reasonably valid measures of important aspects of the school principal's leadership, in the perspective of interaction with the staff" (p. 333).

In 1975 Walden, Taylor, and Watkins lauded the value of the original Halpin and Croft studies and of the OCDQ concluding that this work was a welcome addition to educational administration. They did note, however, that "despite the number of studies in which the OCDQ has been used, some of the more important research questions which Halpin and Croft raised in conjunction with its development have not been addressed" (p. 87). Therefore, they developed one research extension and studied the effects. They wanted to see if schools with open climates would become more open with the passage of time and if closed schools would become more closed. The population included sixty-five elementary schools in the first year; five years later this number had decreased to fifty-five. The hypothesis was not supported, and the researchers suggested a link between the climate and the political flavor of the community. "As Halpin and
Croft put it, 'how open the climate of a school may be will depend at least in part upon how much openness the community itself considers safe'" (Halpin, 1966, p. 201).

Watkins along with Sanders in 1983 took another look at research involving the OCDQ to assess if additional recommendations in the original study had been addressed. They did not find significant additional knowledge to add to that found in previous research. They were interested in replicating the Taylor, Watkins, and Walden study. Their proposal was to compare teachers' and principals' perceptions of the organizational climate of the schools in which they were employed through a combined cross-sectional and longitudinal design. They used the same population from the 1966 and 1971 studies. The organizations were the same; the individuals involved, however, were changed (p. 193). The data showed that schools with open tendencies became more closed. Those schools with closed tendencies generally became more closed while eight schools became slightly more open (p. 196).

Consistency of the data over two study periods provided a basis for the conclusion that principals alone may be more limited in their influence in bringing about desired changes in schools than previously thought (p. 197).

It was also concluded that the impact of the school's external environment might be capable of overriding even the most capable leadership in the absence of
external support.

"In a comprehensive empirical attempt to appraise the OCDQ, Andrew Hayes urged revision of the instrument" (Hoy & Miskel, 1987, p. 229). He advocated that many of the items of the OCDQ were no longer measuring what they intended to measure and that some of the subtests were no longer valid. He also questioned the reliability of the subtests and suggested that a general revision was needed (Hayes, 1973). At Rutgers University research teams composed of Wayne K. Hoy, Robert Kottkamp, Sharon Clover, John Feldman, and John Mulhern were developed to address revisions and field studies. Their work addressed many of the original criticisms and resulted in the formulation of two new and simplified versions of the OCDQ for elementary and secondary schools--the OCDQ-RE and the OCDQ-RS (Hoy & Miskel, 1987, p. 229).

The development of the revised instrument involved two steps with original items evaluated first, and new items generated after. Next a pilot study was performed to deal with the unit-of-analysis issue, reduce the number of items, refine the items, and identify the factor structure of the revised OCDQ (Hoy & Clover, 1986, p. 96).

The researchers examined Halpin and Croft's rotated item factor matrix for the original sixty-four items. Items on subtests were compared, and those with low loadings were revised or discarded. After discarding twenty-four items in this procedure, "it was decided to broaden the scope of the OCDQ by developing items..."
focused on students and teacher-student interactions. Items were written to measure pupil control behavior and the academic press of the school" (Hoy & Clover, 1986, p. 97). No items were included unless they generated consensus on the following criteria: "1. the statement reflected a property of the school (the unit of analysis); 2. the statement was clear and concise; 3. the statement had content validity; and 4. the statement had discriminatory potential" (p. 97).

The researchers were especially concerned with the areas of hindrance, production emphasis, and aloofness because of "the conceptual clarity of these dimensions" (p. 97). In the original OCDQ hindrance was a teacher dimension; this study identified it as a principal characteristic. Items which described the principal's behavior as directing or controlling were added to the production emphasis dimension. "Aloofness was probably the weakest of the original OCDQ subtests, and in view of Hayes' evidence and conclusion that the items simply no longer measured aloofness, an entire set of new items was written" (p. 97).

A pilot study of the new OCDQ with one hundred thirty-one potential items was made using thirty-eight schools. Factor analysis was used to reduce the number of items. Because the pupil control and academic press items had lost their conceptual identity, Hoy and Clover reluctantly removed these items from the instrument. As
a result of the pilot study and factor analysis, forty-two items remained with six dimensions of school climate. These were subsequently grouped into two categories for principal behavior and teacher behavior.

The leader behavior of elementary principals was conceived in terms of supportive, directive, and restrictive behaviors. The interaction patterns of elementary teachers were described in terms of collegial, intimate, and disengaged teacher behaviors (p. 100).

Seventy schools were selected to participate in the test study of the instrument. The school sample was not randomly selected, but it did include a diverse and broad range of schools with only those having ten or more faculty members participating. "The conceptual underpinnings of the OCDQ-RE seem consistent and clear with two general factors – a measure of the openness of teacher interactions and a measure of openness of teacher-principal relations" (p. 107). These openness factors are orthogonal with four contrasting types of school climate as possible results. When both teacher and principal behavior are open, the school climate has been termed an Open Climate; when both sets of behaviors are closed, the resultant climate is a Closed Climate. When teacher behaviors are closed with an open behavior principal, the result is a Disengaged Climate. "Some schools have rigid principals who attempt to be restrictive and controlling while the faculty is cohesive, supportive, and open toward each
other" (p. 107). The resultant climate is known as an Engaged Climate. (See Figure 2)

All of the scales have high reliability coefficients, much higher than those in the original OCDQ. The subtests are reasonably pure in that the items load high on one subtest and relatively low on others when subjected to factor analysis (p. 108).

The construct validity was evidenced for each subtest.

The unit of analysis for all phases of this study was the school, not the individual. "One limitation of the original OCDQ was not overcome: the OCDQ-RE is restricted to social interactions among professional personnel" (p. 108). Since this revised version of the OCDQ was used in the present research study being reported, more detail and explanations of the categories of the instrument will be included in Chapter Three.

Specific research studies on organizational climate using the OCDQ will now be reviewed. In 1976 two different studies were completed which attempted to synthesize and review research on organizational climate. One was completed by Green on work from 1963-1972 focusing on the OCDQ in elementary schools; the other was by Mullins analyzing the use of the instrument in organizations other than elementary schools. Each found the OCDQ to be a popular research instrument; evidence supported the conclusion that it is a valid instrument. Replications and
Figure 2. Typology of school climates

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<th>Teacher behavior</th>
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<th>Closed</th>
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<td>Open</td>
<td>Open climate</td>
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<td>Closed</td>
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generalizations seem limited to those studies reviewed.

In 1982 Anderson reviewed the research on school climate concluding with a summary of methodological issues common to school climate studies and suggestions for dealing with concomitant problems (p. 368). She found many design and analysis criticisms including inadequacy of statistics, misinterpretation of statistical results, misuse of procedures, and inadequate design. Her suggestions for design alternatives included using relevant variables, stratification, indepth observations, longitudinal studies, and experiments. She concluded that the following analysis alternatives might be used: the method of partitioning the variance be changed, appropriate causal models for multilevel data be specified, and the two kinds of group effects be distinguished.

Following the development of the OCDQ, many research studies were generated using the instrument in the sixties. The work of Anderson was probably the first. He attempted to discover a relationship between the organizational climate of elementary schools and selected variables of the principals in 1964. He found that "some attributes of leader personality appear to be associated with leadership effectiveness" (p. 6). In addition he found that principals generally perceived their school climates to be considerably more
open than did the staff members. The principals' personal history data did not appear to be related to the climate dimensions.

Null completed research in 1965 on the relationships between the organizational climate of a school and personal variables of members of the teaching staff. He found that there were significant relationships between teacher attitude toward children and teacher perception of the eight climate dimensions and between personality factors and perception of the climate dimensions.

The object of a study funded by the United States Department of Health, Education, and Welfare in 1966 was:

to relate the control structure in public school systems as perceived by elementary school principals and teachers in four types of school problem areas to the dimensions of the organizational climate of the schools as perceived by principals and teachers (Otto & Veldman, p. 1).

They found that:

The principals' perception of the total decision picture in their schools was related to their OCDQ scores; principals with high self-assigned decision scores viewed organizational climate as high in aloofness, production emphasis, and thrust in the educational program area (p. 34).

The most striking contrast between the climate-decision analysis of principals and that of teachers is the absence of any clear relationship between teachers' evaluation of climate and their view of their own general autonomy; what emerges is a split of functions between teachers and principals--personnel development to the teachers and school management to the principals (p. 37).
Three studies which were completed in 1967 will be reviewed. Wall focused on the congruence of principals' predictions of teachers' perceptions of actual and ideal situations, teacher personal characteristics, and the ability of superintendents to identify relative standings of schools in their districts on the openness continuum. In thirteen of the sixteen cases, the latter hypothesis was accepted. Principals of more open climates were better able to predict how their teachers would respond than those in more closed climates. No relationships were found in the personal characteristics. Ranyard postulated in his research that the organizational structure of a school would co-vary with the climate of that school. He found no significant relationship in this hypothesis, nor did he find a correlation between the number of rules of a school and the closedness of the climate. Notovney applied the OCDQ to parochial schools. He found that "the large percentages of the parochial schools fell into open categories which may suggest that the traditional ecclesiastical concept of authority may be undergoing a transition on the parish-school level" (p. 111).

1968 studies relating organizational climate to student achievement revealed that no statistically significant relationships were found between the separate organizational climate dimensions and the
achievement of pupils; however, there was some evidence that open schools tend to be more related to high achievement (Miller, 1968; Alkin, 1968; Pumphrey, 1968).

Studies linking teachers' perceptions of organizational climate to informal organization and successful change found that there was no statistical relationship between the two variables (Heller, 1968; Helsel, 1968).

Leader behavior was related to organizational climate in studies completed by Owenby and by Wiggins in 1968. Generally, these researchers found that leader behavior and organizational climate were not related. Wiggins did find, however, that there was a significant relationship between the interpersonal orientation of the principal and the climate of the school.

The findings of this investigation clearly indicate the presence of a compelling organizational climate stability with the principal's behavior becoming more significantly related to the climate as the length of his (or her) incumbency increased (Wiggins, 1972, p. 105).

Owenby found certain personality factors of the principal to be correlated with climate, particularly openness.

The findings of three studies relating organizational climate to dogmatism will be reviewed. Both Levy (1968) and Farber (1968) found that
production emphasis could be positively correlated with
dogmatism. Levy also found a negative correlation
between thrust and dogmatism. None of the researchers
including Huff (1968) found dogmatism to be related
overall to openness or closedness of climate.

Studies linking organizational climate to job
satisfaction or personal characteristics of either
teachers or principals were also made. Hoagland (1968)
did find significant relationships between job
satisfaction and climate with higher levels revealed in
schools with more open climates. Personal factors of
degrees held or sex did not seem to be related. Winter
(1968) did not find sex, location of the school, or
size of the staff to be related to climate; he did find
six factors which were related: age, total experience,
degree held, assignment, certification, and experience
in the same school. Franklin (1968) only studied
factors related to the principal such as age,
experience, and sex and found no significant
relationships between these factors and climate. Muhm
(1968) found that some relationships do exist between
certain dimensions of organizational climate and
characteristics of the principals as perceived by
teachers. He had to reject, however, his hypothesis
linking the factors to open or closed climate types.

Studies by Roosa (1968) and Marcum (1968)
revealed differing conclusions. The latter found a
significant relationship between innovativeness and open climate schools while the former found no such relationship. Both found positive correlations with expenditures per pupil and a higher rate of innovative adoptions. A later study by Lokensgard (1969) also revealed no significant relationship between climate and innovation.

Studies by Piper in 1968 and Helwig in 1968 sought to study the effects of communication on the esprit factor of climate. The latter found no significance, while the former concluded that when more use was made of communication bonds, the staff members had a higher level of esprit and more homogeneous perceptions of the organizational climate of their school. "Even with the low level of overt behavior herein, that is, the frequency of oral or written behavior either by the principal or his (or her faculty, no significant differences were obtained" (Helwig, 1971, p. 54).

Leadership and decision making and the relationship to organizational climate were the focus for studies in 1969 by Kaup, Guy, and Watkins. The latter found:

a negative relationship between the concept of psychological distance of the school principal and 1. the openness of the organizational climate, 2. the morale as measured by the esprit dimension. 3. the authenticity behavior of the school principals as established by the thrust dimension of the OCDQ (p. 13).
Guy also found a positive correlation between esprit and leadership behavior but found no relationship between open and closed climates with leadership scores. Kaup specifically studied decision making and found no relationship between climate and decentralized decision making. He found that centralization of decision making was positively related to hindrance while esprit was positively related to decentralized decision making.

Several studies completed in 1969 attempted to seek evidence of relationships between organizational climate and individual school factors. A study by Rogers compared disadvantaged and affluent schools. He found a significant tendency in the disadvantaged elementary schools toward closed climates. Teacher behavior differed significantly in favor of affluent schools on measures of esprit and intimacy. Principal behavior differed significantly in favor of affluent schools on measures of production emphasis. A significant relationship was found between experience in education and climate perceptions of teachers in disadvantaged schools. Mancuso compared the climate of graded and ungraded elementary schools and found no significant difference in the organizational climate of the two types of schools, nor did he find a difference in the esprit subtest score. McLeod tried to determine if staff size would be related to organizational
climate and found a significant relationship between the size of the faculty and organizational climate. The relationship was directional with the smaller the school, the more open the climate. Although he worked with a very small sample, his data indicated that female principals tended to have more open climates. He also found more classroom experience and less principal experience were associated with open climates.

Lutjemeier (1969) found that teachers' interpersonal needs were not related to climate. Neither did he find that pupil-pupil relations correlated with climate. Sommerville (1969) completed similar research to determine if there was a correlation between climate and student personal variables. He found no significant differences but did find that students in the schools with the highest OCDQ ratings had higher self-concepts and higher levels of aspirations. The proportion of open climates was significantly higher in high socioeconomic schools.

Berends (1969) studied perceptions of the principal's personality as related to organizational climate. He found that climate scores related more to the teachers' perceptions of the principal's personality rather than to how the principal saw himself or herself. Concepts of trust and effort were positively correlated to open climates while
conservatism was found to negatively correlate with open climates. George (1969) also studied teachers' perceptions and found that this factor when related to organizational climate might be viewed as a function of the interplay between the teacher's personality and the structure of the organization.

Personal variables and organizational climate were studied by four researchers in 1970. Dawson's study did not find any significant relationships between the teachers' perceptions of climate and the authoritarianism of the principal. He also found significant relationships between sex and disengagement, between the number of graduate credits taken and thrust, between the number of years in the school, the number of years with this principal, and age of first teaching job with disengagement. There was also a positive relationship between the teachers' and principals' perceptions of esprit, intimacy, production emphasis, and thrust. Brickman also studied personality of the principal as related to climate and found that seventy-five percent of the principals with a positive personality administered schools with an open climate. When Tripak studied these personality factors, he found that the age of the principal and the number of years of formal education did not have a significant relationship to climate. Intelligence and personality traits were positively related. In general
the principals perceived their schools to be more open than did the teachers. Summers focused more on teacher variables and found that climate could be compared with those teaching behaviors which relate directly with discipline. More discipline type problems were found in open climate schools. He also concluded that the school principal would have at least partial success in manipulating the organizational climate of the school.

Studies relating climate to students were undertaken in 1970 by Braden, Panushka, Boyd, Allen, and Hartley. Braden found that teachers and principals in more open schools held more positive attitudes toward their students. Students' attitudes did not differ in open and closed climates. Similarities between the teachers' and principals' attitudes toward the students were more similar in those groups which held similar views of their respective climates. Panushka found no significant relationship between organizational climate and student achievement. There was some correlation between the school size and student morale when Boyd completed his research. Allen studied the sense of alienation of both teachers and students and found that the general expectation that openness of climate would be inversely related to a sense of alienation was supported by the teacher data, but not among the students. When Hartley studied student alienation, he did find some support for his
hypothesis that alienation would be greater in closed climate schools. "The inauthenticity of behavior which pervades schools with closed climates appears to provide a school atmosphere which is highly conducive to a sense of normlessness among the students" (Hartley & Hoy, 1972, p. 22).

Three studies were completed in 1970 where climate was related to innovation or change. Spicknall analyzed climate, innovation, and demographic variables. He found staff professional involvement to be the only variable related to innovation. Barden found two correlations to be reported here: schools which associated themselves with more risky movements tended to be more open climates and the variable of thrust was the single best predictor of change in education movements. Bamberger also found that there was a significant positive relationship between the degree of openness and the rate of adoption of educational innovations. He also found the same correlation between openness of climate and open-mindedness among the faculty.

Kenny and Rentz applied the OCDQ to a study of five urban areas (1970). Original responses were drawn from over one hundred schools on the East Coast, seventy-eight schools in the Mid-continent, and fifty-one schools in the South (p. 63). All schools were in urban areas having at least a population of
one million (p. 64). "These teachers' responses to the sixty-four items of the OCDQ were used to make a factor analysis of the items in order to obtain a set of factors, each of which could be identified by a group of items" (p. 64).

In 1970 Roberts attempted to relate perceptions of parents and elementary staff attitudes toward students and organizational climate and income. He found that staffs in the high and low socioeconomic areas and in open and closed schools possessed similar attitudes toward students and teaching. Parents underestimated the attitudes of all staffs; those in high socioeconomic areas expected better attitudes than they felt the teachers possessed. Gilman studied perceptions of support and climate and found no significant differences existing in the three climates in all teacher-perceived factors of support for the teachers' control of their authority spheres (1970).

Farinola (1971) tried to determine the relationship between the belief systems of faculty association leaders and organizational climate. He did find a significant relationship between the open-mindedness of the chief negotiators and the openness of their respective organizational climates. He did not find such a relationship with the association presidents. He did not find significant relationships in the size of the school and climate
although larger schools tended to be more open. When Melnick studied dogmatism and organizational climate in 1970, he found no significant relationship between the two. Nortman (1970) thought there might be a relationship between climate and short simulation type games in interaction and group dynamics. He found no significant relationships but did stress the value of such exercises in assessing climate and organizational behavior.

Two studies in 1971 studied the relationship between climate and student behavior. Bellows concluded that climate openness is related to student social behavior, but not conclusively. This was especially found to be true at the elementary school. When Parker analyzed his findings, he concluded that there was some evidence of positive relatedness associated between climate and indirect/direct ratios of teacher behavior and self-directive student behavior.

Two of the 1971 studies dealt with innovation and organizational climate. Bolen sought a relationship between climate and self-induced and externally-induced innovation. He found no significant difference in overall climate, nor did he find any difference when each of the subtests was eliminated as a variable. Stolz' findings showed principals of innovative schools to be less authoritarian than those of less innovative
schools. He also found that by comparing school climate types, a significantly large number of innovative schools fell into open classifications.

Studies relating climate to leadership or leader behavior revealed these findings. Principals who placed high evidence on human skills often had schools with more open climates (French, 1971). Directional relationships were noted between principal technical task emphasis and hindrance scores, and between principal human task emphasis and esprit scores of schools on opposite ends of the subtest score continuum (French, 1971). Schools scoring above the medium on the open climate scale had principals who scored higher in administrative decision-making, instructional leadership, and general administrative effectiveness (Casey, 1971). Leadership behavior as measured by the LBDQ was found to be significantly related to organizational climate as mapped by the OCDQ in a study completed by Brickner in 1971.

A review of the research in 1971 showed a number of studies were completed on climate and personal variables. Kocher found no significant differences in faculty size, principal's age, teachers' ages, teacher organization membership, or number of years of experience with organizational climate. Esporite found that there was no significant difference between age of the principal, sex of the principal, or length of
experience of the principal and climate. Fascetti found a significant relationship between school size, personal variables of the principal, and perceptions of climate by teachers and the principal. He did not find significant differences in perceptions of climate between black and white teachers. No difference was found between student racial enrollment and climate at the secondary level, but he did find a difference at the elementary level.

In a study of racial differences and climate, Bishop (1971) found more open schools among the white schools than the black schools. The black schools scored higher on the negative dimensions of climate: hindrance and production emphasis, and lower on esprit. The psychological health of the black principals was related to the climate of their schools. Negative dimensions of leadership (production emphasis, hindrance) were related to lower scores on measures of psychological health.

Relating health factors to climate was researched by Ponder (1971). He found that teachers who taught in schools with closed climates took significantly more sick days than those teachers who taught in open school climates. Students in open climate schools did not differ from students in closed climate schools in terms of the amount of school missed. Studies by Schleiter (1971) and Sinatra (1971) found a positive correlation
between openness of climate and compatibility with other staff members or interpersonal relations. Schleiter found no relationship between teacher satisfaction and organizational climate. Warren's (1971) research also substantiated this finding of no significant relationship between job satisfaction and climate. Blythe (1971) found that teachers who were dissatisfied with the school-community inducements provided them tended to perceive the climate of a school as open, whereas teachers who were satisfied with these inducements tended to perceive the climate as closed.

Kelly (1971) sought to relate tenure of the principal to climate and found that there was a significant relationship between the origin of the principals and the hindrance subtest and between the tenure of the principals and the consideration subtest. Climate tended to be most open when the principal came from the outside and had short tenure.

Johnson (1971) sought to find if a planned professional development program that focused on communication and decision making would alter the climate of a school over time. He did find that there was a change in the climate dimensions of disengagement, hindrance, and aloofness, but not in the other areas.

Studies of students in disadvantaged schools were
made by Gies and Leonard and Madden (1971). The latter found that overall achievement of pupils in the language arts area was not significantly related to climate. He did find, however, girls achieved higher in open climates, while boys scored higher in closed climates. In the former study, it was found that teacher values concerning disadvantaged pupils were independent of climate.

As perceived by teachers, the values of urban elementary school principals concerning disadvantaged pupils are higher for teachers who perceive themselves to be working in an open organizational climate compared to a closed organizational climate (Gies & Leonard, 1971, p. 157).

This finding would seem to indicate that:

- teachers believe their own values concerning disadvantaged pupils tend to be more positive or higher than their principal's; this may constitute a dysfunctional element operating within the school which is a potential source of faculty-administrator conflict and may interfere with the attainment of organizational goals (Gies & Leonard, 1972, p. 256).

Prenoveau (1971) found evidence in his study to confirm that behaviors in the classroom are linked to social interactions in the school. Further, he concluded that the level of morale in an elementary school is related to organizational climate of that school. DeAngelis (1971) found a positive relationship between a staff member's perception of climate and his or her philosophy of human nature as measured on the substantive dimension, but he found no such
relationship among the principals. Rank (1971) found that staff perceptions of climate were not related to student perceptions of environment.

Jaworowicz (1971) tried to determine if open-space school design altered the patterns of social interaction between teachers and the principals. He noted no significant divergence in teacher perception of climate changes in the open-space schools with the traditional schools. A significant relationship was found between increases in principal dogmatism-opinionation and decreases in the social needs satisfaction of the teachers.

Studies of teacher perceptions and participations as related to climate were made in 1972. Adelson found a significant relationship between teachers' manner of participation in decision making and the openness of the climate. Berstein found that within a given school, there were significant relationships among individual teachers' perceptions of their participation in decision-making, their perceptions of climate, and their perceptions of organizational output. Nelson found that teachers perceived a high open climate in schools led by principals whom the teachers perceived as reflecting a high level of reinforcement behavior. He also found that the correlations between teachers within schools suggested that a portion of the variance of the measure of this perception of climate and
reinforcement could be attributed to the personality of the teacher. Age of the teacher was also a characteristic that affected perception of certain climate factors and principal reinforcement behavior.

Maggard (1972) compared the perceptions of teachers with those of the principals. He found that these two groups differed significantly in how they viewed their respective climates, and there was a strong tendency for the principals to perceive climate in a more open direction. Climate did not seem to be related to socioeconomic status or to school size although teachers in smaller schools seemed to score higher on certain subtests such as intimacy or esprit. More openness of climates was found among male principals, young principals, and the least experienced principals. Knodt (1972) concluded that the OCDQ incorporated factors which can and do have an effect upon the perceptions which elementary teachers hold with regard to the role of the elementary teacher.

When Moffett (1972) investigated the changes occurring in the perceptions of teachers of climate as a result of the implementation of a system of instructional evaluation, he found no significant differences. The study found insufficient evidence to justify principal avoidance of the use of instructional evaluation on the grounds that it has an undesirable effect upon the organizational climate.
Taylor (1972) attempted to examine a research concern of Halpin in the original OCDQ study. He tried to determine if schools with open climates tended to become more open over time. He found, however, that schools tended to remain in the same relative position with respect to each other even though he did find that all of the schools included in the study tended to shift toward the closed end of the continuum.

In 1973 Summers hypothesized that a statistically significant relationship would be found between organizational climate and the way teachers behave in the classroom. Besides the OCDQ he utilized the Flander's System of Interaction Analysis and observations of verbal behavior. He found no differences between any of the teacher variables and the open climate. "These findings suggested that in the open climate, where acceptance of ideas from both the group and the leader are evident, it is likely that teachers teach the way they please without fear of reprisal" (p. 171). The closed climate provided greater predictability in terms of teacher behavior. "The closed climate was principally characterized as one in which all members of the organization were generally apathetic. The leader constrained the emergence of leadership acts from anyone but himself" (or herself) (p. 173).

"The purpose of a study by Seidman (1975) was to
investigate the relationship between physical openness and climate openness to determine whether organizational climate and operational life are related" (p. 345). She did not find that open climates occurred more frequently than closed climates.

The biographical data revealed no major differences in the overall pattern of characteristics peculiar to principals of either open or closed-tendency schools. The percentage of female principals and principals with advanced education was higher, however, in schools having open characteristics (p. 349).

Studies involving principal behavior and beliefs were conducted in 1975. Huddleston found there was not a significant correlation between teachers' perceptions of climate and principals' perceptions of their leadership behavior, nor was there any relationship between perceptions of climate, leader behavior, or communications between principal and teacher. Calvery did find significant differences between the teachers' perceptions of the technical competencies of the principals and the climate of the school. As the competency level rose, the degree of closedness of the climate increased. When Crates studied the belief systems of the principals, he found that the perceptions of the principals in regard to their own belief systems, intolerance, and authoritarianism had no effect on the organizational climate in their buildings as perceived by teachers and students.

Three studies completed in 1976 correlated
climate with differing variables than had been found in previous research. Bateman tried to determine the change in school climate generated by in-service training directed toward those factors considered closed in an elementary school. He found significant changes in only two areas: hindrance and consideration. Grissom found that the self-concept of elementary teachers varied inversely with the degree of closedness of the climate. Lewis studied the relationship between the perceptions of principals and teachers in schools concerning the selection process for staff and the climate of the schools. Although he found no meaningful correlations, he did conclude that perceptions about a process in a school are related to the climate of that school.

In 1977 Rohr directed a study to compare selected characteristics of teachers, principals, and schools. He found that these characteristics could not be used to predict climate nor did the characteristics affect climate. Wide variations of age, experience, and sex were found in both open and closed schools, and climates were similar for urban and rural areas. Magee found that as the school size increased, the climate became more closed. He also found that rural schools tended to be more open than urban schools. The more closed the school, the more the teachers viewed structure as being a constraint on climate. Crum
studied self-concept of the principal as related to climate; he found no relationships between the two variables.

Sanders completed a longitudinal study of climate to assess changes in 1977 using data from 1966, 1971, and 1977. She found that open climate schools did not tend to become more open with the passage of time and found a slight shift in all schools to become more closed in the same time frame. Also in 1977 Kraegel made a study of climate and dogmatism and found no significant relationship between the two although he did find a slight negative correlation.

Powell (1978) tried to determine if there were predictable variables of elementary principals which could be related to organizational climate. Although she found no statistical significance, she did conclude that the Group Enhancer theme from the Administrator Perceiver Interview appeared to be the most significant theme for predicting traits of administrators who could provide schools with open climates.

Several studies completed in 1979 were directed at leader behavior and climate. Kneale found that leader behavior indexes appeared to be congruent with the types of climate perceived by each faculty. Differences in descriptions of climate and leader behavior were found among the schools. She also found that teachers desired to participate in the decision
making process in both types of climate. Haggerty studied leader situation and Machiavellianism and found that the Machiavellian orientation of principals was negatively related to climate. He also found that the degree of structure in leader situation did not account for the variation in climate.

Boyles (1979) studied personality characteristics of teachers and climate. She found that there were significant correlations between personality factors and climate. There was a negative correlation between tenseness and openness in climate. She also found a correlation between thrust and an autonomous climate. Deck (1979) found that in elementary schools with other than closed climates, there was a significantly greater congruence between the teachers' and the principal's perception of the teachers' responsibilities. The same finding was true in the relationship with the subtest of esprit.

Plimpton (1979) studied student morale judgment as related to climate. He did not find higher levels of moral judgment in open climates, but he did find a statistical significance to the subtest of aloofness when lower levels were found.

The last 1979 study to be reviewed tried to determine the relationship between teacher loyalty and climate. Covato found a significant, positive relationship between the two with disengagement and
hindrance being inversely related and with thrust and consideration positively related.

Wetzel in 1980 found that there was a significant relationship between climate and self-actualization. The certified personnel's perceptions of climate varied with a change in their self-actualization. In the same year, Smith sought to determine the effect of implementing an accountability plan on a school's climate. She concluded that the eight dimensions of climate were not affected, but the overall climates differed. Most of the schools moved toward the closed end of the continuum. Migliara made a similar study involving implementation of an audit program in a school system. He found no differences in climate between the experimental and control groups and no changes in climate after implementing the plan.

Kabiry (1980) found no relationship between the school's organizational climate and the students' perceptions of classroom climate. A study of climate changes as a result of desegregation of staffs was conducted by Simon (1980). He found that desegregation did not affect the climate of the schools but did affect teachers' perceptions of their working conditions and morale.

Two studies on leader behavior were also conducted in 1980. Monk found most teachers and principals viewed the climate as being more closed at
the end of the year. Both groups also viewed the principal as becoming progressively more formal and more impersonal throughout the year. Leader behavior of male and female principals was compared by Rogers. She found that no significant differences could be attributed to either climate or leader behavior. Morale and intimacy were higher in schools with female principals. They were also more aloof and more considerate.

Another longitudinal study was conducted by Dobbs in 1980. Her findings concurred with those of earlier researchers in that all schools in the survey tended to move toward the closed end of the continuum. She did not find any other variable as contributing to the movement (age, sex, experience, race).

Hilliard (1981) studied climate and adaptability of the school. He found that open climate schools are more adaptable. He also concluded that short tenure principals had more adaptable schools, and that principals with outside origin had more adaptable schools and more open climates than those of inside origin. The relationships between teacher stress, attitudes toward teaching, and climate were reviewed by LeMaster (1981). He found significant relationships existing between teachers' self-perception of stress and attitude toward teaching and between self-perception of stress and climate. He
did not find, however, a relationship between attitude toward teaching and climate. When Leonard (1981) studied leadership styles and climate, he found that differences did exist between self-reported and teacher perceived styles. He also found agreement between the teachers' perception of principal's leadership and climate.

Agnew (1981) found significant relationships between student achievement and openness of climate. Esprit was the climate dimension correlating most frequently. A study of the relationships between teachers' perceptions of the role of the principal and climate was completed by Sline in 1981. She found a significant relationship between the behaviors of the principal and the climate of the school under actual and ideal conditions. The principal behaviors of aloofness and consideration affected the climate most significantly.

The last 1981 study to be reported was one done by Forte comparing the climates of Individually Guided Educational schools with non-IGE schools. He did not find a difference in climate between the two schools, but he did find a difference in the consideration subtest with IGE schools achieving a higher score.

Several correlational studies were completed in 1982 with different variables and organizational climate. Whitaker-Braxton studied self-concept of
students and found that while there were differences between elementary schools in terms of organizational climate and student self-concept, these differences were not significant. Burke's study could not support a relationship between leadership style and climate. He did find, however, that more of the climates of schools in his study were closed rather than open. He also found a direct correlation between openness of building climate and higher satisfaction scores. Davis found no significant differences on congruency scores between teachers and principals concerning teacher evaluation and the types of climates.

A study by Birch (1982) on the relationship between teachers' growth and development and climate found no support for the major hypotheses which predicted relationships between openness of climate and teachers' developmental activity; school enrollment size and teachers' developmental activity; and school enrollment size and climate.

The last study to be reported here was a comparison of the OCDQ and the Charles F. Kettering Ltd. School Climate Profile which was conducted by Huddleston. Data analysis indicated that no matter which scoring method was employed, these two instruments did not produce similar estimates of climate. Therefore, he concluded that a school's climate profile is at least partly a function of the
The findings from three studies conducted in 1983 will be reported. Ausejo conducted research on elementary principals' leader behavior and climate. She found a consistent trend of higher leader behavior scores to be correlated with open climates and high teacher morale. Abel studied the parent perceptions of school boundary permeability and climate. He found a significant relationship between the two variables and suggested that climate might be used as a controlling factor related to school boundary permeability. Jones studied the relationships among professional educators' attitudes, students' attitudes, and climate; he found no significant differences in the attitudes and climates.

Smith (1984) studied the relationship between climate and clinical supervisory practices of the elementary principal. It was established that as the perceptions of the principals' use of clinical supervision increased, the faculty's esprit and intimacy increased, the principal's consideration and thrust increased, and the faculty's perception of hindrance and disengagement decreased. He also found a significant relationship between openness of climate and the perception of the use of clinical supervision.

Steinberg (1984) conducted research to determine the relationship between risk taking and climate
factors. The only significant correlation found was between risk taking and esprit. As risk taking increased, so did esprit. Another 1984 study was conducted by Ronnenkamp seeking a correlation between climate and job satisfaction. He found a direct relationship when applied to the combined responses and a diminished relationship when responses were partitioned into subgroups. Job satisfaction was more related to climate dimensions of teachers than those of the principals.

Riffe (1985) studied student achievement, teacher stress, and climate. He found that the climate factors having significance in predicting student achievement were disengagement and esprit. He also found no significant relationship between teacher stress and climate as it related to student achievement. Vrable tried to determine the relationship between organizational climate and personal characteristics of the principals. The results suggested that the way a leader behaves does affect the building climate. He found a statistically significant difference between the principal's perception of the climate and that of the teachers'. In most cases the principals rated the climate more openly than did the teachers.

Truelove (1985) studied the difference between the climate of those schools utilizing quality circle programming and those which do not have quality circle
programs. She found no significant differences between the two groups. A 1986 study by Meeker found a moderate positive correlation between openness of climate and teacher trust. There was also a statistically significant difference for elementary teachers as opposed to middle school teachers.

The last studies to be reviewed here are those which relate organizational climate with pupil control ideology, the next area to be reviewed. In 1969 Appleberry studied the relationship between these two variables. He found that schools with relatively open climates were more humanistic in their pupil control ideology. He also found that the more open a school climate was, the more humanistic the school was. Although principals serving in open schools were not significantly more humanistic than those serving in closed schools, the difference was in the predicted direction. Teachers serving in open schools were more humanistic than those serving in closed schools. The hypothesis that principals would be more humanistic than teachers was reconfirmed in this study.

The rationale for the major hypotheses of this study stressed the authenticity of interactions among professional staff in schools with open climates and inauthenticity of the interactions among professional staff in schools with closed climates (Appleberry, 1971, p. 9).

Additional analysis of the data in this study found that:
humanistic schools were more likely to have teachers who worked well together, high morale and satisfaction, principals who dealt with teachers in an informal manner, principals who did not supervise closely, and an atmosphere marked by openness, acceptance, and authenticity in teacher-principal interactions (p. 13).

"The strength of the correlation found to exist between the openness of the school and the pupil control orientation of the school may have some theoretical import" (Appleberry & Hoy, 1969, p. 83). If student control is a feature of the school and if statements concerning beliefs correspond with behavior, "then the pupil control orientation of the school may be another important correlate with the climate of public schools" (p. 84).

Another study on these two variables was completed in 1969 by Keefe. He found also that when the humanistic and custodial groups' perceptions of organizational climates were compared, the humanistic group described an open climate and the custodial group described a closed climate. He did not find a statistically significant difference in humanistic and custodial control with other variables of age, sex, level of attainment, or experience.

Waldman compared these two variables in 1971 and found that the more open the climate, the less custodial the pupil control orientation of both the school and the teachers. It was not confirmed, however, that the more open, the less custodial the
principal was. Related findings showed that the more dense the population and the greater the number of minority students, the more custodial the school was.

In 1973 Helwig and Smallie studied three operationalized constructs, dogmatism, pupil control ideology, and school organizational climate.

They subjected these to prediction through the multiple correlation statistics. They also conducted reliability tests on the PCI and Dogmatism scale to determine if these two instruments did have internal consistency (p. 57). The data confirmed this hypothesis. The second hypothesis that openness of dogmatism and pupil control ideology would predict openness of climate was not upheld.

In 1974 Lunenburg and O'Reilly examined the influence of teacher dogmatism and organizational climate on pupil control ideology. Open-minded teachers were more humanistic in their pupil control ideology than closed-minded teachers. "The hypothesis of a relationship between humanism and custodialism in pupil control ideology and openness and closedness of organizational climate was supported" (p. 33).

Washington (1981) compared these two variables in open education and traditional schools. He found that teachers in open education schools were more humanistic in PCI than teachers in traditional schools; open education schools had a more open climate than traditional schools, and schools with open climates.
would have teachers who were more humanistic than those with closed climates.

In 1983 Burgess found a low, but significant, correlation between pupil control ideology and organizational climate. She concluded that her study provides a basis for using pupil control ideology as a qualified predictor of climate in schools. She stated that it was likely that teachers with humanistic orientations would tend to exhibit behaviors found in open climates.

Hogg (1984) used pupil control to study student alienation and discipline problems as related to climate. He found that custodial pupil orientation was directly related to an increased sense of alienation in students. School climate also significantly correlated with student alienation. Neither school climate nor student alienation were directly significantly related to student acts of misbehavior.

Lunenburg (1985) compared pupil control ideology, pupil control behavior, and school climate research. "Studies he reported demonstrated the fruitfulness of the construct of pupil control ideology/behavior as a school climate descriptor with direct implications for pupil-teacher relations" (p. 296). He concluded that "Given the salience of pupil control in schools, the humanistic-custodial framework provides a general picture of the school's atmosphere" (p. 296). Schools
should work to train teachers in humanistic pupil controls and use the PCI to screen prospective teaching candidates.

Another study in 1985 compared pupil control ideology with teachers' perceptions of actual and ideal climates (Ward). The teachers involved in this study were found to be relatively humanistic in their ideology perceiving their climates as more open. A significant low negative relationship was found between the PCI and each of the eight climate dimensions. A significant positive relationship was found between PCI and the perceived difference between actual and ideal climate conditions of the trust climate dimension.

Two studies were found completed in 1986. Coyle studied the relationship of pupil control ideology to teacher value orientations and perceptions of organizational climate. She found that there was a significant relationship between PCI and traditionalism in values. She found no significant relationship between openness in climate and PCI, nor did she find a relationship between value orientation and openness of climate as they related to PCI. Adding managerial system and student academic achievement to PCI and climate was the work of Hughes. He only found a significant difference in school climate perception in students from high achieving schools. He found no differences between these two groups on pupil control
or management. Comparing teachers and principals, he found significant differences between their perceptions of climate, PCI, and management.

In 1987 the OCDQ-RS (the revised version of the OCDQ for secondary schools as developed at Rutgers University) was used along with PCI to measure relationships between teacher expectancy motivation, open-to-closed climates, and pupil control ideology (Kottkamp & Mulhern). "Climate openness and humanism in pupil control ideology were both related to force of expectancy motivation" (p. 9). These results tend to support the importance of relationships between organizational variables and motivation.

That pupil control is a major issue in the social system of the schools seems invariant. What varies is the difficulty the adults have in controlling students in a particular setting and the means employed to do so. PCI rationalized and justified the means used to control students (p. 11).

**Pupil Control Ideology**

"Another way to conceptualize the social climate of the school is in terms of dominant control patterns that teachers and principals use to control students" (Hoy & Miskell, 1987, p. 242). Willard Waller emphasized both the structural and normative importance of pupil control in the school culture in his 1932 description of the school as a social system. In 1956 Landis described pupil control as a form of social control, the process by which social order is
established and maintained (p. 4). In initial studies at Pennsylvania State University, Donald J. Willower and Ronald G. Jones sought to clarify the social behavior of an educational organization through description and theoretical concept formation. They found that "while many other matters influenced the tone of the school, pupil control was a dominant motif" (1963, p. 107). They concluded that pupil control is the integrative theme which binds the general climate of the school and all relations therein.

The concept formation and research on pupil control was initiated by Willower, Eidell, and Hoy at Pennsylvania State University in 1967. "The purpose of their inquiry was to test a number of hypotheses concerning the pupil control ideology of public school professional personnel" (1973, p. 3). For the purposes of their work, they adopted a:

- typology employed by Gilbert and Levinson in the study of the control ideology of mental hospital staff members concerning patients. They conceptualized a continuum of control ideology ranging from custodialism at one extreme to humanism on the other (p. 5).

In adapting the model to the school organization, the researchers developed prototypes of both orientations toward pupil control.

Custodial orientation can be viewed as the traditional school setting characterized by rigidity, structure, and maximum control. "Students are
stereotyped in terms of their appearance, behavior, and parents' social status; they are perceived as irresponsible and undisciplined persons who must be controlled through punitive sanctions" (p. 5). Impersonality, watchfulness, and lack of trust permeate all relations between staff and students. The organization is viewed as autocratic with a "rigid pupil-teacher status hierarchy" (Hoy & Miskel, 1987, p. 242).

"The model for the humanistic orientation is the school conceived of as an educational community in which students learn through cooperative interaction and experience" (Hoy & Miskel, 1987, p. 243). Both students' learning and behavior is seen from psychological and sociological viewpoints rather than moralistic. The goal of all discipline is that through the process students will develop self-discipline where they feel responsibility not only for themselves, but also for others and the group as a whole.

The concepts of custodialism and humanism can be useful in addressing educational viewpoints toward pupil control. The terms can be used in both ideology and in terms of behavior.

As an operational measure of pupil control ideology, an instrument called the Pupil Control Ideology Form (PCI Form) was devised with a final form consisting of twenty items with five response categories for each ranging from "strongly agree to strongly disagree" (Willower, Eidell & Hoy, 1973, p. 10).
Construction of the instrument began by writing fifty-seven items concerning pupil control. These were revised and modified numerous times through observation, field testing, and interviews. "An item analysis to determine the discriminating power of each statement was completed using biserial correlation techniques" (Willower, Eidell & Hoy, 1973, p. 11). Reliability and validity studies were made with high correlations found. After testing the PCI Form, these researchers concluded that teachers were more custodial than principals; elementary principals were less custodial than secondary administrators. Experience tended to make one more custodial, and closed-minded educators were more custodial than open-minded ones.

Pupil control not only gives information about teacher ideology and teacher-student relationships, but also provides a broader picture of teacher-teacher and teacher-administrator relations. "Given the importance of pupil control, the custodial-humanistic framework provides a general picture of the school's character, one that can yield predictions about the nature of the school in a number of important areas" (Hoy & Miskel, 1987, p. 244).

In 1974 the original monograph of the Penn State Studies was reprinted with an annotated bibliography of nearly seventy pupil control studies affording an opportunity to compare pupil control ideology with
teacher predispositions and characteristics, organizational elements, perceptions, and community viewpoints (Willower, 1974). Research studies will be reviewed next beginning with the work of Hoy in 1967.

Using two hundred eighty-two student teachers at Oklahoma State University, Hoy administered the PCI Form. The instrument was first administered before the student teaching experience and then again near the end of the experience. Hoy found that the pupil control ideology was significantly more custodial after student teaching than before.

A basic assumption underlying the proposition advanced in this study was that the sub-culture of the public schools would emphasize a more custodial pupil control orientation than that acquired by the student teacher during formal college preparation (Hoy, 1967, p. 154).

Hoy advocated that:

public school teachers go through a double socialization process with initial socialization to professional norms and values occurring during college preparation which focuses on the ideal; the second phase begins as teachers enter the real teaching world where the internalized ideal images of the teacher role may be in conflict with the school subculture (Hoy, 1968, p. 315).

In 1968 Hoy replicated his original research using one hundred fifty-two of the original subjects. In this study Hoy found that teacher socialization results in the adoption of a more custodial pupil control ideology. "The data suggested that teachers were less susceptible to the socialization process of the teacher subculture during their initial year of
teaching" (Hoy, 1969, p. 263).

In 1969 Roberts completed a similar study in the change of ideology in student teachers and also compared their perceptions of the cooperating teacher's ideology. He found the student teachers becoming more custodial with experience and also found significant differences in the PCI scores depending upon the level of socialization pressure. He concluded that "if humanistic pupil control ideology is desirable, care must be taken to select cooperating teachers whose attitudes and beliefs toward pupil control are consistent with this desired ideology" (Roberts & Blankenship, 1970, p. 319).

Both Gossen and Klucher compared socioeconomic status with PCI in 1969. The former found that teachers in low socioeconomic status schools were more custodial in their PCI than their counterparts in middle or high socioeconomic status schools. Klucher found that teachers in high socioeconomic status schools were more custodial while principals in such schools were less custodial. He also found that secondary teachers and teachers with more experience were more custodial.

Three studies dealt mainly with pupil control at the junior or senior high school level. Warrell (1969) found that teachers at the senior high were more concerned with pupil control than those at the junior
high school level. He did not find, however, that
teachers transferred from junior high school to senior
high school would change their orientations in the
direction of other senior high school teachers. Jones
(1969) studied the relationship between bureaucracy and
PCI and found that teachers in high authority schools
were more custodial than those in low authority
schools. He also found that men were more custodial
than women, but that size of the school did not affect
control. Duggal (1969) found that student unrest was
related to custodial pupil control.

In 1970 Jones conducted a study of biology
teachers and their pupil control ideology. He found
that teachers having a more humanistic ideology used
classroom activities as recommended by the Biological
Curriculum Study Program more often than those who had
a more custodial orientation. "Some teachers are
reluctant to adopt innovative practices in the
classroom for fear of being charged as soft on
discipline" (Jones & Blankenship, 1972, p. 281).
Therefore, Jones concluded that "teacher training
programs should include activities that would tend to
lessen the teachers' concern in this area of rigid
control of students" (Jones & Blankenship, 1970,
p. 265).

The relationship between PCI and observed verbal
behavior of selected secondary teachers was studied in
1970 (Rexford). His results did not yield a significant relationship, but the results were in the predicted direction. He concluded that the amount of teacher talk and the direct influence of teacher talk were related to PCI. Teacher talk can be either custodial or humanistic in content. "Custodial teachers gave directions more than five times as much as humanistic teachers did, and student initiated talk occurred twice as much in the humanistic teachers' classes" (Rexford, Willower & Lynch, 1972, p. 80).

Some studies in 1971 focused on teacher influence, self-esteem, job satisfaction, or sense of power. Goldenberg found that the proportions of indirect, direct, and pupil verbal behaviors were not different for humanistic or custodial teachers. There were significant differences, however, in accepting student ideas or in student-initiated verbal behavior. Zelei found that a custodial pupil control ideology was associated with a low sense of power. She inferred from her results that in the hierarchical structure of the school, teachers are often placed on a level in direct relationship with the students, and pupil control thus emerges as an adoptive mechanism to control the students and maintain the status of teachers. McAndrews did not find a correlation between self-esteem and pupil control ideology.

When Packard (1971) examined pluralistic
ignorance, he found that teacher estimates of ideology were more custodial than teacher self-scores. He found that pupil control ideology was understood for counselors, but not for teachers or principals. Yuskiewicz (1971) concluded that teacher job satisfaction is directly related to the congruence between the pupil control ideology held by the teacher and the pupil control ideology of colleagues as perceived by the teacher. In addition he found that elementary teachers and those with less than five years of experience were less custodial than secondary teachers or those with more than five years of teaching. The more experienced the teachers were, the more satisfied they were with their jobs (Yuskiewicz & Willower, 1973, p. 236).

Budzik (1971) conducted a study of teacher perceptions and found that as teachers increased in experience, they moved toward the custodial end of the continuum. Female teachers viewed their orientation more often as humanistic. Male teachers and those with more experience tended to rate the ideology of their principals as humanistic. Helsel (1971) tried to seek a relationship between values orientations and PCI. He found a positive relationship between traditionalism in educators' value orientation and custodialism. "The results of this study suggested that personality factors may be important determinants of educators'
ideological orientations toward pupil control" (1971, p. 29).

Heineman studied school principals in 1971 and found that increased educational levels tended to make principals more humanistic. Abrams (1971) found that the principal's score on the PCI form was the single most significant predictor of attitude toward decentralization. Principals with a more humanistic orientation tended to support school decentralization; these subjects tended to be younger principals from schools with a high minority population.

Student teachers, cooperating teachers, and education instructors were studied by Longo and Hamil in 1971. The latter found that student teachers did not become more custodial during their student teaching experience. The former found that there were significant differences in PCI between cooperating teachers and education instructors with the latter being more humanistic in orientation.

It is possible that being out of the classroom erodes one's sense of relativity about what is possible within it, but a more realistic implication is that the compulsory nature of the pupil-teacher relationship requires a more custodial approach on the part of those who deal directly with children (Longo, 1974, p. 145).

He also found a positive correlation between dogmatism and pupil control values.

Rafalides made a study of student alienation and pupil control (1971). She found that the pupil control
orientation of the school related to the student sense of normlessness, powerlessness, and isolation. The relationship between student self-estrangement and pupil control orientation of the school was in the predicted direction, although it was not significant. She concluded that "school imbued with a custodial pupil control orientation generally does not provide an atmosphere conducive to positive commitment on the part of students to their teachers and school" (Rafalides & Hoy, 1971, p. 110).

Williams and Leppert each conducted studies of personality and personal variables of teachers as related to PCI (1972). The latter found that no significant relationships emerged on the twelve personality dimensions he included and PCI.

The fact that both personality and demographic variables were entered in the regression equation predicting custodialism in pupil control ideology tends to support Gilbert and Levinson's (1956) broader view that ideology is a function of both personality and social system factors (Leppert & Hoy, 1972, p. 59).

The former concluded that high levels of dogmatism and local-cosmopolitan attitude were associated with a more custodial pupil control ideology. The following groups were also found to be more custodial: educators with more teaching experience, males, secondary educators, teachers over principals, school size. He found no relationship between race and PCI or pupil density and PCI.
McBride (1972) conducted a similar study using middle schools and junior high schools and found that junior highs were more custodial with higher absent rates. He found higher rates of suspension in custodial schools and found males to be more custodial than females. Teachers were more custodial than principals. A positive correlation was found between the number of minority students in the school and custodialism, and a negative correlation was found between district wealth and custodialism.

Drozda studied the impact of socialization on the PCI of beginning teachers as a result of their first year of experience. He found that closed-minded novice teachers are more susceptible to sources of influence in the school socialization process than are more open-minded teachers. He also found that the difficulty of the teaching situation and the control ideology of the experienced teachers were the variables of most value in explaining the change in the beginning teachers' PCI.

Relating PCI to classroom behavior and climate as perceived by pupils was done by Bean (1972). He found that teacher sex was an important variable between the PCI indicated by the teachers and their classroom behavior. There were significant correlations for the male teachers, but not for the females.

A climate characterized by higher levels of cognitive activity, opportunity for divergent
thinking, encouragement for student initiative, and student enthusiasm appeared to be associated with a more humanistic PCI, while a teacher-dominated, lecture-oriented class climate with passive listening roles for students, high emphasis on grades and tests, and little student enthusiasm seem to be more typical for men teachers having a custodial ideology (Bean & Hoy, 1974, p. 68).

Two studies emerged in 1973. Halpin, Halpin & Goldberg sought to find out if creative teachers were more humanistic.

The results of the study indicated that the verbal creativity measures of fluency, flexibility, originality, and creative personality measure were all significantly related to pupil control orientations; the hypothesis that the more creative teacher may be characterized as a humanist is supported by the data (p. 285).

Jury studied self-actualization and found that self-actualizing teachers were more humanistic in their pupil control beliefs. He also found that secondary teachers, males, and more experienced teachers were more custodial in PCI.

When Barfield and Burlingame studied teacher variables in 1974, they found that "a custodial orientation toward pupil control was prevalent among teachers with a low sense of efficacy as well as teachers in low SES schools" (p. 9). Additionally, their study suggests that PCI may be an indicator of the bureaucratic structure within the school. Another study linking school SES to PCI was conducted by Brown with Willower and Lynch in 1974. In their study, "it must be concluded that race and the interaction of race
and social class do not have a significant effect on
teacher pupil control" (p. 243).

Rose sought to find a correlation between the
teachers' sense of power and PCI (1974). After
reasoning that teachers who felt secure in their
position would be less susceptible to pressure on their
behavior and could function more consistently with
their own ideologies, he found no significant
relationships (Rose & Willower, 1981, p. 387). In the
same year Waple studied ressentiment (student feelings
of hostility toward the schools). He found
statistically significant levels of ressentiment in all
schools studied with a correlation to custodialism.
Gipp (1974) found a relationship between the degree of
traditionalism in teacher perception of community
education viewpoint and the degree of custodialism.

Three studies completed in 1975 will be
highlighted here. Licata and Willower surveyed
"student and teacher attitudes toward student
brinkmanship, behavior which challenges the authority
system of the school while avoiding negative sanctions"
(p. 1). The students in the more custodial school were
considerably more euphoric about student brinkmanship
than the students in the humanistic school (p. 7). In
addition, students in the custodial school reported
student brinkmanship to be more exciting and more witty
than their everyday class experiences; the other
students attending the more humanistic school reported the experiences to be more humorous and more monotonous (p. 9). Ens compared ideology with behavior as perceived by students and teachers. He found a positive relationship between the teachers' ideology and their perception of behavior. The correlation between teacher ideology and student perception of behavior was also positive. No differences were shown between male and female teachers nor between experienced and less experienced teachers. Teacher self-acceptance and the acceptance of others was studied by Brenneman. He found that "acceptance of others, teaching level, and teaching experience were the most significant predictors of pupil control ideology" (Brenneman, Willower & Lynch, 1975, p. 16). Elementary teachers were more humanistic, and female teachers were more accepting of others. Male and female teachers did not differ on self-acceptance.

Ford (1976) found in her study that teachers with high levels of concern were found to be more humanistic in PCI and to have significantly more social power attributed to them by their students. Student perceptions of teacher social power base were also found to be positively related to teacher PCI. Kelton (1976) found that children's sense of responsibility was not related to PCI, race, or SES. PCI did not seem to be related to the SES of the school nor to the
racial enrollment of the school.

In 1977 Lawrence studied teacher perception of student threat to teacher status. He did find a relationship with secondary teachers being more custodial and indicating greater perception of threat. "Both personality and social-organizational causes are at work; a pattern characterized by perceptions of threat fits with the view that others should be rigidly controlled to one personality type or style" (Willower & Lawrence, 1979, p. 589).

Multhauf (1977) examined classroom environmental robustness and found that custodialism in PCI was associated directly and through perceptions with low classroom environmental robustness.

It is possible that the classrooms of relatively custodial teachers are high in routines and rules, which make for a predictable environment for students, but an environment that is dull and lacking in drama (p. 45).

Deibert and Hoy (1977) conducted a study of custodial high schools and the self-actualization level of the students. "The more custodial the school, the less likely the students were to be basically inner directed and the less likely the students were to be time competent" (p. 29).

Custodial schools characterized by mistrust, order, and conformity were postulated to have deleterious effects on the ability of students to develop inner directedness while humanistic schools would lead to the development of a mature self system for individuals (p. 30).
Jones and Garner (1978) compared middle school teachers' PCI. They had hypothesized they would not find a difference in the different levels; their results showed that the lower the grade, the more humanistic the PCI. They concluded that "one needs to be aware of the general conclusion that teachers tend to become more custodial at higher grade levels; techniques may be needed to combat this tendency" (p. 294).

Campbell and Williamson (1978) found that inner-city schools become entrenched with more custodial than humanistic teachers.

The finding that student teachers in the inner city, ghetto school were more custodial in their attitudes before student teaching than were their counterparts in white, middle-class schools both before and after student teaching might reflect the fact that those who teach in the inner city enter that setting with attitudes that reflect a more dehumanizing environment (p. 140).

Foley and Brooks (1978) used PCI to predict teacher discipline referrals. "From this study it can be concluded that humanism in teachers is related to reporting fewer unresolvable conflicts with pupils" (p. 109).

Premeaux studied the relationship between pupil control and political attitudes of teachers (1979). She found that there was a relationship between custodialism and conservative political attitudes. There was no significant finding with regard to
liberalism and control, nor did she find any significant differences in sex, age, ethnic affiliation, or school type. Also in 1979 Jalovick and Hoy formulated hypotheses concerning the relationships among attitudes toward open education, open educational practices, and custodialism.

The major expectations of the study were supported; as predicted, there was an inverse relationship between the openness of a teacher’s classroom practices and custodialism in pupil control orientation. Similarly, the more open a teacher’s beliefs about learning and knowledge, the less custodial the pupil control ideology (p. 48).

Long (1979) conducted a research study investigating the relationship between the executive professional leadership of the elementary school principal and the PCI. The teachers assigned high leadership scores to principals whose pupil control beliefs they estimated accurately. Whatever the views of the teachers, the closer they were to the principal’s, the greater the probability that the teachers would rate the principal high in perceived leadership (Long & Willower, 1980, p. 37).

Estep (1979) studied classroom environmental robustness and climate. She found a significant negative correlation between the two variables. Humanistic pupil control ideology was associated with high classroom robustness. She concluded that "teacher behavior should be a key to classroom robustness as experienced by students" (Estep, Willower & Licata,
Horowitz conducted a study in 1980 on relationships between the attitudes toward student rights and PCI. The analysis of the data showed that administrators tended to be more knowledgeable about student rights and exhibited more humanistic beliefs in control than teachers. Female administrators exhibited these tendencies more than male administrators. A related study compared militancy with PCI (Stoops, 1980). The findings revealed that the two variables were not statistically significant. It was also found that liberals were less custodial than conservatives.

Two 1980 studies were concerned with alienation and PCI. Racine surveyed students and found that their alienation tended to reflect their own personal orientation rather than the pupil control of the teachers and school. Savage studied teacher alienation. The findings indicated that factors describing structural properties of schools appeared to be more influential in explaining aspects of alienation than was pupil control.

Girardi (1980) compared PCI and rated teacher effectiveness in public and parochial schools. He found a significant difference between the PCI scores of the two different groups of principals. There was also a significant difference between the PCI scores of both groups of teachers rated as most effective by
their principals and those not so rated. There was a significant difference between the PCI scores of the public school teachers rated more effective by their peers and those not so rated.

Harty and Jones (1980) made a longitudinal study of preservice experiences on the PCI of secondary teachers.

A significant change occurred in the pupil control ideologies during the two teacher preparation experiences, a shift toward a more custodial orientation; this change represents the influence of methods instruction and student teaching together (p. 37).

They concluded that "would-be teachers may possess humanistic ideologies about classroom teaching without having the knowledge and skills to implement these approaches" (Jones & Harty, p. 15).

The general findings of two studies conducted in 1981 will be reported here. Buchanan studied the effects of early field experience upon the teaching concerns and PCI of beginning preservice teachers. She found that differences in control were not related to this field experience and that the experience was not of sufficient strength to effect any real differences in control orientations. Zeichner and Grant examined the effects of student teaching experience on the PCI of student teachers and attempted to assess the relative contributions of biography and social structure in determining student teacher attitudes.
toward pupil control (p. 298). "Contrary to the findings of previous studies, the student teachers in this study did not become significantly more custodial in their views toward pupil control" (p. 304). The ideologies of the student teachers were more custodial initially and at the end than those of the student teachers in previous studies.

A 1982 study by Halpin, Halpin, and Harris focused on personality characteristics. Their work related the personality characteristics and self-concept of teachers-in-training to their PCI.

The humanistically orientated educators tended to be emotionally stable, expedient, happy-go-lucky, relaxed, self-assured, and have a high self-concept. The authoritarian educators were more affected by feelings, conscientious, sober, practical, shy, reserved, tense, apprehensive, and had low self-concept (p. 195).

The researchers felt that "the personality characteristics found to be related to pupil control orientations are highly consistent with the definitions of humanism and authoritarianism given by Willower" (p. 198).

Schavio also conducted a study in 1982 on PCI and its relatedness to cognitive style and authoritarianism. He found support for the hypothesis suggesting that PCI is a function of cognitive style, extent of authoritarianism, and sex for the teachers studied. While authoritarianism and the sex of the principals contributed to the prediction of PCI,
cognitive style only added to this prediction for the female principals. Another 1982 study was conducted by Shearin on the relationship between student alienation and extent of agreement by faculty on PCI. He found that the schools with high agreement on PCI regardless of the ideology had less alienation than those who had low agreement (p. 34).

Childers (1983) conducted a study on pupil academic achievement and found that there was little if any relationship between the two variables. Hartle (1983) made a study of the work motivation strategies and leadership with PCI. She found that educator aspiration to be a leader is significantly greater among men than women, but that the work motivation of educators did not differ between men and women. She did not find a significant relationship between PCI and sex nor between PCI and leadership aspirations. Pistone (1983) made a study of teacher attitudes toward pupil control, discipline, and suspension. She found that teachers in schools with fewer repeated suspensions were more custodial than teachers with greater frequency of repeated suspensions.

Lunenburg's 1983 study examined the relationship between the pupil control orientation of schools and the self-concept as a learner of students. Total self-concept as a learner was related to PCI. When students' perceptions of the PCI of the school were
compared with aspects of self-concept as a learner, all subtests of the Self-concept as a Learner were significantly correlated with the school's PCI (p. 33). Another study by Lunenburg and Stouten compared teacher pupil control ideology and pupils' projected feelings toward teachers (1983). Correlations indicated that custodialism was directly related to pupils' negative feelings toward teachers. PCI, followed by teacher sex and grade levels, could be used to predict pupils' feelings toward teachers. Boys tended to project more negative feelings than did girls (p. 528).

Two 1984 studies will be reported here. Longstrom wanted to determine the relationships among principal control ideology, teacher discipline style, and student behavior. The only statistically significant positive correlations she found were between teacher discipline style and lack of respect for the teacher and lack of concern for classmates. None of the hypotheses involving PCI was accepted. Bush (1984) also studied pupil control and behavior. The major findings of her study were that relationships among all of her variables were significant and positive. The relationship between teacher personality and PCI was high, and relationships between PCI and pupil behavior were high.

There were many studies undertaken on PCI and related variables in 1985. Green studied perceptions
of principals' managerial style and student perceptions of teachers' PCI. Her findings indicated a significant relationship between managerial style and PCI. PCI was related to pupil control behavior and was the main predictor for such. Butler's major purpose of his study was to examine the relationship between PCI and perceptions of PCI representing organizational pressure. Secondary assistants were more custodial and issued more suspensions than their elementary counterparts. Perceived PCI failed to predict the incidence of pupil control measures.

After conducting a longitudinal study of preservice education courses on elementary teacher education students, Samuel concluded that field-oriented methods courses have the potential to develop more desirable classroom personality characteristics in preservice teachers. His subjects all exhibited a greater humanistic PCI at the end of each semester of methods and field work.

Simandle did not find a relationship between PCI and assumption of responsibility for student academic achievement in his study. Barrett did not find a relationship between pupil control ideology and assertive discipline training in his study of preservice teachers. A similar study on a staff development program on student discipline and PCI was conducted by Fredericks. He found that teachers who
participated developed a more positive self-concept and more humanistic ideology than teachers who did not participate.

Halpin, Harris, and Halpin investigated the relationship between teacher stress and PCI in 1985. An authoritarian orientation was significantly related to higher scores on the stress factors. No significant relationship was found between sex and stress although female teachers tended to have a more humanistic orientation. Age was related to two stress factors (p. 346).

Studies related to a factor analysis of the Pupil Control Ideology Scale were made in 1985 by Graham, Halpin, Harris, and Benson. In this study the responses of students who were administered the PCI were examined via a series of factor analyses. "An exploratory factor analysis was first conducted to determine the factor structure of the PCI; next, a confirmatory factor analysis was used to test the models developed in the exploratory analysis" (p. 202). "Overall the results of this study were consistent with the theoretical hypothesis that the PCI is unidimensional" (p. 205). They concluded that teachers may refrain from agreeing with some of the statements "due to the values of their milieu even if their control orientation tends to be custodial" (p. 206).

Three final studies conducted in 1986 will be
referred to in this section of PCI. Howard sought relationships between the educator's locus of control and PCI. His findings indicated that administrators with an internal locus of control preferred humanistic pupil control and educators with an external locus of control preferred custodial orientations. He also found that the higher the educational degree held, the more likely that the locus of control would be internal. Greater years of experience demonstrated a proportionate increase in custodialism.

Cadavid related PCI to burnout of special education teachers as related to regular education teachers. She found that burnout was related to locus of control and PCI for the entire sample. Teachers who rated themselves as burned out were more likely to have an external locus of control and be more custodial. Special education teachers reported significant emotional exhaustion.

Lunenburg studied the influence of experience on the student teacher. His findings were "an extension of earlier results that supported the proposition that teacher socialization results in a change to a more custodial pupil control experience" (p. 215). He also found that subsequent years of teaching had little impact on PCI.
Summary

An attempt was made to review and report the most significant findings of the literature and major research conducted during the past twenty years in the three areas included in the present study: conflict management, organizational climate, and pupil control ideology.

Because conflict management is the predominant theme of this research, an indepth study was made of this topic. Original research by Blake and Mouton was introduced with studies by Kilmann and Thomas subsequently reviewed. The development of the Thomas–Kilmann Conflict MODE Instrument was explained. Research reviewed was not limited to the inclusion of this instrument, but did try to focus on the use of the instrument and on the variable of conflict management rather than resolution.

The study of organizational climate focused on the original research by Halpin and Croft and included findings of studies incorporating the OCDQ. Special attention was given to the recent revision of the instrument, the OCDQ–RE, as developed and tested by Hoy and Clover.

Original research by Willower and Jones on pupil control ideology was presented with emphasis on the development of the Pupil Control Ideology Form by Willower, Eidell, and Hoy. Studies reviewed were
limited to those made in the United States incorporating the PCI Form.

Some research was found and reported using both conflict management and organizational climate as variables and relating organizational climate and pupil control ideology. No work was found correlating conflict management with pupil control ideology, nor was there any research incorporating all three areas as variables.

During the past twenty years the concepts of conflict resolution have changed along with the terminology. "If the conflict is merely suppressed but not resolved, the latent conditions of conflict may be aggravated and explode in more serious form until they are rectified or until the relationship dissolves" (Pondy, 1967, p. 305). The new approach to conflict management is based on behavioral science theory involving intergroup relations. Concept formation, generalization, and application can enhance cooperative conditions of interaction (Blake, Mouton & Sloma, 1964). Because conflict is now thought to be a dynamic process leading to organization change, resolution or the suppression of such behaviors may no longer be in the best interests of the organization. Rather, administrators need to learn how to effectively manage conflict and channel it to constructive ends resulting in the betterment of the organization. With the
current disposition toward more openness in communications and a broader participation in decision making, administrators need both the scientific knowledge base of conflict resolution and the skill and insight of artistic sensitivity (Bailey, 1971, p. 238).

If the educational administrator needs to incorporate both art and science in the inevitable conflict situation, an awareness of personality will be essential. Human relations skills deal with individual personalities, but the personality or feeling tone of the entire organization must also be assessed. This is organizational climate: "that enduring quality of the school environment that is experienced by teachers, affects their behavior, and is based on perception" (Hoy & Miskel, 1987, p. 226). "It is an elusive and intangible concept, and yet it is one which may offer the educationalist a means of better understanding the operation of schools" (Thomas, 1976, p. 441).

The concept of pupil control ideology and its measurement allows another view of the school climate, one that focuses on teacher-student relations rather than principal-teacher relations, but at the same time also suggests a great deal about the nature of teacher-teacher and teacher-principal interactions (Hoy & Miskel, 1987, p. 244).

The major conclusion of all pupil control research has been that "preoccupation with pupil control permeates the life of the school, influencing normative and other social structures, as well as relationships among the
various members and clients of the organization" (Willower, 1975, p. 219).

The complexities and interrelatedness of conflict management, school climate, and pupil control ideology permeate human behavior in the total scope of the organization with the underlying, cohesive strand being administrative leadership. "Studying human behavior in schools, as in any organization, involves, according to Argyris (1958, p. 501), 'ordering and conceptualizing a buzzing confusion of simultaneously existing, multi-level, mutually interacting variables'" (Anderson, 1982, p. 368).
CHAPTER III

DESIGN OF THE STUDY

Restatement of the Problem

Recent research studies and current theory development in the field of educational administration seem to focus strongly on the centricity of the role of the individual building level administrator. He or she, although not burdened with the sole responsibility for, seems to figure prominently in the overall building climate of the school as an organization. Primary responsibility for managing conflict rests with the building administrator. The teachers also have an ideology toward the pupils and their control. If a relationship could be determined among these three variables, administrators might be able to use the results to strengthen their own effectiveness within their schools as organizations.

The major problem of this research study was to determine whether any significant relationships existed among the conflict management strategies used by the administrator of an elementary school, the organizational climate at that school, and the pupil control orientation of the elementary staff of that school.
The major problems of the study were:

1. To determine whether there is any relationship between the organizational climate of an elementary school (as measured by faculty openness and principal openness) and the conflict management strategies used by elementary school administrator.

2. To determine whether there is any relationship between the six dimensions of climate of an elementary school: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, and principal restrictive, and the administrator's use of each of the five areas of conflict management: competing, collaborating, compromising, avoiding, and accommodating.

3. To determine whether there is any relationship between the pupil control ideology of the elementary teachers and the conflict management strategies used by the school administrator.

4. To determine whether there is a relationship between the six dimensions of climate of an elementary school: teacher collegial, teacher intimate, teacher disengaged, principal supportive, principal directive, and principal restrictive and the elementary teachers' orientation toward pupil control ranging from humanistic to custodial.

The secondary problems of the study were:
5. To determine if there is a relationship between faculty openness and principal openness.

6. To determine if there is a relationship between faculty openness and the principal dimensions of climate: supportive, directive, restrictive.

7. To determine if there is a relationship between principal openness and the teacher dimensions of climate: collegial, intimate, disengaged.

8. To determine if there is a relationship between faculty openness and teachers' pupil control ideology.

9. To determine if there is a relationship between principal openness and teachers' pupil control ideology.

10. To determine if there is a relationship between the teacher dimensions of climate and the principal dimensions of climate.

11. To determine if there is a relationship between any of the conflict management styles used by principals.

**Population and Sample**

The population for this study was limited to a midwestern three state geographical area. Population for the study included elementary teachers from Illinois, Iowa, and Wisconsin. Schools to be eligible
for inclusion in the study were elementary level schools serving any or all of the grades between kindergarten and grade six. The schools were limited to those having ten or more full-time teachers and one full-time building level administrator. Only full-time teachers would participate in the study. The administrators were limited to full-time administrators at the elementary kindergarten through grade six level. In addition, the administrator needed to spend full-time in one building as the administrator.

A random sample of thirty schools was selected from this population. This sample yielded three hundred and thirty respondents participating in the study. Directories from the departments of public education were obtained from the three states. Random numbers were assigned to those schools whose building composition and principals met the criteria determined for inclusion. Using a table of random numbers, thirty schools were selected.

Personal telephone calls were made to the superintendents to secure cooperation and participation in the study. A positive response was followed with a similar telephone call to the individual building administrator to explain the study and secure willingness to participate. Some of the schools initially selected were not available for this research due to individual district or principal's reasons.
Additional schools were randomly selected from the population to meet the study design of thirty schools.

Sources of the Data

Each of the elementary school principals in the sample was asked to complete the Thomas-Kilmann Conflict MODE instrument and a brief personal information questionnaire. Each of the full-time teachers within the elementary school was asked to complete the Organizational Climate Description Questionnaire--Revised Elementary and the Pupil Control Ideology Form. Both the principal's and the teachers' responses to these instruments were returned and formed the data for this study. A total of thirty principals submitted usable data, and a total of two hundred seventy-six teachers from thirty elementary schools submitted completed response sheets to comprise the data for the study.

Procedures for Collecting the Data

During the initial telephone conversation with each building administrator, a brief introduction and background for the study was given. Expectations for the administrator and his or her teachers along with brief directions were communicated. The administrator was assured of complete confidentiality of response for himself or herself, the staff, and the school building. Opportunities for questions were given.
In the week following this telephone call, packets containing the instruments and directions for completion were mailed to each administrator. Since anonymity and confidentiality seemed to be of great concern for the majority of administrators, a written assurance of this factor was included in the packet. A return mailer was included for the response. This was followed in three to four days with a second telephone call to elicit additional questions and verify receipt of the packet.

After a period of four weeks, a phone call was made to any school administrator whose packet had not been returned. After a period of eight weeks, all thirty packets had been returned. The desired minimum number of ten teacher responses per school was not achieved. Teacher compliance was left to the individual administrator. Some did try for higher percentage of completion with varying degrees of success; some were satisfied with any returns.

As each packet was returned, it was coded with an alphabetical letter from A to Z and AA to AD. The principal's response was coded by the letter P. Teachers were coded with the letter T and an individual teacher letter. All responses were transferred to computer data scan sheets to facilitate a computer statistical analysis program and subsequent treatment.
The Thomas-Kilmann Conflict MODE Instrument was written by Kenneth W. Thomas and Ralph H. Kilmann and published by Xicom, Incorporated, in 1986. Written permission was granted by the publisher to reproduce and use the instrument after payment of a user’s fee. This instrument is a forced-choice measure of an individual’s conflict handling behavior. Each of the thirty items necessitates a choice of response where the individual is told to respond as he or she most often would respond. It yields five scores: competing, collaborating, compromising, avoiding, accommodating. The instrument also assesses the principal’s behavior on a continuum from assertive to unassertive and on a continuum from cooperative to uncooperative.

The profile of scores obtained indicates the individual’s repertoire of conflict handling skills which are used in conflict situations the individual faces (Thomas & Kilmann, 1986, p. 7). The five modes are represented by five columns. In the column under each model is the range of possible scores on that mode ranging from 0 (very low use) to 12 (very high use). "Each possible score is then graphed in relation to the scores of managers who have taken the Thomas-Kilmann Conflict MODE Instrument" (p. 7). The scores are then converted to percentiles comparing the individual with
the percentage of practicing managers at the middle and upper levels in business and government organizations. A score falling within the middle fifty percentile means that the individual is average in the use of that particular mode. The five specific methods of dealing with conflict can also be used to describe a person's behavior along two dimensions, assertiveness and cooperativeness. Unassertive behavior is measured via the avoiding and accommodating scores; assertive behavior is measured by using the competing and collaborating scores. Avoiding and competing are the two areas comprising the uncooperative index while cooperativeness is measured by using the collaborating and accommodating scores.

"Major emphasis was given to controlling social desirability in designing the MODE instrument for substantive validity" (Kilmann & Thomas, 1977, p. 311).

Only four percent of the variance in the test sample's aggregate self-ratings on the items of the MODE instrument could be accounted for by the social desirability value of items. Approximately seventeen percent of the variance among aggregate scores on the five modes in the instrument can be accounted for by social desirability (p. 314).

When internal consistency coefficients and test-retest reliabilities were computed for the MODE instrument, "internal consistency coefficients were in the moderate range with the exception of the accommodating mode. The test-retest reliabilities were moderately high and consistent across modes" (p. 317).
External validity has been established by studies relating the MODE instrument to other settings. Studies by Jameson and Thomas (1974) and Ruble and Thomas (1976) "using different designs yielded rather consistent results supporting the two-dimensional model providing some construct validity for the meaningfulness of these two dimensions and the five conflict handling modes" (Kilmann & Thomas, 1977, p. 321).

The Organizational Climate Description Questionnaire - Revised Elementary

The Organizational Climate Description Questionnaire - Revised Elementary is a forty-two item instrument which measures the behavior of elementary principals and teachers in six climate dimensions. The instrument was developed by Sharon I. R. Clover and Wayne K. Hoy in 1986. Permission to reproduce and use the instrument in this study was granted by Dr. Wayne K. Hoy.

There are three principal subtests, supportive, directive, and restrictive, and three teacher subtests, collegial, intimate, and disengaged. "The instrument has two general factors--one a measure of openness of teacher interactions and the other a measure of openness of teacher-principal relations" (Hoy & Miskel, 1987, p. 232). On each of the items the response is made based upon the individual's school. He or she
indicates the extent to which the statement characterizes the school by circling rarely occurs, sometimes occurs, often occurs, or very often occurs. The responses are assigned scores ranging from one to four with two items scored oppositely. For the subjects in each school, the scores for each item are averaged across individuals so each school has a mean score for each of the items of the OCDQ-RE. Then the mean score for each of the subtests is summed to produce a school score on each of the subtests. The higher the score on each dimension, the stronger that property is for the school.

Two openness indices can be created for each school: the openness index for faculty relations and the openness index for principal behavior. The formula for the latter is $S-D-R$ where $S$ equals the standardized supportive subtest score, $D$ equals the standardized directive score, and $S$ equals the standardized restrictive score. The formula for the former is $C+I-D$ where $C$ equals the standardized collegial subtest score, $I$ equals the standardized intimate subtest score, and $D$ equals the standardized disengaged score.

Each set of behaviors is defined by a more general construct of openness, but openness in principal behavior is independent of openness in faculty behavior. Two continuums of openness underlie the climate of elementary schools and provide the basis for a four-celled typology of organizational climate: open, closed, engaged, and disengaged climate (Hoy & Clover, 1986, p. 109). (For clarification, see Figure 2 in Chapter II.)
All of the scales have high reliability coefficients, much higher than those in the original OCDQ. The subtests are reasonably pure with items loading high on one subtest and low on another when subjected to factor analysis. The stability of the factor structures in two separate samples provided evidence of the construct validity of each subtest (Hoy & Clover, 1986, p. 108).

The Pupil Control Ideology Form

The Pupil Control Ideology Form was developed by Donald J. Willower, Terry I. Eidell, and Wayne K. Hoy in 1967. Permission to use the instrument in this research was granted via a personal telephone call to Dr. Donald J. Willower at Pennsylvania State University. The instrument is a twenty item Likert-type scale with five response categories for each item ranging from strongly agree to strongly disagree. Two items are scored oppositely; other items are assigned scores ranging from five to one. The resulting orientations fall on a continuum ranging from custodial to humanistic with the higher the scores, the more custodial the ideology.

"Reliability coefficients of the PCI Form have been consistently high ranging from the high 0.80's and 0.90's" (Packard & Willower, 1972, p. 82). "Construct validity has been supported in numerous studies (Hoy, 1968; Appleberry, 1970). "Since the publication of the original monograph in 1967, more than seventy studies have been completed using the PCI" (Hoy & Miskel, 1987, p. 266).
principal Questionnaire

This was designed by the writer to collect demographic data on the building principal for general information in analyzing the organizational behavior within the schools and in the interests of future correlational study. No direct correlational design was intended for this research.

The questionnaire included eight items. Three items were nominal measurements of sex, marital status, and educational level. Five of the items were ratio measurements: age, years of experience as a teacher, years of experience as an administrator, and student enrollment in the school.

Discussion of the Basic Statistical Design Used

The data gathered in this study were analyzed to answer the research questions under investigation. Two statistical techniques were employed: the Pearson product moment correlation and the Analysis of Variance (ANOVA). The Pearson was used to determine how each individual score related to each other. In analysis of variance, the task was to determine whether group differences could be reasonably attributed to random error or whether they were sufficiently large to indicate there was a correlational effect. Since random error is measured by the variability of scores within a group, differences among groups are compared
to variability within the groups by the analysis of variance.

For the data collected by each instrument, raw scores were totaled. The Statistical Analysis Systems computer analysis package was utilized for computing the statistical data (SAS, 1985). Notations were made for each of the factors to be included in the study (see Table 1). The universe of possible intercorrelations and attendant null hypotheses was completed to facilitate the recognition of possible correlations between factors (see Table 2). Pearson product moment correlations were made between each of these factors. The independent sample analysis of variance was calculated to analyze the variance among factors used to measure hypotheses 1, 2, 3, and 4 (see Table 3).

It was also determined which intercorrelations would be available to assess the internal validity of the instruments used in this research study (see Table 4). As D1 through D5 are conceived to measure relatively discrete methods of principals' conflict management styles, intercorrelations among them should be low to moderate for evidence of good internal validity for the conflict management scales. Logically, a moderate correlation between compromising
**TABLE 1**

**EXPLANATION OF NOTATIONS**

**Elementary School Climate**

- \((M_1)\) = Teachers' collegial behavior
- \((M_2)\) = Teachers' intimate behavior
- \((M_3)\) = Teachers' disengaged behavior
- \((M_4)\) = Principals' supportive behavior
- \((M_5)\) = Principals' directive behavior
- \((M_6)\) = Principals' restrictive behavior

**Pupil Control Ideology**

- \((M_7)\) = Teachers' Pupil Control Ideology

**Organizational Climate**

- \((F_0)\) = Faculty Openness Score = \((M_1) + (M_2) - (M_3)\)
- \((P_0)\) = Principal Openness Score = \((M_4) - (M_5) - (M_6)\)

**Principals' Management Conflict Strategies**

- \((D_1)\) = Principals' use of competing
- \((D_2)\) = Principals' use of collaborating
- \((D_3)\) = Principals' use of compromising
- \((D_4)\) = Principals' use of avoiding
- \((D_5)\) = Principals' use of accommodating
### TABLE 2
UNIVERSE OF POSSIBLE INTERCORRELATIONS
AND ATTENDANT NULL HYPOTHESES

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1. Numbers in cells refer to possible null hypotheses from the data.

* PO = (M4) - (M5) - (M6)

# FO = (M1) + (M2) - (M3)
TABLE 3

COLUMNS AND ROWS FOR ANOVA

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NOTES: A-values analyze variance between D-intercorrelations by columns with PO and FO the dependent variables, and between FO and PO by rows with D's the dependent variables.

B-values analyze variance between M-intercorrelations by columns with D-intercorrelations the dependent variables, and between D-intercorrelations by rows with M-intercorrelations the dependent variables.
### TABLE 4
AVAILABLE INTERCORRELATIONS TO ASSESS INTERNAL VALIDITY

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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>M1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>M2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>M3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>M4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>M5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>
(D3) and accommodating would be positive evidence for convergent validity. Relatively lower remaining conflict style intercorrelations would be positive evidence for discriminant validity. As M1 through M6 are conceived to measure relatively discrete types of elementary school environments, intercorrelations among them should be low to moderate for evidence of good internal validity. Logically, positive evidence for convergent validity would be moderate intercorrelations among teacher collegial (M1), teacher intimate (M2), and perhaps, principal supportive (M4); and among principal directive (M5), principal restrictive (M6), and perhaps, teacher disengaged (M3).

To facilitate an analysis of an individual school using each instrument, subtest scores on the OCDQ-RE could be computed, averaged, and standardized with a mean of fifty and a standard deviation of ten. This was the procedure recommended by Hoy and Clover following the development of their instrument in 1986. To allow descriptive comparisons of the principals, data from the Conflict Management MODE could be converted to percentiles as provided by the publisher (see Appendix D for this profile graph). This normalized data was not used for calculating correlations because it was determined that standardized scores would restrict the variability and thereby yield spuriously low values of r.
The same general procedure was followed for analyzing each hypothesis and is outlined as follows:

Step I: State the null hypothesis.

Step II: Select the level of significance. The alpha level of significance required was $\leq .05$ for all tests under each of the major hypotheses.

Step III: Identify the test statistic.

Step IV: Denote the critical value. Using the appropriate tables and entering at the specified level of significance and number of degrees of freedom, the critical values were determined.

Step V: Compute the statistics.

Step VI: Reject or fail to reject the null hypothesis. The hypothesis was rejected or not rejected by comparing the calculated value of the statistics to the critical value noted in Step V.

Primary Null Hypotheses

Null Hypothesis 1:

There is no significant relationship between the organizational climate of an elementary school as measured by one or both of the openness scales: faculty openness and principal openness and the conflict management strategies used by the elementary school administrator.
Data for testing hypothesis H1 came from the principals' scores on the five modes of conflict management and the teachers' scores on the openness indices for faculty relations and for principal behavior. The statistical treatment was to correlate the scores using the Pearson product moment correlational technique. A test of the significance of the correlation coefficients was made. An independent sample analysis of variance design (ANOVA) was also used to analyze this data. The main and interaction effects were tested for significance. In the ANOVA the independent variables were the principals' scores on the conflict management strategies, and the dependent variables were the teachers' scores on the openness indices.

Null Hypothesis 2:

There is no significant relationship between the six dimensions of climate of an elementary school and the administrator's use of the five areas of conflict management, competing, collaborating, compromising, avoiding, accommodating.

Data for testing hypothesis H2 came from the principals' scores in each of the five areas of conflict management and from the teachers' scores in each of the six climate dimensions. The statistical treatment was to correlate the scores using the Pearson product moment correlational technique. A test of the
An independent sample analysis of variance design (ANOVA) was also used to analyze this data. The main and interaction effect were tested for significance. In the ANOVA the independent variables were the principals' scores on the conflict management strategies, and the dependent variables were the teachers' scores on the six dimensions of climate.

Null Hypothesis 3:

There is no significant relationship between the pupil control ideology of the elementary teachers and the conflict management strategies used by the school administrator.

Data for testing hypothesis H3 came from the teachers' scores on the PCI Form and from the principals' scores on the five conflict management modes. The statistical treatment was to correlate the scores using the Pearson product moment correlational technique. A test of the significance of the correlation coefficients was made. An independent sample analysis of variance design was also used (ANOVA) to analyze this data. The main and interaction effects were tested for significance. In the ANOVA the independent variables were the principals' scores in each of the five conflict management modes, and the dependent variables were the teachers' scores on the
Null Hypothesis 4:

There is no significant relationship between the six dimensions of organizational climate of an elementary school and the elementary teachers' orientation toward pupil control ranging from custodial to humanistic.

Data for testing hypothesis H4 came from the teachers' scores on the six dimensions of organizational climate and from the teachers' scores on the PCI Form. The statistical treatment was to correlate the scores using the Pearson product moment correlational technique. A test of the significance of the correlation coefficients was made. An independent sample analysis of variance design was also used (ANOVA) to analyze this data. The main and interaction effects were tested for significance.

Secondary Null Hypotheses

Null Hypothesis 5:

There is no significant relationship between faculty openness and principal openness of an elementary school.

Null Hypothesis 6:

There is no significant relationship between
faculty openness and the principal dimensions of climate of an elementary school.

Null Hypothesis 7:

There is no significant relationship between the principal openness and the teacher dimensions of climate of the elementary school,

Null Hypothesis 8:

There is no significant relationship between faculty openness and teachers' pupil control ideology.

Null Hypothesis 9:

There is no significant relationship between principal openness and the teachers' pupil control ideology.

Null Hypothesis 10:

There is no significant relationship between the teacher dimensions of climate and the principal dimensions of climate.

Null Hypothesis 11:

There is no significant relationship between any of the conflict management strategies used by the principals.

Summary

The design of this research project has been presented in this chapter. The problem was restated,
the population was defined with the sample delineated, the sources of the data were stated, and the procedures for collecting the data were specified. Descriptions of the data collecting instruments were stated along with a discussion of the basic statistical design which was used.

The population from which the sample was drawn included the elementary schools (kindergarten through grade six) from the three midwestern states of Illinois, Iowa, and Wisconsin. The population was further limited by restrictions on both the school and the building principal. The random sample resulting included thirty elementary schools each with a minimum of ten full-time teachers and a full-time building administrator who had served in that capacity for a minimum of two years.

All of the full-time teachers in each of the thirty sample schools were requested to complete the Organizational Climate Description Questionnaire - Revised Elementary version and the Pupil Control Ideology Form. The thirty principals completed the Thomas-Kilmann Conflict MODE Instrument and a simple demographic data questionnaire.

Four major hypotheses were identified along with seven secondary hypotheses. All were stated in the null form. The statistical procedures that were followed for testing each of the major hypotheses were
defined. Two different correlational procedures were used, the Pearson product moment correlational technique and the Analysis of Variance (ANOVA). Tests for the significance of the correlation coefficients were made. The main and interaction effects were tested for significance.
CHAPTER IV

REPORT OF THE FINDINGS

Presentation of the Data

The data were collected and analyzed in this investigation in accordance with the procedures outlined in the chapter on design. In the present chapter, the data are presented, the statistical analysis of the data are described, and the results of the analysis are reported. Each of the four primary hypotheses is repeated with the results of analysis for each reported. The secondary null hypotheses emerging from within the study are also reported along with statistical data and analyses.

Descriptive information about the thirty elementary principals participating in the study was collected for discussion purposes only via the personal data questionnaire completed by each administrator. In this particular sample, three percent of the population of principals were under the age of thirty-five. Forty-three percent were between the ages of thirty-six and forty-five with forty percent between forty-six and fifty-five. Fourteen percent were over the age of fifty-five. It was found that forty percent of
the principal respondents were female and sixty percent were male. Seventy percent indicated married marital status with twenty-three reporting single status. There was one divorced principal and one non-respondent on this characteristic. Fifty percent of the principals held a master's degree; twenty-three percent held a master's degree plus thirty hours, and twenty percent had earned more than thirty hours beyond the master's degree plus thirty level. One administrator held a doctorate, and one reported a bachelor's degree as the highest degree earned. The mean administrative experience reported was eleven and nine-tenths years with six and one-half years as the mean number of years spent in the current position. Fifteen years of teaching experience was reported as the mean. The mean number of teachers under the administrator was reported to be seventeen and four-fifths. The mean number of pupils in the principal's respective school was two hundred and seventy-five.

Because conflict management was the predominant theme of this research and served as the major independent variable for the study, a descriptive analysis of the conflict management strategies used by the thirty principals included in this study might be useful in adding to the conflict management theories. The use of the five strategies could be plotted on the profile graph supplied by the publisher of the
The Thomas-Kilmann Conflict MODE instrument. This compared the individual usage with that of practicing managers. The scores were "graphed in relation to the scores of 339 practicing managers at middle and upper levels in business and government organizations" (Thomas & Kilmann, 1986, p. 8). In the use of the strategy of competing, seventy-seven percent of the principals were low in their use compared to the norm group of managers. Sixty percent ranked in the middle group and forty percent in the low group in the area of collaborating. Compromising found forty percent of the principals ranking in the high group and fifty-seven percent in the middle group. In the strategy of avoiding, fifty percent of the principals ranked high with forty percent in the middle. The last strategy of accommodating found that forty percent ranked high with forty-seven percent ranking in the middle group.

Avoiding was the only strategy where the majority of the responding principals indicated high usage. Competing was the only strategy where the majority of the principals indicated low usage. Compromising, collaborating, and accommodating all receive middle usage as indicated by the principals responding to the survey.
Explanation of Notations for Hypotheses

Elementary School Climate:
(M1) = Teachers' collegial behavior
(M2) = Teachers' intimate behavior
(M3) = Teachers' disengaged behavior
(M4) = Principals' supportive behavior
(M5) = Principals' directive behavior
(M6) = Principals' restrictive behavior

Pupil Control Ideology:
(M7) = Teachers' Pupil Control Ideology

Organizational Climate:
(FO) = Faculty Openness Score = (M1) + (M2) - (M3)
(PO) = Principal Openness Score = (M4) - (M5) - (M6)

Principals' Conflict-Management Strategies:
(D1) = Principals' use of competing
(D2) = Principals' use of collaborating
(D3) = Principals' use of compromising
(D4) = Principals' use of avoiding
(D5) = Principals' use of accommodating

Primary Null Hypotheses

Null #1 There is no significant relationship between the organizational climate of elementary schools (as measured by one or both of FO and PO) and the conflict management strategies used by elementary school
administrators (as measured by one or all of D1 thru D5).

**Null #2** There is no significant relationship between the dimensions of climate of elementary schools (as measured by one or all of M1 thru M6) and the conflict management strategies used by elementary school administrators (as measured by one or all of D1 thru D5).

**Null #3** There is no significant relationship between the pupil control ideology of elementary teachers (M7) and the conflict management strategies used by elementary school administrators (as measured by one or all of D1 thru D5).

**Null #4** There is no significant relationship between the dimensions of climate of elementary schools (as measured by one or all of M1 thru M6) and teachers' pupil control ideology (M7).

**Secondary Null Hypotheses**

**Null #5** There is no significant relationship between faculty openness (FO) and principal openness (PO).

**Null #6** There is no significant relationship between faculty openness (FO) and the dimensions of
climates of elementary schools (as measured by one or all of M4 thru M6).

**Null #7** There is no significant relationship between principals' openness (PO) and the dimensions of climates of elementary schools (as measured by one or all of M1 thru M3).

**Null #8** There is no significant relationship between faculty openness (FO) and teachers' pupil control ideology (M7).

**Null #9** There is no significant relationship between principals' openness (PO) and teachers' pupil control ideology (M7).

**Null #10** There is no significant relationship between teacher-generated climates (as measured by one or all of M1 thru M3) and principal-generated climates (as measured by one or all of M3 thru M6).

(M-intercorrelations could also be conceived as measures of internal convergent and discriminant validity.)

**Null #11** There is no significant relationship between any of the conflict management strategies used by principals (as measured by D1 thru D5).

(D-intercorrelations could also be conceived as measures of internal convergent and discriminant validity.)
The interrelationships among Faculty Openness (FO), Principal Openness (PO), and Principals' Conflict-management Strategies (D1 through D5) are summarized in Tables 5 and 6.

**TABLE 5**
ANALYSIS OF VARIANCE AMONG INTERCORRELATIONS OF FACULTY OPENNESS, PRINCIPAL OPENNESS, AND PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>DF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columns</td>
<td>4</td>
<td>36469298.1</td>
<td>9117324.525</td>
<td>3.158</td>
</tr>
<tr>
<td>Rows</td>
<td>1</td>
<td>26522.5</td>
<td>26522.5</td>
<td>9.188</td>
</tr>
<tr>
<td>Error</td>
<td>4</td>
<td>11545665.5</td>
<td>2886416.375</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>48041486.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F-columns (FO/PO dependent) must be \( \geq 6.39 \) to reject null @ \( p = .05 \)

F-rows (D dependent) must be \( \geq 7.71 \) to reject null @ \( p = .05 \)

Underlined values are significant @ \( p \leq .05 \)

Table 5 presents calculations for analysis of variance. FO and PO are independent variables by rows; D1 through D5 are independent variables by columns.

The measured variance by columns (\( F = 3.158 \)) is inadequate to reject the first null hypothesis at the .05 level of probability.
The measured variance by rows ($F = 9.188$) is adequate to reject the first null hypothesis at the .05 level of probability.

Table 6 presents intercorrelations for both FO and PO across D1 through D5. Pearson product-moment values are inadequate to reject the first null hypothesis at the .05 level of probability, with one exception: a low, negative correlation ($r = -.4467$) between FO and D3.

**TABLE 6**

**CORRELATIONS OF FACULTY OPENNESS AND PRINCIPAL OPENNESS ACROSS MEASURES OF PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES**

<table>
<thead>
<tr>
<th></th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
</tr>
</thead>
<tbody>
<tr>
<td>FO</td>
<td>-.0788</td>
<td>-.1556</td>
<td><strong>-.4467</strong></td>
<td>+.3594</td>
<td>+.2683</td>
</tr>
<tr>
<td>PO</td>
<td>-.0032</td>
<td>-.1013</td>
<td><strong>-.1070</strong></td>
<td>+.0504</td>
<td>+.1592</td>
</tr>
</tbody>
</table>

**RE: PRIMARY NULL HYPOTHESIS 1**

Underlined values are significant @ $p <= .05$

The interrelationships among Principals' Conflict-management Strategies (D1 through D5) and Elementary School Climates (M1 through M6) are summarized in Tables 7 and 8.
Table 7 presents calculations for analysis of variance. M1 through M6 are independent variables by rows; D1 through D5 are independent variables by columns.

The measured variance by columns ($F = 2.298$) is inadequate to reject the second null hypothesis at the .05 level of probability.

The measured variance by rows ($F = 1.6153$) is also inadequate to reject the second null hypothesis at the .05 level of probability.

### TABLE 7

**ANALYSIS OF VARIANCE AMONG INTERCORRELATIONS OF ELEMENTARY SCHOOL CLIMATES AND PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columns</td>
<td>5</td>
<td>57835.1</td>
<td>11567.02</td>
<td>2.298</td>
</tr>
<tr>
<td>Rows</td>
<td>4</td>
<td>32518932.9</td>
<td>8129733.225</td>
<td>1.6153</td>
</tr>
<tr>
<td>Error</td>
<td>20</td>
<td>100655814.0</td>
<td>5032790.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>133232582.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$F$-columns (D dependent) must be $\geq 2.71$ to reject null @ $p = .05$

$F$-rows (M dependent) must be $\geq 2.87$ to reject null @ $p = .05$
Table 8 presents intercorrelations within and across values of M1 through M6 and D1 through D5. Only one Pearson product-moment value is adequate to reject the second null hypothesis at the .05 level of probability.

TABLE 8
CORRELATIONS OF ELEMENTARY SCHOOL CLIMATES ACROSS MEASURES OF PRINCIPALS' CONFLICT MANAGEMENT STRATEGIES

<table>
<thead>
<tr>
<th></th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>-.1177</td>
<td>-.1404</td>
<td>-.4662</td>
<td>+.3591</td>
<td>+.3197</td>
</tr>
<tr>
<td>M2</td>
<td>+.0611</td>
<td>-.2334</td>
<td>-.3253</td>
<td>+.2982</td>
<td>+.1359</td>
</tr>
<tr>
<td>M3</td>
<td>+.2462</td>
<td>-.1726</td>
<td>+.2211</td>
<td>-.1275</td>
<td>-.1775</td>
</tr>
<tr>
<td>M4</td>
<td>+.0688</td>
<td>+.0460</td>
<td>-.3533</td>
<td>+.1531</td>
<td>+.0227</td>
</tr>
<tr>
<td>M5</td>
<td>+.1116</td>
<td>+.0950</td>
<td>-.2228</td>
<td>+.0822</td>
<td>-.1266</td>
</tr>
<tr>
<td>M6</td>
<td>-.0359</td>
<td>+.2627</td>
<td>+.0312</td>
<td>-.0038</td>
<td>-.2702</td>
</tr>
</tbody>
</table>

RE: PRIMARY NULL HYPOTHESIS 2
Underlined values are significant @ p <= .05

The correlations for Teachers' Pupil-control Ideology (M7) with each measure of Principals' Conflict-management Strategy (D1 through D5) are summarized in Table 9. Only one Pearson product-moment value is adequate to reject the third null hypothesis at the .05 level of probability: a low, negative correlation (r = -.3900) between M7 and D3.
TABLE 9
CORRELATIONS OF TEACHERS' PUPIL CONTROL
IDEOLOGY ACROSS MEASURES OF PRINCIPALS'
CONFLICT MANAGEMENT STRATEGIES

<table>
<thead>
<tr>
<th></th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
</tr>
</thead>
<tbody>
<tr>
<td>M7</td>
<td>-.0655</td>
<td>-.2670</td>
<td>-.3900</td>
<td>+.3367</td>
<td>+.3465</td>
</tr>
</tbody>
</table>

RE: PRIMARY NULL HYPOTHESIS 3
Underlined values are significant @ p <= .05.

The correlations for Teachers' Pupil-control Ideology (M7) with each measure of the dimensions of Elementary School Climates (M1 through M7) is summarized in Table 10. Pearson product-moment values are inadequate to reject the fourth null hypothesis at the .05 level of probability.

TABLE 10
CORRELATIONS OF TEACHERS' PUPIL CONTROL IDEOLOGY ACROSS MEASURES OF ELEMENTARY SCHOOL CLIMATES

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
</tr>
</thead>
<tbody>
<tr>
<td>M7</td>
<td>+.3507</td>
<td>+.0342</td>
<td>-.0590</td>
<td>+.2085</td>
<td>+.0928</td>
<td>-.1460</td>
</tr>
</tbody>
</table>

RE: PRIMARY NULL HYPOTHESIS 4
The intercorrelations among the various measures of Principals' Conflict-management Strategies (D1 through D5) were calculated and are summarized in Table 11. Three values are adequate to reject the 11th secondary null hypothesis at the .05 level of probability.

The correlation between D1 and D5 is significant at the .05 level of probability ($r = -.6979$), both otherwise exhibiting insignificant, small correlations with all other D-values.

The correlation for D4 is significant at the .05 level of probability with each of D2 ($r = -.6432$) and D3 ($r = -.6402$). Otherwise, D2 and D3 exhibit insignificant, small correlations with all other D-values, including with each other.
TABLE 12
INTERCORRELATIONS AMONG MEASURES
OF ELEMENTARY SCHOOL CLIMATES

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>+.6051</td>
<td>-.5517</td>
<td>+.3302</td>
<td>+.1658</td>
<td>-.2561</td>
<td></td>
</tr>
<tr>
<td>M2</td>
<td></td>
<td>-.1282</td>
<td>+.2669</td>
<td>+.3246</td>
<td>-.0487</td>
<td></td>
</tr>
<tr>
<td>M3</td>
<td></td>
<td></td>
<td>-.4126</td>
<td>+.0717</td>
<td>+.4192</td>
<td></td>
</tr>
<tr>
<td>M4</td>
<td></td>
<td></td>
<td></td>
<td>-.1749</td>
<td>-.3817</td>
<td>+.2814</td>
</tr>
<tr>
<td>M5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RE: SECONDARY NULL HYPOTHESIS 10

Underlined values are significant @ p <= .05

Table 12 summarizes intercorrelations among measures of the dimensions of Elementary School Climates between "teacher" variables (M1 through M3) and "principal" variables (M4 through M5), two values are adequate to reject the tenth secondary null hypothesis at the .05 level of probability: a significant, low negative correlation exists for M3 with M4 (r = -.4126); and a significant, small positive one exists for it with M6 (r = +.4192).

Table 13 summarizes intercorrelations among Faculty Openness (FO), Principal Openness (PI), Dimensions of Elementary School Climates (M1 through M6) and Teachers' Pupil Control Ideology (M7).
TABLE 13
INTERCORRELATIONS TO ASSESS SECONDARY NULL HYPOTHESES
NUMBERS 5, 6, 7, 8 AND 9

<table>
<thead>
<tr>
<th></th>
<th>PO</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>M5</th>
<th>M6</th>
<th>M7</th>
</tr>
</thead>
<tbody>
<tr>
<td>FO</td>
<td>+.1840</td>
<td>+.9277</td>
<td>+.8331</td>
<td>-.5435</td>
<td>+.3832</td>
<td>+.2328</td>
<td>-.2384</td>
<td>+.2124</td>
</tr>
<tr>
<td>PO</td>
<td>+.1913</td>
<td>+.0123</td>
<td>-.4062</td>
<td>+.7878</td>
<td>-.6782</td>
<td>-.6712</td>
<td>+.1218</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: FO (m1) + (M2) - (M3)
PO = (M4) - (M5) - (M6)

Underlined values are significant @ p <= .05

The correlation between FO and PO (r = +.1840) is inadequate to reject the fifth secondary null hypothesis at the .05 level of probability.

The correlation between FO and M4 (r = +.3832) is adequate to reject the sixth secondary null hypothesis at the .05 level of probability.

The correlation between PO and M3 (r = -.4062) is adequate to reject the seventh null hypothesis at the .05 level of probability.

The correlation between FO and M7 (r = +.2124) is inadequate to reject the eighth secondary null hypothesis at the .05 level of probability.

The correlation between PO and M7 (r = +.1218) is inadequate to reject the ninth secondary null hypothesis at the .05 level of probability.
Analysis of the Data

The correlations were considered according to the convention that those below .50 were low, those between .50 and .75 were moderate, and those above .75 were high. The significance was established at the .05 level of probability.

The first primary null hypothesis was not rejected when Conflict-management Strategies were independent variables because the measured variance indicated by data analysis was inadequate. Measured differences between Faculty Openness and Principal Openness relative to Principals' Conflict-management Strategies were most likely due to chance.

The measured differences by rows where Faculty Openness and Principal Openness were independent variables was adequate to reject the first primary null hypothesis at the .05 level of probability. Some measured differences among Principals' Conflict-management Strategies relative to Faculty versus Principal Openness were likely due to something other than chance.

Pearson product-moment values were inadequate to reject the first primary null hypothesis at the .05 level of probability with the exception of the low, negative correlation between Faculty Openness and compromising. This means the significant variance
measured among Principals' Conflict-management strategies (with Faculty and Principal Openness as the independent variable) is attributable solely to a low, inverse relationship measured between Faculty Openness and Principals' Use of Compromising.

The measured variance among the Principals' Conflict-management Strategies and the Dimensions of School Climate was determined with Climate Dimensions being the independent variables. The measured variance was inadequate to reject the second primary null hypothesis. Measured differences across Principals' Conflict-management Strategies relative to the Dimensions of Elementary School Climate were most likely due to chance.

When the Conflict-management Strategies were viewed as the independent variables, the measured variance was inadequate to reject the second primary null hypothesis at the .05 level of probability. Measured differences across the Dimensions of Elementary School Climate relative to Principals' Conflict-management Strategies were most likely due to chance.

When intercorrelations were made between the Conflict-management Strategies and the Dimensions of Climate, only one Pearson product-moment value was adequate to reject the second primary null hypothesis at the .05 level of probability: a low, negative
correlation between compromising and Teachers' Collegial Behavior. This means there was an inverse, low, albeit significant relationship measured between principals' Use of Compromising and Teachers' Collegial Behavior, but that generally insignificant amounts of variance across measures of the Dimensions of Elementary School Climates were attributable to Principals' Conflict Management Strategies or vice-versa.

The correlation for Teachers' Pupil Control Ideology with each measure of Principals' Conflict-mangement Strategy found only one Pearson product-moment value adequate to reject the third primary null hypothesis at the .05 level of probability: a low, negative correlation between compromising and Pupil Control Ideology. This means that only a low, inverse relationship with Principals' Use of Compromising was measured between Teachers' Pupil Control Ideology across Principals' Conflict-management Strategies.

When correlations for Teachers' Pupil Control Ideology were made with each measure of the Dimensions of Elementary School climate, Pearson product-moment values were inadequate to reject the fourth primary null hypothesis at the .05 level of probability. This means no significant relationships were measured between Teachers' Pupil Control Ideology and the
dimensions of Elementary School Climates.

Intercorrelations made among the various measures of Principals' Conflict-management Strategies were determined, and it was found that three values were adequate to reject the eleventh secondary null hypothesis at the .05 level of probability. The correlation between competing and accommodating was significant as was the correlation between avoiding and collaborating. There was also a significant correlation between avoiding and compromising. This means Principals' Use of Competing was measured to exist in moderate inverse proportion to the extent that Principals' Use of Accommodating was extant within the same elementary school. It could be further inferred that Principals' Use of Avoiding was measured to exist in moderate inverse proportion to the extent that Principals' Use of Collaborating and Principals' Use of Compromising were extant within the same elementary school, although the latter two are largely independent of one another.

Intercorrelations among those measures used to calculate Faculty Openness (teacher collegial behavior, teacher intimate behavior, teacher disengaged behavior), and those measures used to calculate Principal Openness (principal supportive behavior, principal directive behavior, and principal restrictive behavior) found two values adequate to reject the tenth
secondary null hypothesis at the .05 level of probability: a significant, low negative correlation existed for teacher disengaged behavior with principal supportive behavior and a significant, small positive correlation for teacher disengaged behavior with principal restrictive behavior. This means Teachers' Disengaged Behavior was measured to exist in low, inverse proportion with Principals' Supportive Behavior, and in low, positive proportion to Principals' Restrictive Behavior.

Intercorrelations were made between Faculty Openness, Principal Openness, the Dimensions of Elementary School Climates, and Teachers' Pupil Control Ideology. The correlation between Faculty Openness and Principal Openness was inadequate to reject the fifth secondary null hypothesis. Any measured relationship between Faculty Openness and Principal Openness was likely due to chance.

The correlation between Faculty Openness and Principal Supportive Behavior was adequate to reject the sixth secondary null hypothesis at the .05 level of probability. The measured relationship between Faculty Openness and Principal Supportive Behavior was likely due to something other than chance. The correlations between Faculty Openness with Principals' Directive Behavior and Principals' Restrictive Behavior, however, were likely due to chance.
The correlation between Principal Openness and Teachers' Disengaged Behavior was adequate to reject the seventh secondary null hypothesis at the .05 level of probability. The measured inverse relationship between Principal Openness and Teachers' Disengaged Behavior was likely due to something other than chance. The correlations between Principal Openness with Teachers' Collegial Behavior and Teachers' Intimate Behavior, however, were likely due to chance.

The correlations between Faculty Openness and Teachers' Pupil Control Ideology was inadequate to reject the eighth secondary null hypothesis at the .05 level of probability. Any measured relationship between Faculty Openness and Teachers' Pupil Control Ideology was likely due to chance.

The correlation between Principal Openness and Teachers' Pupil Control Ideology was inadequate to reject the ninth secondary null hypothesis at the .05 level of probability. Any measured relationship between Principal Openness and Teachers' Pupil Control Ideology was likely due to chance.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Restatement of the Problem

The major problem addressed in this research study was to determine if there was a relationship among the conflict management strategies used by the principal of an elementary school, the organizational climate of that elementary school, and the pupil control ideology held by the teachers of that elementary school.

An analysis of the major problem found four primary subproblems to be studied. The first was to determine if there was a relationship between the organizational climate of the elementary school as evidenced by the faculty openness and the principal openness of the school and the conflict management strategies used by the elementary school administrator. The second problem was to determine whether there was a relationship between the dimensions of the school climate of the elementary schools and the conflict management strategies used by the elementary school administrator. The third problem was to determine whether there was a relationship between the pupil
control ideology of the elementary teachers and the conflict management strategies used by the elementary school administrators. Determining whether there was a relationship between the dimensions of climate of an elementary school and the teachers' pupil control ideology was the fourth problem.

Further dissection of the problem revealed seven secondary subproblems which needed to be addressed. The first of these was to determine whether there was a relationship between faculty openness and principal openness. Secondly, whether there was a relationship between faculty openness and the dimensions of the climate of the elementary school needed to be determined. Thirdly, it was necessary to determine whether there was a relationship between principal openness and the dimensions of climate of an elementary school. The fourth concern was to determine whether there was a relationship between faculty openness and the teachers' pupil control ideology. The fifth need was to determine whether there was a relationship between the principal openness and the teachers' pupil control ideology. Whether there was a relationship between the dimensions of climate which generated the faculty openness score and the dimensions of climate which generated the principal openness score was the sixth secondary subproblem. The seventh area was to determine whether there was a relationship between any
of the conflict management strategies used by the elementary principals.

Summary of the Procedures Used

A random sample of the population of elementary schools of a three state Mid-western geographic region was drawn to include thirty schools in this study. The teachers in each school completed the Organizational Climate Description Questionnaire - Revised (OCDQ-RE) and the Pupil Control Ideology Form. The principal of each of the schools included in the study completed the Thomas-Kilmann Conflict MODE Instrument and a brief personal data sheet.

Four primary research null hypotheses were generated along with seven secondary null hypotheses to be tested by statistically analyzing the data collected via the instrumentation.

The data was transferred to computer scan sheets to allow the use of the Statistical Analysis Systems computer software program for analyzing the data. The Analysis of Variance technique was used along with the Pearson product-moment correlational technique to determine the significance of all relationships in the various research hypotheses.
Principal Findings and Conclusions

Primary Null Hypotheses

Primary Null Hypothesis #1
There is no significant relationship between the organizational climate of elementary schools as measured by one or both of faculty openness and principal openness and the conflict management strategies used by elementary school administrators.

The measured analysis of variance when conflict management strategies were the independent variables was inadequate to reject this hypothesis. When faculty openness and principal openness were analyzed as the independent variables, the measured variance was adequate to reject this hypothesis at the .05 level of probability. Pearson product-moment values were inadequate to reject this null hypothesis with the exception of the low, negative correlation found between "faculty openness" and "compromising" as a management strategy. This meant that the significant variance measured among the Principals' Conflict Management Strategies was attributable solely to a low, inverse relationship measured between Faculty Openness and Principals' Use of Compromising.

Primary Null Hypothesis #2
There is no significant relationship between the dimensions of climate of the elementary schools and the
conflict management strategies used by the elementary school administrators.

Analysis of variance calculations were completed and found to be inadequate to reject this null hypothesis. Only one Pearson product-moment value was adequate to reject this second null hypothesis. There was a low, negative correlation between principals' use of "compromising" and "teachers' collegial behavior." This meant that there was an inverse, low significant relationship between Principals' Use of Compromising and Teachers' Collegial Behavior.

**Primary Null Hypothesis #3**

There is no significant relationship between the pupil control ideology of elementary teachers and the conflict management strategies used by elementary school administrators.

Only one Pearson product-moment value was adequate to reject this third null hypothesis at the .05 level of probability. A low, negative correlation was determined between compromising and the pupil control ideology of the teachers. This meant that only a low, inverse relationship with Principals' Use of Compromising was measured between Teachers' Pupil Control Ideology across Principals' Conflict Management Strategies.
Primary Null Hypothesis #4
There is no significant relationship between the dimensions of climate of an elementary school and the teachers' pupil control ideology.

Pearson product-moment correlations were inadequate to reject this fourth null hypothesis at the .05 level of probability indicating that no significant relationships were measured between these two variables.

Secondary Null Hypotheses

Secondary Null Hypothesis #5
There is no significant relationship between faculty openness and principal openness.

The calculated correlation was inadequate to reject this hypothesis at the .05 level of probability.

Secondary Null Hypothesis #6
There is no significant relationship between faculty openness and the dimensions of climates of elementary schools.

The correlation between faculty openness and principal supportive behavior was adequate to reject the sixth null hypothesis at the .05 level of probability. The measured relationship between Faculty Openness and Principal Supportive Behavior was significant.
Secondary Null Hypothesis #7
There is no significant relationship between principals' openness and the dimensions of climates of elementary schools.

The correlation between principals' openness and teacher disengaged behavior was adequate to reject this seventh secondary null hypothesis at the .05 level of probability. There was a measured inverse relationship between Principal Openness and Teachers' Disengaged Behavior.

Secondary Null Hypothesis #8
There is no significant relationship between faculty openness and teachers' pupil control ideology.

The correlation between faculty openness and teachers' pupil control ideology was inadequate to reject this hypothesis at the .05 level of probability.

Secondary Null Hypothesis #9
There is no significant relationship between principals' openness and teachers' pupil control ideology.

The correlation between principal openness and the pupil control ideology of the teachers was inadequate to reject this null hypothesis at the .05 level of probability.
Secondary Null Hypothesis #10
There is no significant relationship between the dimensions used to generate the faculty openness score and those dimensions used to generate the principals' openness score.

The intercorrelations calculated found two values adequate to reject this null hypothesis. A significant, low negative correlation existed between teacher disengaged behavior and principal supportive behavior. A significant, small positive correlation existed between teacher disengaged behavior and principal restrictive behavior. This meant that Teachers' Disengaged Behavior was measured to exist in low, inverse proportion with Principals' Supportive Behavior and in low positive proportion to Principals' Restrictive Behavior.

Secondary Null Hypothesis #11
There is no significant relationship between any of the conflict management strategies used by principals of the elementary schools.

The intercorrelations among the various measures of Principals' Conflict Management Strategies found three values adequate to reject this null hypothesis. The correlation between "competing" and "accommodating" was significant at the .05 level of probability. This meant that the Principals' Use of Competing was
measured to exist in moderate inverse proportion to the extent that Principals’ Use of Accommodating was extant within the same elementary school. The correlation for "avoiding" was significant at the .05 level of probability with both "collaborating" and "compromising." This meant that Principals’ Use of Avoiding was measured to exist in moderate inverse proportion to the extent that Principals’ Use of Collaborating and Principals’ Use of Compromising were extant within the same elementary school.

A review of the findings leads to the conclusion that, of the four primary null hypotheses, only the first three could be rejected on the basis of a single correlational value of each. There was found to be a significant low, inverse relationship between Faculty Openness and Principals’ Use of Compromising. A significant low, inverse relationship was also found between Principals’ Use of Compromising and Teachers’ Collegial Behavior. A significant low, inverse relationship was found between the Principals’ Use of Compromising and Teachers’ Pupil Control Ideology.

Of the seven secondary null hypotheses, only four could be rejected due to adequate values of correlation. The measured relationship between Faculty Openness and Principals’ Supportive Behavior was significant. There was a measured significant inverse relationship between Principal Openness and Teachers’
disengaged Behavior. Teachers' Disengaged Behavior was also found to be significant in low, inverse proportion with Principals' Supportive Behavior and in low, positive proportion to Principals' Restrictive Behavior. It was also found that Principals' Use of Competing was measured to exist in moderate inverse proportion to the extent that Principals' Use of Accommodating was extant in the elementary school. The Principals' Use of Avoiding was measured to exist in moderate inverse proportion to the extent that Principals' Use of Collaborating and Principals' Use of Compromising were extant in the elementary school.

These findings would seem to indicate that conflict management strategies used by elementary school principals do have an effect on some of the indicators of school organizational climate and on the pupil control orientation held by the staff of that school.

It appears that the principals' use of "compromising" does have a relationship with teacher openness in the school. The findings suggest that the more the principal uses compromising as a strategy, the less open the teachers will be in that school.

The Principals' Use of Compromising also was found to have a relationship with the measurement of Teachers' Collegial Behavior. This finding would seem to imply that the greater use the principal made of
compromising to manage conflict, the lower the teachers' collegial behavior would be at that school.

The results of this study also found support for a relationship between the Principals' Use of Compromising and Teachers' Pupil Control Ideology. The scoring of the PCI results in a higher score for custodialism and a lower score for humanism. The findings of a significant, inverse relationship would seem to suggest that the more the principal used compromising as a strategy to manage conflict, the more humanistic the teachers would be in their orientation toward their students.

Implications might also be drawn from the findings related to the secondary null hypotheses. Supportive behavior by the principal appears to result in more open teacher behaviors. An increase in the openness of principal behavior would seem to suggest a lower teacher disengagement rate. The findings also imply that the more supportive the principal is, the lower the teachers' disengagement will be. If a principal is restrictive in his or her behavior, there seems to be some evidence to indicate that the teachers will show increased disengagement.

The final conclusions which might be made are drawn from the findings on the principals' use of conflict management strategies. These would seem to suggest that the more the principals used "competing"
as a strategy, the less they would use "accommodating." An increased use of "avoiding" as a strategy would seem to indicate a decrease in the use of "collaborating" in the use of "compromising."

Recommendations for Further Study and Research

1. Given the predominantly negligible variance and small intercorrelations among the variables, it would be useful to analyze the extent to which differences among measures of Elementary School Organizational Climates, Pupil Control Ideology, and Principals' Conflict Management Strategies are a function of test versus trait variance.

In other words, are differences among the respective scores because of poor convergent and/or discriminant validity within the respective instruments, or do they actually reflect the relationships among the variables? To analyze this, intercorrelations among all measured variables could be calculated.

Where traits are logically conceived to be similar, relatively moderate correlations between them would be considered positive evidence for convergent validity. Where traits are logically conceived to be dissimilar, relatively low (or negative) correlations between them would be considered positive evidence for discriminant validity.
2. Studies could also be made using outside measures with each of the test instruments used in this study: The OCDQ-RE, Pupil Control Ideology Form, Thomas-Kilmann Conflict MODE Instrument. It would be first necessary to analyze each instrument with one of the other instruments used to determine if they are measuring the same or different traits. Then an outside measure could be selected to be administered along with the original test instrument. This would help to determine convergent and discriminate validity using validity triangles.

Two measures that purport to measure the same trait should correlate moderately for evidence of adequate convergent validity.

Two measures that purport to measure traits which are logically conceived to be opposite from one another should exhibit low or negative correlations for evidence of discriminate validity.

3. Because the OCDQ-RE is a relatively new measure developed in 1986, additional studies should be made using this instrument as a primary source for data on elementary school climate. A review of the literature found limited studies made using this instrument. Norms had not been established so comparisons could only be made within the sample.

4. This study could be replicated comparing the variables using population samples from both public
elementary and private elementary schools.

5. This study could be replicated comparing the personal characteristics of the elementary school principals to the conflict management strategies used. The present research included collecting data on these characteristics, but they were not statistically analyzed.

6. The study could be replicated at the middle school, junior high school, or senior high school levels using the Organizational Climate Description Questionnaire - Secondary (OCDQ-RS) which was recently developed in 1985 at Rutgers University. In addition to identifying and categorizing climates at this level, comparisons could also be made within academic departments.

7. A longitudinal study might be made to determine if changes which occur in areas encompassing the three variables were related over a period of years. The strategies used by the elementary principal might change as he or she gained experience or worked with the staff. This in turn might affect the climate of the school or the pupil control ideology of the staff. A number of studies reviewed in the research were longitudinal based on the suggestion by Halpin and Croft that open climates would become more open and closed climates more closed. The studies reviewed did not find this supposition to be true. Perhaps, similar
studies should be now completed using the OCDQ-RE. Such studies could also focus on the principal to determine whether or not a new principal alters a school climate or pupil control ideology or what effect the common practice of intra-school transfers has upon the individual school.

8. Studies might also be made correlating perceptions with idealism. Teachers and principals might be asked to complete the survey instruments based upon how they feel the situation actually is and then complete it again based upon how they feel the situation should be in an "ideal" setting. Faculty of schools might then be matched with principals having similar philosophy toward pupil control, conflict management, or climate.

9. Student achievement should be the primary goal of and focus for education as well as direct evidence of effective schools. Therefore, a study might be made to determine if there are relationships between any or all of the variables used in this study (conflict management strategies, organizational climate, and pupil control ideology) and student achievement within the school.

10. Schools exist within the community structure and are directly influenced by the dynamics of the community. This relationship is of necessity a two-way process. A research study might be made to determine
if there are relationships between any or all of the variables used in this study and the community in which the school is located. Such a study could focus on community involvement in the school structure, communications between school and community, or attitudes toward the local school.
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202


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APPENDIX A
February 17, 1997

Karen Schilling
625 Grant Street
Platteville, WI 53810

Dear Karen:

Pursuant to your request, XICOM, INC. consents to your use of the Thomas-Kilmann Conflict Mode Instrument under the following terms and conditions:

(1) That the maximum number of Thomas-Kilmann Conflict Mode Instruments you reproduce will not exceed 50 copies, and that Xicom, Inc., will be identified as the creators and owners thereof.

(2) You will use the Thomas-Kilmann Conflict Mode Instrument only for your dissertation entitled "The Relationship among the Organizational Climate of a School, the Pupil Control Orientation, and the Conflict Resolution Techniques Utilized by the School Administrator. It is understood that is the above titled dissertation is reproduced, a copy of the Thomas-Kilmann Conflict Mode Instrument may not be enclosed.

(3) You will provide XICOM with a copy of the results of this study and a copy of any articles produced as a result of this study.

(4) For the limited rights conveyed herein, you will pay XICOM, INC., Twenty-Five Dollars ($25.00).

(5) It is understood that the Thomas-Kilmann Conflict Mode Instrument and all reprints of articles written will credit Xicom as the owner/originators of the Thomas-Kilmann Conflict Mode Instrument.
(6) That you further agree that the use of any reference to promotional materials, any publications written as the result of this study will refer to the "Thomas-Kilmann Conflict Mode Instrument", copyright XICOM, INC. 1974.

If the above terms and conditions are agreeable, please sign on the line designated, and return with your check for ($25.00).

ACCEPTED AND AGREED:  
Karen Schilling

XICOM, INC.
Edward H. Northrop  
President

COMPLETION DATE OF DISSERTATION:  
December 1987

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NAME & PHONE OF DEPARTMENT CHAIRMAN  
Dr. Philip Carlin; 1-312-670-3053

EMPLOYER  
School District of Platteville

Company Name:  

Company Address:  
425 Broadway
City:  
Platteville,  
State:  
Wisconsin  
Zip:  
53818

YOUR TITLE OR DEPARTMENT  
Elementary Principal, Neal Wilkins Elementary School
SCORING AND INTERPRETING THE
THOMAS-KILMANN CONFLICT MODE INSTRUMENT
Circle the letters below which you circled on each item of the questionnaire.

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<td>B</td>
<td>A</td>
</tr>
<tr>
<td>19.</td>
<td>A</td>
<td></td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>A</td>
<td></td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>B</td>
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<td>A</td>
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<tr>
<td>22.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
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<tr>
<td>24.</td>
<td></td>
<td></td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>25.</td>
<td>A</td>
<td></td>
<td>B</td>
<td></td>
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<tr>
<td>26.</td>
<td></td>
<td></td>
<td>B</td>
<td>A</td>
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<tr>
<td>27.</td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>28.</td>
<td>A</td>
<td></td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>30.</td>
<td></td>
<td></td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

Total number of items circled in each column:

<table>
<thead>
<tr>
<th>Competing</th>
<th>Collaborating</th>
<th>Compromising</th>
<th>Avoiding</th>
<th>Accommodating</th>
</tr>
</thead>
</table>
APPENDIX C
GRAPHING YOUR PROFILE SCORES

Your profile of scores indicates the repertoire of conflict-handling skills which you, as an individual, use in the kinds of conflict situations you face. Your score profile can be graphed on the next page entitled, "Your Scores on the Thomas-Kilmann Conflict Mode Instrument."

The five modes are represented by the five columns labeled "competing," "collaborating," and so on. In the column under each model is the range of possible scores on that mode—from 0 (for very low use) to 12 (for very high use). Circle your own scores on each of the five modes.

Each possible score is graphed in relation to the scores of managers who have already taken the Thomas-Kilmann Conflict Mode Instrument. The horizontal lines represent percentiles—the percentage of people who have scored at or below a given number. If you had scored some number above the "80%" line on competing, for example, that would mean that you had scored higher than 80% of the people who have taken the Thomas-Kilmann Conflict Mode Instrument—that you were in the top 20% on competition.

The double lines (at the 25th and 75th percentiles) separate the middle 50% of the scores on each mode from the top 25% and the bottom 25%. In general, if your score falls somewhere within the middle 50% on a given mode, you are close to the average in your use of that mode. If your score falls outside that range, then your use of that mode is somewhat higher or lower than most of the people who have taken the Instrument. Remember that extreme scores are not necessarily bad, however, since your situation may require high or low use of a given conflict-handling mode.
YOUR SCORES ON THE THOMAS-KILMANN CONFLICT MODE INSTRUMENT

<table>
<thead>
<tr>
<th></th>
<th>Competing</th>
<th>Collaborating</th>
<th>Compromising</th>
<th>Avoiding</th>
<th>Accommodating</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>10</td>
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<tr>
<td></td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>9</td>
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<tr>
<td>90%</td>
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<tr>
<td>High</td>
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</tr>
<tr>
<td>25%</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
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<tr>
<td></td>
<td>8</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70%</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7</td>
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<tr>
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<tr>
<td>60%</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
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<tr>
<td>Middle</td>
<td></td>
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<tr>
<td>50%</td>
<td>5</td>
<td>7</td>
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<tr>
<td>40%</td>
<td>4</td>
<td>6</td>
<td>5</td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td>30%</td>
<td>4</td>
<td>6</td>
<td>5</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td>0</td>
<td>0</td>
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<tr>
<td>0%</td>
<td></td>
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</tr>
</tbody>
</table>

*Scores are graphed in relation to the scores of 339 practicing managers at middle and upper levels in business and government organizations.
APPENDIX D
Dear Dr. Hoy:

Thank you very much for speaking with me on the telephone earlier today in regard to my using the OCDQ-RE (elementary) for my dissertation research.

I would like to study the relationship among the variables: Organizational Climate of an Elementary School, the Pupil Control Orientation of the Elementary Teachers, and the Conflict Management Style of the Elementary Administrator. I would use elementary schools in three mid-western states randomly selected.

I would appreciate a copy of the revised instrument with instructions and scoring and permission to make under 50 photocopies each giving you appropriate credit. Please advise me as to what part of my finished dissertation you would like and any charges which may be involved in obtaining and using this instrument.

I am really excited about the research project which I know will be enhanced with the use of such a current instrument as the OCDQ-RE.

Sincerely yours,

Karen Schilling
Elementary Principal
Graduate Student - Loyola University of Chicago
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; VO=VERY FREQUENTLY OCCURS

1. The teachers accomplish their work with vim, vigor and pleasure.-------- RO SO O VO
2. Teachers' closest friends are other faculty members at this school.--- RO SO O VO
3. Faculty meetings are useless.---------------------------------------- RO SO O VO
4. The principal goes out of his/her way to help teachers.------------- RO SO O VO
5. The principal rules with an iron fist.----------------------------- RO SO O VO
6. Teachers leave school immediately after school is over.------------- RO SO O VO
7. Teachers invite other faculty members to visit them at home.--------- RO SO O VO
8. There is a minority group of teachers who always oppose the majority.- RO SO O VO
9. The principal uses constructive criticism.-------------------------- RO SO O VO
10. The principal checks the sign-in sheet every morning.-------------- RO SO O VO
11. Routine duties interfere with the job of teaching.------------------- RO SO O VO
12. Most of the teachers here accept the faults of their colleagues.--- RO SO O VO
13. Teachers know the family background of other faculty members.----- RO SO O VO
14. Teachers exert group pressure on non-conforming faculty members.--- RO SO O VO
15. The principal explains his/her reasons for criticism to teachers.--- RO SO O VO
16. The principal listens to and accepts teachers' suggestions.---------- RO SO O VO
17. The principal schedules the work for the teachers.------------------- RO SO O VO
18. Teachers have too many committee requirements.-------------------- RO SO O VO
19. Teachers help and support each other.----------------------------- RO SO O VO
20. Teachers have fun socializing together during school time.--------- RO SO O VO
21. Teachers ramble when they talk at faculty meetings.---------------- RO SO O VO
22. The principal looks out for the personal welfare of teachers.------ RO SO O VO
23. The principal treats teachers as equals.--------------------------- RO SO O VO
24. The principal corrects teachers' mistakes.------------------------- RO SO O VO
25. Administrative paperwork is burdensome at this school.------------- RO SO O VO
26. Teachers are proud of their school.------------------------------- RO SO O VO
27. Teachers have parties for each other.----------------------------- RO SO O VO
28. The principal compliments teachers.----------------------------- RO SO O VO
29. The principal is easy to understand.----------------------------- RO SO O VO
30. The principal closely checks classroom (teacher) activities.-------- RO SO O VO
31. Clerical support reduces teachers' paperwork.---------------------- RO SO O VO
32. New teachers are readily accepted by colleagues.------------------ RO SO O VO
33. Teachers socialize with each other on a regular basis.------------- RO SO O VO
34. The principal supervises teachers closely.------------------------- RO SO O VO
35. The principal checks lesson plans.------------------------------- RO SO O VO
36. Teachers are burdened with busywork.----------------------------- RO SO O VO
37. Teachers socialize together in small, select groups.--------------- RO SO O VO
38. Teachers provide strong social support for colleagues.------------- RO SO O VO
39. The principal is autocratic.--------------------------------------- RO SO O VO
40. Teachers respect the professional competence of their colleagues.--- RO SO O VO
41. The principal monitors everything teachers do.--------------------- RO SO O VO
42. The principal goes out of his/her way to show appreciation to teachers.-------------- RO SO O VO
APPENDIX F
The Six Dimensions of the OCDQ-RE and Items that Compose the Six Subtests

Teacher Behavior: Collegial

Collegial behavior is indicated by supportive, professional relationships among staff. Teachers are proud of their school, enjoy working with their colleagues, and feel a sense of accomplishment and fulfillment in their jobs. They exhibit energy, enthusiasm, and positiveness.

Collegial Items

1. The teachers accomplish their work with vim, vigor, and pleasure.

* 6. Teachers leave school immediately after school is over.

12. Most of the teachers here accept the faults of their colleagues.

19. Teachers help and support each other.

26. Teachers are proud of their school.

32. New teachers are readily accepted by colleagues.

* 37. Teachers socialize in small, select groups.

40. Teachers respect the professional competence of their colleagues.

* scored negatively
Teacher Behavior: Intimate

Intimate behavior reflects a pervasive social support network among staff. Teachers have gotten to know one another well enough to be personal friends, and they socialize regularly both in and out of the working environment.

Intimate Items

2. Teachers' closest friends are other faculty members at this school.

7. Teachers invite other faculty members to visit them at home.

13. Teachers know the family background of other faculty members.

20. Teachers have fun socializing together during school time.

27. Teachers have parties for each other.

33. Teachers socialize with each other on a regular basis.

38. Teachers provide strong social support for colleagues.

Teacher Behavior: Disengaged

Disengaged behavior is exhibited by teachers who have no personal stake in the school, their colleagues, or their profession. They are simply putting in time and are non-productive in group efforts or team-building; they have no common goal orientation. Their behavior is negative and critical toward colleagues and the organization.
**Disengaged Items**

3. Faculty meetings are useless.

8. There is a minority group of teachers who always oppose the majority.

14. Teachers exert group pressure on non-conforming faculty members.

21. Teachers ramble when they talk at faculty meetings.

**Principal Behavior: Supportive**

Supportive behavior by the principal is reflected in his/her genuine rapport with staff. Supportive principals respect the professional competence of their staff and also try to exhibit a personal interest in each teacher. They enjoy working with teachers to set goals and solve problems, and they are willing to accept teacher suggestions and feedback. Praise is given genuinely and frequently, and criticism is handled constructively.

**Supportive Items**

4. The principal goes out of his/her way to help teachers.

9. The principal uses constructive criticism.

15. The principal explains his/her reasons for criticism to teachers.

22. The principal looks out for the personal welfare of teachers.

28. The principal compliments teachers.
16. The principal listens to and accepts teachers' suggestions.

23. The principal treats teachers as equals.

29. The principal is easy to understand.

42. The principal goes out of his/her way to show appreciation to teachers.

**Principal Behavior: Directive**

Directive behavior is indicated by principals who are rigid and keep a distance between employer and employee. Such principals need to maintain close and constant control over all teacher and school activities, down to smallest details. Directive principals are monitors and autocrats who give no consideration to interpersonal relationships.

**Directive Items**

5. The principal rules with an iron fist.

10. The principal checks the sign-in sheet every morning.

17. The principal schedules the work for the teachers.

24. The principal corrects teachers' mistakes.

30. The principal closely checks classroom (teacher) activities.

35. The principal checks lesson plans.

39. The principal is autocratic.

41. The principal monitors everything teachers do.

4. The principal supervises teachers closely.
Principal Behavior: Restrictive

Restrictive behavior is exhibited by principals who discourage interaction and productivity because of their overwhelming concern for strict adherence to policies, procedures, and administrative detail. Restrictive principals leave no room for teacher input or creative approaches to school concerns, and they burden others with non-educative activities.

Restrictive Items

11. Routine duties interfere with the job of teaching.

18. Teachers have too many committee requirements.
To Score the OCDQ-RE

1. Group items according to the six subtests [See enclosure].

2. RO=1  SO=2  OO=3  VO=4 Each item (except the negative items *) should be scored according to the numerical code. The items with an * are scored in reverse--R0=4  SO=3  OO=2  VO=1. For the subjects in each school, the scores for each item should be averaged across individuals (an average item school score is created); hence, each school will have a mean score for each of the items of the OCDQ-RE. Then the mean scores for each of the subtests should be summed to produce the school score on each of the subtests. NOTE: This procedure is used because the appropriate unit of analysis is the school, not the individual.

3. The higher the score on each dimension, the stronger that property for the school.

4. Two openness indices can be created for each school as follows:
   a. Standardize the school scores for each subtest. I suggest you make the mean 50 and the standard deviation 10.
   b. Openness Index for faculty relations= [C+I-D] WHERE C= the standardized collegial subtest score, I=the standardized intimate score, and D is the standardized disengaged score.
   c. Openness Index for principal behavior= [S-D-R] WHERE S= the standardized supportive subtest score, D is the standardized directive score, and S is the standardized restrictive score.

5. Norms have not been established; hence, comparisons should be made within your sample.
APPENDIX G
FORM PCI
INFORMATION

On the following page, a number of statements about teaching are presented. Our purpose is to gather information regarding the actual attitudes of educators concerning these statements. You will recognize that the statements are of such a nature that there are no correct or incorrect answers. We are interested only in your frank opinion of them. Your responses will remain confidential, and no individual or school will be named in the report of this study. Your cooperation is greatly appreciated.

INSTRUCTIONS: Following are twenty statements about schools, teachers, and pupils. Please indicate your personal opinion about each statement by circling the appropriate response at the right of the statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is desirable to require pupils to sit in assigned seats during assemblies.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>2. Pupils are usually not capable of solving their problems through logical reasoning.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>3. Directing sarcastic remarks toward a defiant pupil is a good disciplinary technique.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>4. Beginning teachers are not likely to maintain strict enough control over their pupils.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>5. Teachers should consider revision of their teaching methods if these are criticized by their pupils.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>6. The best principals give unquestioning support to teachers in disciplining pupils.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>7. Pupils should not be permitted to contradict the statements of a teacher in class.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>8. It is justifiable to have pupils learn many facts about a subject even if they have no immediate application.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>9. Too much pupil time is spent on guidance and activities and too little on academic preparation.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>10. Being friendly with pupils often leads them to become too familiar.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>11. It is more important for pupils to learn to obey rules than that they make their own decisions.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>12. Student governments are a good &quot;safety valve&quot; but should not have much influence on school policy.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>13. Pupils can be trusted to work together without supervision.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>14. If a pupil uses obscene or profane language in school, it must be considered a moral offense.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>15. If pupils are allowed to use the lavatory without getting permission, this privilege will be abused.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>16. A few pupils are just young hoodlums and should be treated accordingly.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>17. It is often necessary to remind pupils that their status in school differs from that of teachers.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>18. A pupil who destroys school material or property should be severely punished.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>19. Pupils cannot perceive the difference between democracy and anarchy in the classroom.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
<tr>
<td>20. Pupils often misbehave in order to make the teacher look bad.</td>
<td>SA</td>
<td>A</td>
<td>U</td>
<td>D</td>
<td>SD</td>
</tr>
</tbody>
</table>
PRINCIPAL'S QUESTIONNAIRE

Biographical Information

1. Age ................................................ 1. Under 35 -------
   2. 36-45 ---------
   3. 46-55 ---------
   4. Over 55 ---------

2. Sex .............................................. 1. Male -------
   2. Female -------

3. Marital Status .................................. 1. Single -------
   2. Married -------
   3. Widowed -------
   4. Divorced -------
   5. Separated -------

4. Total years of teaching experience ............. -------
   (As of June 1987)

5. Total years of administrative experience ...........
   (As of June 1987)

6. Years at this school as administrator ............. -------

7. Highest degree and hours beyond earned ........... 1. B.S. -------
   2. B.S. +30 -------
   3. M.S. -------
   4. M.S. +30 -------
   5. M.S. + more than 30 -------
   6. Doctorate -------

8. Total number of pupils (K-6) enrolled at this
   school ........................................... -------

9. Total number of teachers at this school ............ -------
APPENDIX I
Dr. Wayne K. Hoy  
Associate Dean for Academic Affairs in the  
Graduate School of Education  
10 Seminary  
Rutgers University  
New Brunswick, New Jersey 08903

Dear Dr. Hoy:

My dissertation is finally beginning to take shape. I do find, however, that a verbal description of school climates would be enhanced by the use of a figure depicting both behaviors and climates.

Would you grant permission to reproduce the figure found on page 232 of your book, Educational Administration (New York: Random House, 1987)? If so, I will include credit to you and to Cecil C. Miskel and add a caution against other reproductions without your permission.

Thank you very much.

Sincerely yours,
Karen Schilling

You have my permission to use Table从小孩
Karen Schilling has my permission to reproduce the figure of the Conflict Process Model found on page 8 of my book, *Interpersonal Conflict Resolution* in her dissertation for an Ed.D. degree being completed at Loyola University of Chicago. I understand she will include credit to me and a caution against further reproduction of the figure without my permission.

Dr. Alan C. Filley
School of Business
1155 Observatory Drive
University of Wisconsin - Madison
Madison, Wisconsin 53706
APPROVAL SHEET

The dissertation submitted by Karen Johnson Schilling has been read and approved by the following committee:

Dr. Philip M. Carlin, Director
Associate Professor, Educational Leadership and Policy Studies, Loyola

Dr. Max A. Bailey
Associate Professor, Educational Leadership and Policy Studies, Loyola

Rev. Charles Kyle
Visiting Professor, Educational Leadership and Policy Studies, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

April 18, 1988
Date

Philip M. Carlin
Director's Signature