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An Exploratory Study of Teacher Perceptions of Elementary School Climate and Elementary School Discipline in Omaha Public Schools

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AN EXPLORATORY STUDY OF TEACHER PERCEPTIONS OF ELEMENTARY SCHOOL CLIMATE AND ELEMENTARY SCHOOL DISCIPLINE IN THE OMAHA PUBLIC SCHOOLS

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THESIS ACCEPTANCE

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Chapter 1

INTRODUCTION

The organizational climate of elementary schools has been extensively studied since the early 1960s. Hundreds of studies have been done using just one of the available climate instruments, the Organizational Climate Description Questionnaire. Much publicity has recently been given to methods of student management in the public schools as well.

The goals of this study were to explore teachers' perceptions of school climate and school discipline in the Omaha Public Schools and to seek possible relationships between climate, discipline, and the implementation of a citizenship-discipline program.

A recently revised school climate instrument, based on teachers' perceptions of teacher behavior and principal behavior, was used in pursuit of these goals. Two additional sets of questions were written. One concerned discipline in the elementary school, and one related to a specific citizenship-discipline program being implemented in some Omaha Public Schools. An attempt to combine climate and discipline questions into one instrument was also made.

Organizational Climate in the Elementary School

The purposes of this section are to summarize some of the issues concerning organizational climate, to review recent literature dealing with organizational climate in the elementary school, and to describe the Citizenship-Discipline Program being implemented in some Omaha Public Schools.

Organizational Climate

The concept of "climate" has been investigated extensively, receiving much research attention since the 1960s. Jablin considers climate "a meaningful construct and potentially critical for understanding organizational behavior" (1980, p. 329). Yet, "confused" seems to be an adjective commonly applied to climate research (e.g., Falcione & Kaplan, 1984; James & Jones, 1974; Muchinsky, 1977).

Research has been done from several different perspectives based on differing assumptions and treating climate variously as a moderating, criterion or predictor variable.

Issues in climate research have included the definitions of "organizational climate," "communication climate," and "psychological climate," and whether climate is simply a duplication of other constructs such as "satisfaction." Climate has been considered as an organizational or individual attribute, as descriptive or perceptual (James & Jones, 1974), as a property of subsystems rather than of whole organizations (Powell & Butterfield, 1978) and as a field of study in which statistics and methodology have outstripped conceptual advances (e.g., Jablin, 1980; James & Jones, 1974).

Definitions.

Tagiuri and Litwin define climate as "the relatively enduring quality of the internal environment of an organization that (a) is experienced by its members; (b) influences their behavior; and (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the organization" (cited in Albrecht, 1979). Powell and Butterfield summarize Payne and Pugh's definition of organizational climate "as the characteristic behavioral processes in an organization at one point in time, reflecting the members' attitudes, beliefs and values, measured either objectively or subjectively" (1978), p. 151). Campbell defines organizational climate as "a set of attributes specific to a particular organization that may be induced from the way the organization deals with its members and its environment" (cited in James & Jones, 1974, p. 1099).

Jablin considers communication climate to be more specific than organizational climate. He suggests that most research of communication climates in organizations explores "the measurement of employees' perceptions and attitudes of selected communication-related events, activities and behaviors" (1980, p. 328).

Ireland, VanAuken and Lewis (1978) describe a relationship between organizational climate and communication climate by using the six variables or managerial processes which Litwin and Stringer believe mold organizational climate. The six variables (structure, individual responsibility, rewards, risk and risk-taking, warmth and support, and tolerance and conflict) are rated high or low for each of three types of organizational climate (power-motivated, affiliation oriented,

and achievement oriented). Many low marks indicate a communication climate that is defensive and impedes successful message transmission. High marks show a communication climate that is supportive and facilitates message transmission. In a defensive climate criticism is evaluative, decisions are controlled by superiors, organizational messages are designed to control employee actions, members show a lack of concern for others in the organization, supervisors do not consider mutual trust and respect as important, and decisions are final, with no more input needed. In a supportive climate, criticism is descriptive, employees are encouraged to develop solutions to problems, spontaneous communication is desirable, members empathize with each other, there is a sense of equality in the superior-subordinate relationship, and all decisions are considered temporary.

James and Jones use the term psychological climate when climate is considered an individual, rather than organizational attribute. The emphasis in this usage is on "intervening psychological processes" (1974, p. 1108).

Perspectives and Assumptions.

James and Jones organize climate research into three major perspectives. The first in the "multiple measurement-organizational attribute approach" (1974, p. 1097). This perspective assumes an organizational personality: an organization has a "set of traits that distinguish it from other organizations and that are relatively stable ...thus influencing individual behavior" (Falcione & Kaplan, 1984, p. 286). Falcione and Kaplan suggest that researchers using this perspective identify those traits and their interrelationships.

A second perspective is the "perceptual measurements-organizational attribute approach" (James & Jones, 1974, p. 1099). Here climate is "an interaction of an organization's traits or characteristics and the individual's perceptions of these traits" (Falcione & Kaplan, 1984, p. 287). Researchers with this perspective would look "for patterns of consensus among individuals and their characteristics that might account for the occurrence of such consensus" (Falcione & Kaplan, 1984, p. 288).

The third perspective is termed the "perceptual measurement-individual attribute approach" (James & Jones, 1974, p. 1105). This reflects "an individual, psychological approach to organizational climate" which is "an individual's summary perceptions of his or her encounters with the organization" (Falcione & Kaplan, 1984, p. 288). These theorists assume "that the perceived situation is more important than the objective situation in determining individual behaviors" (James & Jones, 1974, p. 1107). As an example of this perspective, Schneider and Reicher's Selection-attraction-attrition (SAA) approach "places the source of perceptions and meanings primarily with the individual" (1983, p. 27).

Schneider and Reicher propose another perspective which is based on Mead's work on meaning and the self. By drawing on Mead's symbolic interactionism, Schneider and Reicher develop a view of climates that "emerge out of the interactions that members of a work group have with each other" (1983, p. 30) and that accounts for differences in climates in different groups in an organization. In this approach, people are "actors and symbol users" (p. 34), and climates may change

fairly rapidly and dramatically.

From the multiple measurement-organizational attribute perspective, organizational climate seems synonymous with organizational situation (James & Jones, 1974) and is often used as a predictor variable (Falcione & Kaplan, 1984).

Authors employing the perceptual measurements-organizational attribute perspective regard "perceived organizational climate as a psychological process intervening between organizational processes and dependent variables" (James & Jones, 1974, p. 1104). James and Jones suggest an inconsistency in this perspective because the approach "proposes to measure organizational attributes which have been shown to vary across levels of explanation" but "is considered a psychological process which operates at a level of explanation separate from objective organizational characteristics and organizational processes" (1974, p. 1105).

Research from the perceptual measurement-individual attribute perspective treats climate as predictor, criterion and moderating variable (Falcione & Kaplan, 1984).

Research Designs.

Various perspectives and assumptions have led to a wide variety of research. For example, the relationship of organizational climate and job satisfaction has been frequently studied. Payne, Fineman and Wall (1976, p. 45) identify these as two of a family of constructs and suggest that researchers distinguish "(a) the unit of analysis employed; (b) the elements of analysis involved, and (c) the nature of the concept (affective of descriptive)". The unit of analysis

may be individual or organization; the element may be job or group/organization (Powell & Butterfield, 1978). Payne et al. (1976) conclude that when the unit of analysis is the organization, the element is the organization, and the nature of the measurement is descriptive, the construct of organizational climate is researched. When the three facets are individual, job,and affective, job satisfaction is studied. Other combinations of these facets yield a total of eight separate constructs, including perceived job characteristics, satisfaction with organization, perceived organizational characteristics, role morale, role climate, and organizational morale.

Other variables which have been frequently investigated relating to climate are leadership and supervisor/subordinate dyadic communication. Many studies seem to have tried to relate isolated variables to communication climate rather than observing interrelationships of clusters of variables.

Most climate studies rely on correlation designs or factor analysis. Woodman and King recommend adding convergent and discriminant validity studies (1978).

Instruments commonly used to measure organizational climate are: the Organizational Climate Description Questionnaire (OCDQ), originally used in school systems and later with hospital research and development organizations; Likert's Profile of Organizational Characteristics (POC), used to classify management systems; Litwin and Stringer's Organizational Climate Questionnaire (OCQ), used in business organizations; Payne and Pheysey's Business Organization Climate Index (BOCI); and Schneider and Bartlett's Agency Climate Questionnaire

(ACQ), for use with insurance agencies (Woodman & King, 1978).

Elementary School Climate

Research into school climate has been as prolific as organizational climate research. Hundreds of studies have been done using just one of the available school climate instruments, the OCDQ (Norton, 1984). School climate has been difficult to define, but it is considered separate from the construct of organizational climate (Anderson, 1982).

Anderson lists some of the issues in school climate research as definitions, theory, types of variables affecting climate, use of school climate as a moderating, criterion or predictor variable, unit of measurement choices, and the validity of using subjective perceptions in defining climate. While some school climate research has a strong theoretical and empirical base, other studies appear to be infected with what Princeton Management Associates calls a classic error of United States problem solvers, "a leap to cause" (1984).

Definitions.

School climate research has been called "the stepchild of both organizational climate research and school effects research" (Anderson, 1982, p. 368). Climate has been defined as school district climate, building climate, and classroom climate. Anderson's review of school climate research focusses on building climate.

Halpin and Croft, considered to be pioneer researchers of the organizational climate of schools, describe school climate as an atmosphere on a "continuum of teacher-principal behaviors from open to closed" (Hoy & Henderson, 1983, p. 124). Norton defines the construct as "the individuality of a school" or "the collective personality

of a school" (1984, p. 43). Hoy and Miskel explain school climate as "a relatively enduring quality of the school environment that is experienced by teachers, affects their behavior, and is based on their collective perceptions of behavior in schools" (1987, pp. 225-226).

In their study of organizationally based stress affecting teachers, Milstein, Golaszewski and Duquette (1984) list organizational structure and climate as one of five environmental categories in any organization. The organizational structure and climate category includes amount of member participation in decision making, sense of belonging, whether supervision is supportive and effective, whether communication is clear and sufficient, and whether limitations are placed on member behavior. The other four environmental categories are relationships at work, factors intrinsic to the job, role in the organization, and career development.

Perspectives and Assumptions.

School climate researchers have not clearly defined their perspectives. Yet, aspects of the climate research perspectives suggested by James and Jones (1974) are evident. Some researchers suggest an organizational personality (e.g. Hoy & Clover, 1986). Others choose a perceptual, individual approach (Brady, 1985). Often, climate is considered a result of interactions of principal and teacher behavior. This is similar to Schneider and Reicher's idea that climate results from the interaction of work group members (1983). The purpose of Halpin and Croft's pioneering study of school climate was to "describe the Organizational Climate of schools as perceived by their respective staffs" (1963, p. 51). They identify four teacher behaviors,

and four principal behaviors as perceived by teachers, and describe six climate types.

One review of school climate literature, based on over 200 references, finds climate considered as a predictor, moderating, or criterion variable (Anderson, 1982). Another review that analyzes 127 studies shows that in a majority of them, climate is a criterion variable (Schwandt, 1978). Hoy and Henderson's several hypotheses use school climate as both a criterion and predictor variable (1983).

Research Designs.

Researchers of school climate are becoming more cognizant of issues such as unit of analysis and whether an affective or descriptive approach is employed (e.g., Anderson, 1982; Hoy & Clover, 1986; Hoy & Henderson, 1983). Longitudinal designs are being employed (e.g., Brady, 1985; Sanders & Watkins, 1983).

School climate researchers frequently measure climate variables on an open/closed continuum. In his work on General System Theory, Bertalanffy (1968) discusses systems as open or closed to the environment. Halpin and Croft consider an open school climate as "marked by functional flexibility," and a closed climate by "functional rigidity" (1963, p. 60). In an open climate, actions of group members emerge freely, without restraint, behavior of group members is genuine, there is a balance of social control behavior and social needs satisfaction, and also a balance between principal initiated leadership acts and leadership acts emerging from the group (pp. 74-75).

Recently, Hoy and Miskel have described open and closed school climates:

> The distinctive features of the open climate are the cooperation and respect that exist within the faculty and between the faculty and principal....the closed climate is virtually the antithesis of the open climate. The principal and teachers simply appear to go through the motions, with the principal stressing routine trivia and unnecessary busywork (high restrictiveness), and the teachers responding minimally and exhibiting little committment (high disengagement). (1987, pp. 232, 234).

While some researchers argue for finding a wide range of relevant variables which relate to climate (Anderson, 1982), a great deal of school climate research has considered the principal as the key. Principal leadership styles and school climate (Chaffee, 1981), organizational environment characteristics and principal leadership behavior (Gibbons, 1981), and principal leader authenticity and school climate (Hoy & Henderson, 1983) are examples of this pairing of variables.

Many instruments have been employed in school climate research. Some used for elementary schools are the widely recognized OCDQ; My School Inventory (MSI) which uses class as social system; Elementary School Environment Survey (ESES), which develops school profiles using student perceptions of teacher and peer values and attitudes; The School Survey (SS), which measures teacher morale or satisfaction with work environment; and Quality of School Life Scale (QLS), which treats attitude toward school as an educational outcome separate from academic success (Anderson, 1982).

Hoy and Clover (1986; see also Hoy & Miskel, 1987) have revised and modified the OCDQ as an instrument for measuring teachers' perceptions of principal behavior and teacher behavior in the elementary school. The revised questionnaire (OCDQ-RE) focusses on the criterion

of openness in describing elementary school climate. Factor analysis of the 42 questions resulted in Hoy and Clover's selection of a six factor solution. Their descriptions of the six factors, labeled Supportive Principal Behavior, Directive Principal Behavior, Restrictive Principal Behavior, Collegial Teacher Behavior, Intimate Teacher Behavior, and Disengaged Teacher Behavior are reproduced in Table 1. Second order factor analysis of the six dimensions of climate yielded two underlying factors: Openness of Faculty Relations and Closedness of Principal Behavior.

Four school climates are described: an open climate, when both teacher and principal behaviors are open, a closed climate, when both are closed, an engaged climate, when teacher relationships are open but principal behaviors are closed, and a disengaged climate, when principal behaviors are open but teacher behaviors are closed.

In the original OCDQ, "concern is restricted to social interactions among professional personnel" (Hoy & Clover, 1986, p. 95). Hoy and Clover suggest that including students in the OCDQ-RE would broaden the scope of the climate measure.

> It seems reasonable to predict that openness in both teacher and principal behavior may be related to positive student outcomes, but it also seems likely that open principal behavior will not lead to effective student performance unless it is coupled with open teacher behavior. (p. 109).

As an example of successful open principal and open teacher behavior, they were able to construct an academic press index to describe the

> extent to which the school stressed academic performance, an orderly and serious learning environment, and high, but achievable student goals. Not surprisingly, both openness in teacher-teacher

Table 1

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 paperwork, committee requirements, routine duties, and other demands that interfer 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.

Note. From "Elementary School Climate: A Revision of the OCDQ" by W. K. Hoy and S. I. R. Clover, 1986, Educational Administration Quarterly, 22, 1, p. 101.

> relations ($r = .52$, $p < .01$) and openness in teacher-principal relations ($r = .43$, $p < .01$) were significantly correlated with the academic press (p. 108).

Factor analysis of the OCDQ-RE yielded distinct factors related to principal behavior and teacher behavior. However, the pupil control and academic press items lost their conceptual identity and did not form an independent factor: "these items were interwoven into many dimensions of both principal and teacher behavior" (p. 99), and so were removed from the OCDQ-RE.

Developing Effective Discipline

Developing Effective Discipline: A Positive Approach (DED) has been developed as a preventive discipline program for the Omaha Public Schools by Bob Trumbauer, an OPS Student Services Assistant.

The three strands of DED include 1) staff development, 2) programs and activities for students, and 3) helping students who are at risk of dropping out of school.

Staff development training is done in two parts in elementary schools. Together, those two parts include 1) positive approaches, 2) expectations and rules, 3) classroom management and motivation, 4) interactions or consequences, 5) assertiveness, 6) techniques, 7) race as a factor in discipline, and 8) situations and referrals.

The first semester of the elementary school staff training focusses on Lee Canter's Assertive Discipline Program, which is reviewed below. The second semester training is drawn from many sources. It emphasizes the role of the teacher in developing acceptance and respect among all in the classroom throughout the varied daily activities.

Assertive Discipline.

Canter (1979a, 1979b) has developed an Assertive Discipline program for elementary and secondary schools, which he describes as "a competency based approach to discipline." He describes competencies as what is needed to enable teachers to effectively deal with children. The key, according to Canter, is for teachers to communicate that they mean business and will not tolerate disruptions that interrupt teaching or learning. Teachers must expect that all students, except those with organic problems, can behave and that all students will act normally whether they are normal or not. Canter further states that teachers are neither tough enough nor positive enough with behavior problems. Teachers are encouraged to assert their rights to have help from parents and principals and to master assertive discipline competencies.

The competencies are: 1) you must at all times know exactly what you want the students to do, 2) You must know how to effectively set limits on disruptive students and provide consistent follow-through with consequences, 3) Positive reinforcement in the classroom is the key to dealing with students ("motivating them" to do what you want).

Canter suggests that assertive teachers are those who communicate certain attitudes to the students, such as: "I will not tolerate any student stopping me from teaching or stopping another student from learning," and "I will not tolerate any student engaging in behavior that is not in his or her best interest or the interest of others." Whenever students respond appropriately in the classroom there will be immediate recognition and reinforcement of behavior.

Rules and consequences are written by the individual teacher or by the whole staff, presented to students and posted in the classroom. Examples of rules are: "Follow directions the first time," and "Stay in your seat unless given permission to get up."

The discipline has a maximum of five negative consequences. For example:

Infraction Number	Action	Consequence
1	name of student written on board	warning
2	check mark added to name	15 minutes detention after school
3	check mark added	30 minutes detention after school
4	check mark added	30 minutes detention after school, teacher phones parent
5	check mark added	30 minutes detention after school, teacher phones parent, student sent to principal

Severe disruption: Student is sent immediately to principal.

Whether an individual teacher or an entire staff adopts Assertive Discipline, Canter stresses that the program must be planned, agreed on, and followed through by administrators as well as involved teachers. Parents should also be fully informed, in writing, and sign the discipline plan.

Canter claims that effectively using the Assertive Discipline program, both rewards and consequences, can cut discipline problems by up to 80% in one week. He states that the program is successful with 95% to 99% of students.

Summary

This literature review has included organizational climate, school climate and Developing Effective Discipline.

Organizational Climate.

One perspective considers organizational climate as a set of relatively stable organizational traits that influences behavior. Another describes climate as an interaction of organizational traits and the individual's perceptions of the traits. A third perspective identifies organizational climate as people's perceptions of their encounters with the organization. A fourth states that climate emerges out of interactions of work group members.

Organizational climate has been studied as a predictor, criterion and moderating variable. Issues in climate research include the unit of analysis, elements of analysis and the affective or descriptive nature of the concept. Variables such as job satisfaction, leadership, and supervisor/subordinate communication have been investigated relating to climate. Several instruments have been developed to measure organizational climate.

Elementary School Climate.

Perspectives on school climate view the construct as an atmosphere or collective personality of a school, or as the enduring quality of the school environment perceived by teachers and affecting their behavior. Others take a perceptual, individual approach, or consider climate as a result of principal-teacher interactions.

School climate has been viewed as a predictor, moderating or criterion variable. Some recognition has been made of issues such as

unit of analysis and affective or descriptive approaches. Researchers frequently measure climate variables on an open/closed continuum. Variables concerning the principal have often been investigated relating to climate. Several instruments have been developed to measure school climate. The Organizational Climate Description Questionnaire-Revised Elementary focusses on openness in describing school climate by surveying teacher perceptions of principal and teacher behaviors.

Developing Effective Discipline.

Developing Effective Discipline: A Positive Approach was planned as a preventive discipline program for the Omaha Public Schools. One aspect of the program involves training in the use of aspects of Lee Canter's Assertive Discipline Program. His Assertive Discipline competencies include knowing what you want the students to do, setting limits, and providing consistent consequences and positive reinforcement. Rules such as "follow directions the first time" are provided to students and a hierarchy of up to five negative consequences are consistently applied to those who break the rules.

Purpose of the Study

The purposes of this study are to explore OPS teachers' perceptions of a) elementary school climate, b) student discipline (the management of students) and c) the Citizenship-Discipline Programs which include aspects of Assertive Discipline as they are implemented in individual schools.

Specific research questions to be addressed are:

1) What differences are there among teachers' perceptions of the

climate in their different schools?

2) What differences are there among teachers' perceptions of student discipline (the management of students) in their different schools?

3) How does the implementation of a Citizenship-Discipline Program relate to teachers' perceptions of school climate?

Chapter 2

RESEARCH DESIGN

Subjects and Setting

Subjects of this study were elementary teachers in the Omaha Public Schools (OPS). Teachers in the participating schools included certified preschool through sixth grade teachers, special education teachers, librarians, and art, music and physical education specialists. Those who were assigned to a participating school for at least half of their teaching duty time per week were included in the faculty total for that school.

Some OPS schools have been implementing a school-wide Citizenship-discipline program for years. Other schools began implementing newly developed school-wide programs in the Fall of 1988. Faculties in some schools began studying the OPS Developing Effective Discipline course but they had not yet begun to develop their own programs in the Fall of 1988. In another group of schools, faculties were not studying, developing nor implementing such a program as of the Fall of 1988. It was planned to include schools from each category in this research; however, schools studying but not implementing the Developing Effective Discipline course were unavailable. Therefore, schools without contact with the program, those newly implementing their programs, and those in full implementation of their programs were included. One school that had been implementing the program but had terminated its use was also included.

Permission to conduct this study in OPS was received from Dr. Irving Young, Coordinator of Research for OPS. Dr. Young provided names

of principals who might be willing to participate. He made the initial contact with those principals by letter to introduce the study and communicate OPS Research Department authorization for the study. Follow-up letters and phone calls by the researcher requested the principals' participation in the study. Principals who agreed to participate were asked to distribute the questionnaires to their faculties and to encourage completion and return of the questionnaires to the box provided.

Instruments

Three testing instruments were used (see Appendix A). One was Hoy and Clover's (1986) OCDQ-RE, a recent revision of Halpin and Croft's (1963) OCDQ. Hoy and Clover discarded many of the items on the OCDQ and added others. The resultant 42 item instrument, in their opinion, measures openness of school climate as perceived by teachers, and "is restricted to social interactions among professional personnel" (p. 108). The OCDQ-RE provides respondents with four answer choices: Rarely Occurs, Sometimes Occurs, Often Occurs, and Very Frequently Occurs.

The OCDQ-RE was selected for this study for several reasons. Some instruments measure constructs such as morale or satisfaction, but the OCDQ-RE purports to measure the construct of school climate, which is a focus of this study. Second, the OCDQ-RE was constructed to measure school climate rather than district or classroom climate. Since influences on climate are not confined to the classroom, but can be described at the school level, an instrument identifying the unit of analysis as the school was an appropriate choice for a study conducted within one school district. Third, the subjects of the

OCDQ-RE are teachers. In OPS, faculty members can choose to be involved in research projects approved by the OPS Research Department if their building principals agree to allow the project in their schools. It is much more difficult to involve students in research projects since individual written permission from guardians must be secured for each child. Therefore, instruments dependent upon answers of students were not feasible for this project.

Hoy and Clover completed a pilot study and a test of the OCDQ-RE. A factor analysis was done on each data set. Hoy and Clover state that "the factor structures for both data sets are virtually identical" (1986, p. 102), and

> the reliability scores for subtests for the new data set remained high: the alpha coefficients were as follows: Directive (.89), Supportive (.95), Restrictive (.80), Disengaged (.75), Collegial (.90), and Intimate (.86). (p. 102).

Hoy and Clover also discussed the construct validity of their instrument.

> The stability of the factor structure also supports the construct validity of the six dimensions of climate. Factor analyses enable the researcher to study the constitutive meanings of constructs and thus, their construct validity. (Kerlinger, cited in Hoy & Clover, 1986). In the present study, six hypothetical entities, dimensions of school climate, were constructed. The relations among the items consistently held up as theoretically expected; that is, the item (variables) measuring each dimension were systematically related to each other as expected in the test of the OCDQ-RE (1986, p. 102).

Thus, the OCDQ-RE was chosen for these reasons: it purported to measure the construct of school climate, the unit of analysis was the school, the subjects were teachers, the reliability scores for the subtests appeared high, and there appeared to be appropriate construct validity.

As part of this research, additional questions were written concerning

teachers' perceptions of discipline in their schools. During the Summer of 1988, several OPS teachers who had recently been involved in planning a school's Citizenship-Discipline program were asked which issues they felt were important in elementary school discipline. Issues raised included the effectiveness with which students were managed, the effectiveness of student self-management, fairness of discipline, consistency of discipline, cooperation among teachers and administrators, and staff attitudes about the preparation of a school discipline program.

These discussions and suggestions were utilized in developing two other testing instruments, the Discipline Questionnaire and the Citizenship-Discipline Program Questionnaire. The Discipline Questionnaire, questions 43 to 56 (Appendix A), was intended to explore teachers' perceptions of some issues related to student control or discipline. Response choices matched those of the OCDQ-RE: Rarely Occurs, Sometimes Occurs, Often Occurs, and Very Frequently Occurs.

The Citizenship-Discipline Program Questionnaire, questions 60 to 67 (Appendix A), related to a specific OPS discipline program, which seems to be connected with concerns for improving school climate. Questions were intended to explore teachers' perceptions of how the programs in their schools were developed and used. Answer choices were on a five level Likert type scale: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree. Appendix A contains all three instruments.

Three demographic questions were also included. These asked how many years the respondents had taught, in how many schools, and how many years they had been teaching at their current schools.

Procedures

A pilot study was completed at one school using the cover letter and three questionnaires shown in Appendix A. The responses were factor analyzed.

Initial information about this research project was provided to several principals in an introductory letter from Dr. Young. Phone calls by the researcher followed the letter. The project was discussed by phone or in person with several of the principals.

Cover letters, questionnaires, response envelopes, principal information sheets (Appendix B) and boxes for completed questionnaires were delivered in person or by school mail to principals or school secretaries within a few days of the administration date. Boxes of completed questionnaires were picked up or returned by school mail at the discretion of the principals involved.

The principals were requested to provide the questionnaires to their faculties during a staff meeting. Faculties that had not implemented or had stopped using a Citizenship-Discipline program were asked to complete the OCDQ-RE, the Discipline Questionnaire, and the demographic questions. Completion of all three instruments was requested at schools utilizing a Citizenship-Discipline program. It was expected that about 15 minutes would be needed for completion of the instruments.

Assurances of confidentiality were given to faculty members in the cover letter, and to principals both orally and in writing. Summary findings of the completed study were to be provided to principals for faculties in each participating school, to the OPS Research Department, and to Dr. John Mackiel of OPS Staff Personnel Services.

Statistical Plan

Using a cross-sectional design, each member of the sample completed the questionnaires once. The OCDQ-RE was scored according to published directions. Items were grouped according to subtests. Mean school scores for the six subtests and two openness indices were studied by Analysis of Variance and the Student-Newman-Keuls procedure to identify significant differences among the schools. Comparisons were made within the OPS sample since norms have not been established for the OCDQ-RE.

Cronbach's Alpha was used to compare subtest reliabilities in this study with those reported by Hoy and Clover (1986).

Responses to all three questionnaires, the OCDQ-RE, the Discipline Questionnaire, and the Citizenship-Discipline Program Questionnaire were studied by factor analysis. Analyses of Variance and Student-Newman-Keuls procedures were completed on factors and single items of the Discipline Questionnaire and for the single items of the Citizenship-Discipline Program Questionnaire. It is recognized that using a single item to measure a concept can be questioned from a validity standpoint, but the purpose in this exploratory study was to gain a preliminary understanding of the issues involved.

Individual scores for the OCDQ-RE and Discipline Questionnaire were grouped in three categories of equal or nearly equal range for each subtest. The Kruskal-Wallis One-Way Analysis of Variance was performed to examine the differences in median scores for different levels of implementation of Citizenship-Discipline programs. The Binomial test was used to identify which pairs of implementation levels were significantly different for each category of each subtest.

Chapter 3

RESULTS

Pilot Study

Seventeen teachers from one school participated in the pilot study of the two page questionnaire in October 1988. There were few written or oral comments about the second page, which included the Discipline Questionnaire, the demographic questions and the Citizenship-Discipline Program Questionnaire. Therefore, no revisions were made in the questionnaires. The written instructions to the principal concerning administration of the questionnaires were carefully revised to improve clarity and completeness (see Appendix B).

Descriptive statistics showed a range of means and standard deviations for the different questions. Factor analyses were run on the three questionnaires. While 17 subjects is inadequate for a factor analysis, some questions had clear loadings indicating a possible similarity to the factor loadings described by Hoy and Clover (1986).

Questionnaire Administration

Principal Contact

Dr. Irving Young of the Omaha Public Schools Research Department sent introductory letters concerning the research to 19 principals during October and November 1988. Two principals requested preview copies of the questionnaires. Including the pilot school, twelve principals agreed to participate in this research project. There were personal interviews of about twenty minutes each with five of the principals. Topics most frequently discussed were the content of the questionnaires,

questions in the three instruments as they related to the various schools, characteristics of schools such as number of special education classes which principals felt might affect outcomes of the research, questions about why their schools were invited to participate, and the Citizenship-Discipline programs being used in some schools. Similar length phone conversations were held with several other principals. Some principals simply agreed to participate in the research but had no additional comments or questions. Several principals chose not to be involved due to the content of the questionnaires, due to busyness, or without specifying a reason. Experience in contacting principals led to an understanding of possible principal concerns: confidentiality and the specific questions in the OCDQ-RE concerning teachers' perceptions of principals. When these issues were initially discussed, principals seemed to respond positively without further reservations. Several principals offered information about the Citizenship-Discipline programs their faculties had developed, spoke enthusiastically about their programs and provided printed school discipline materials.

Possible schools to include in this research were suggested by Dr. Young, by the researcher, or in two cases by another principal. Dr. Young made the selection of schools to invite. Building principals chose to participate or not to participate. Faculty members' participation was also voluntary. For these reasons, the selection of the sample was not random.

Administration Procedures

The questionnaires were administered by principals or their assistants in schools number 2 to 12 between November 14 and December 6, 1988.

They were generally passed out in a staff meeting and completed during the staff meeting or later and returned to a collection box. In a minority of cases, the questionnaires were provided to teachers at a time other than a staff meeting. The responses were picked up at the schools or returned by school mail. In several cases, questionnaires were mailed both ways due to principal request.

Response Rate

There were between 11 and 23 usable responses from each school, with eight of the eleven schools returning from 73% to 100% of the questionnaires. The overall response rate from the eleven schools was 70%. Almost all of the questionnaires were usable. In two cases, obviously incorrect answers to demographic questions were deleted. One response could not be coded by school, so it was included in the factor analyses but not in the Analysis of Variance results reported by school. Two responses were discarded due to incompleteness. A total of 178 responses were used for the factor analyses on the OCDQ-RE and the Discipline Questionnaire. One hundred responses were used in the factor analysis of the Citizenship-Discipline Program Questionnaire, which was answered by teachers in schools using a school-developed Citizenship-Discipline program.

School Categories

Three participating schools had no contact with, and one had terminated use of a Citizenship-Discipline program utilizing aspects of the Assertive Discipline program. Three schools were beginning implementation of their programs. Four schools had fully implemented their Citizenship-Discipline programs. Schools that were beginning

to develop Citizenship-Discipline programs but had not yet begun implementation were not included because those schools did not appear to be available for participation. Thus, three categories of schools were included: those not implementing, those beginning implementation, and those fully implementing Citizenship-Discipline programs in the Fall of 1988.

Descriptive Statistics

Means and standard deviations for each school are listed in Tables 2 to 12. Each school was assigned a school number for use in statistical procedures, but the school numbers were removed from the tables of descriptive statistics to maintain confidentiality. Several questions on the two-page instrument were recoded so that in all cases, except the demographic questions, numbers 57 to 59, the highest value response was considered to be the most desirable response. The OCDQ-RE and Discipline Questionnaire provided response choices with a minimum of one and a maximum of four. Rarely Occurs was coded one, Sometimes Occurs was coded two, Often Occurs was three and Very Frequently Occurs was four. For the Citizenship-Discipline Program Questionnaire, the minimum possible was one and the maximum, five. A score of one meant Strongly Disagree, two meant Disagree, three was Neither Agree nor Disagree, four was Agree, and five, Strongly Agree. While no schools recorded the minimum score as the mean, in several cases means were the maximum scores possible.

Table 2

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	3.143	.770	31	2.143	1.027
2	2.286	.994	32	3.214	.699
3*	3.154	.899	33	2.357	.842
4	2.714	.825	34*	3.000	.784
5*	3.500	.855	35*	3.071	.616
6*	2.500	1.019	36*	2.357	1.151
7	2.000	.784	37*	3.214	.699
8*	3.429	.938	38	2.786	.802
9	2.786	.893	39*	3.167	.577
10*	2.500	.905	40	2.857	.663
11*	2.786	1.051	41*	3.357	.842
12	2.786	.699	42	2.357	.929
13	2.429	.938	43	2.714	.726
14*	3.643	.633	44	2.643	.633
15	2.500	.855	45	2.143	.770
16	2.786	.975	46	2.429	.646
17*	3.583	.515	47	2.857	.770
18*	2.786	1.051	48	1.929	.616
19	3.214	.893	49*	2.643	.633
20	2.692	.855	50	2.462	1.050
21*	3.143	1.027	51	3.000	.784
22	2.714	.914	52	3.000	.679
23	3.071	.917	53*	2.643	.633
24*	2.846	.689	54	2.000	.784
25*	2.857	.864	55	2.538	.660
26	3.214	.802	56	2.500	.941
27	2.714	.825	57	3.000	1.240
28	3.000	.877	58	2.077	1.038
29	2.643	.842	59	2.000	.679
30*	2.643	.842			

Note. $n = 14$.

Note. The highest value response is considered the most desirable response. The starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4).

Table 3

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	2.867	.640	31	2.467	.990
2	2.200	.941	32	3.133	.915
3*	3.333	.976	33	2.267	.961
4	2.733	1.223	34*	2.500	.855
5*	3.214	1.122	35*	3.133	.990
6*	3.000	.845	36*	2.600	1.183
7	2.267	.799	37*	2.933	.961
8*	3.333	.976	38	2.667	.900
9	2.500	.855	39*	3.231	.832
10*	2.889	.928	40	2.733	1.033
11*	3.067	.799	41*	3.667	.617
12	2.467	1.060	42	1.667	.900
13	2.400	.828	43	2.533	.834
14*	3.533	.834	44	2.733	.704
15	2.692	.751	45	2.200	1.146
16	2.929	1.072	46	2.733	.884
17*	2.769	.725	47	2.571	.852
18*	2.733	1.033	48	1.600	.737
19	3.000	.926	49*	2.733	.594
20	1.933	.884	50	2.400	.632
21*	3.600	.507	51	3.067	.884
22	2.714	1.139	52	2.933	.704
23	3.133	.834	53*	2.533	.834
24*	3.000	.961	54	2.357	1.008
25*	2.385	1.044	55	2.533	.834
26	2.800	.941	56	3.133	.834
27	2.467	.990	57	3.286	.994
28	2.000	1.069	58	2.429	1.016
29	2.733	1.100	59	2.214	.802
30*	2.533	.915			

Note. n = 15.

Note. The highest value response is considered the most desirable response. The starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4).

Table 4

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	3.176	.636	31	2.600	.828
2	2.294	.772	32	3.706	.470
3*	3.529	.624	33	2.706	.772
4	3.529	.717	34*	2.353	.931
5*	3.235	.831	35*	2.176	.951
6*	3.059	.899	36*	2.588	1.064
7	2.176	.529	37*	2.941	.966
8*	3.471	1.007	38	2.824	1.015
9	2.941	.966	39*	3.400	.632
10*	2.733	.961	40	3.235	.831
11*	3.000	.866	41*	3.235	.752
12	2.882	.697	42	3.353	.702
13	2.471	.717	43	3.000	.791
14*	3.882	.332	44	2.765	.664
15	3.176	.728	45	3.118	.993
16	3.000	.866	46	2.941	1.029
17*	2.875	.885	47	3.059	.748
18*	3.118	.857	48	2.471	.800
19	3.588	.618	49*	2.824	.809
20	2.647	1.057	50	2.706	.920
21*	3.235	.831	51	3.353	.606
22	3.471	.717	52	3.294	.588
23	3.471	.624	53*	2.529	1.068
24*	2.647	.862	54	2.765	.903
25*	2.647	.862	55	2.353	.862
26	3.375	.719	56	3.294	.849
27	2.625	.719	57	3.118	1.269
28	3.529	.800	58	1.941	.827
29	3.294	.772	59	2.059	.899
30*	2.118	.781			

Note. $n = 17$.

Note. The highest value response is considered the most desirable response. The starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4).

Table 5

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	3.35	.671	31	2.75	.967
2	2.15	.671	32	3.40	.503
3*	3.40	.754	33	2.45	.945
4	3.20	.768	34*	2.722	.752
5*	3.30	.733	35*	2.737	.806
6*	3.45	.887	36*	2.20	1.152
7	1.95	.605	37*	2.40	.754
8*	3.55	.686	38	2.65	.988
9	3.15	.745	39*	3.35	.745
10*	3.188	1.167	40	3.20	.696
11*	2.35	.933	41*	3.45	.826
12	2.70	.733	42	3.00	.858
13	2.60	.821	43	3.70	.571
14*	3.55	.759	44	2.80	.834
15	3.00	.858	45	2.75	1.020
16	3.20	.894	46	3.10	.718
17*	2.50	.761	47	3.45	.686
18*	2.25	1.118	48	2.65	.988
19	3.10	.788	49*	2.632	.831
20	2.25	1.070	50	2.85	.671
21*	3.35	.813	51	3.35	.587
22	3.00	.973	52	3.20	.768
23	2.90	1.021	53*	2.65	.933
24*	2.316	.885	54	2.50	1.000
25*	2.30	1.081	55	2.65	.671
26	3.60	.598	56	3.20	.768
27	2.00	1.076	57	3.444	.705
28	3.15	.988	58	2.70	.979
29	3.30	.801	59	2.10	.718
30*	2.45	.887			

Note. $n = 20$.

Note. The highest value response is considered the most desirable response. The starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4).

Table 6

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	2.545	.820	35*	3.545	.522
2	1.909	.302	36*	2.182	1.079
3*	3.364	.505	37*	2.727	.647
4	2.545	.934	38	2.182	.982
5*	3.636	.674	39*	3.100	.876
6*	3.818	.405	40	2.727	.647
7	1.636	.674	41*	3.636	.505
8*	2.727	.786	42	1.909	.944
9	1.909	.701	43	2.545	.934
10*	3.857	.378	44	2.455	.820
11*	2.364	.924	45	3.273	.786
12	2.455	.820	46	3.091	.701
13	1.909	.944	47	3.100	.568
14*	3.364	.505	48	2.700	.675
15	1.818	.874	49*	2.600	.699
16	2.727	.467	50	2.500	.527
17*	2.700	.949	51	3.000	.775
18*	2.000	.632	52	3.091	.701
19	2.727	.647	53*	2.182	1.079
20	1.900	.738	54	2.909	.539
21*	3.182	.603	55	2.500	.850
22	1.818	.751	56	2.700	1.059
23	2.727	.786	57	3.727	.647
24*	3.100	.568	58	2.545	.934
25*	2.273	1.104	59	2.455	.522
26	2.727	.786	60	4.727	.467
27	1.818	.603	61	3.636	.809
28	2.000	.866	62*	3.909	1.136
29	2.636	.809	63	4.182	.603
30*	2.818	1.079	64	3.636	.505
31	2.455	1.128	65	3.455	.934
32	2.727	.786	66	4.091	.539
33	2.273	.647	67	4.545	.688
34*	3.182	.751			

Note. $n = 11$.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

Table 7

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	2.556	.527	35*	2.636	.809
2	1.818	.751	36*	2.364	.809
3*	3.273	.905	37*	3.000	.632
4	3.273	.905	38	2.182	.751
5*	3.273	1.009	39*	3.182	.982
6*	3.909	.302	40	3.273	.786
7	2.000	.447	41*	3.364	.674
8*	3.273	.786	42	2.727	1.009
9	2.909	.701	43	2.364	.924
10*	3.000	1.225	44	2.545	.688
11*	2.545	.688	45	3.364	.809
12	2.800	1.033	46	3.000	.894
13	2.818	.603	47	2.727	1.009
14*	3.545	.522	48	2.727	.905
15	2.909	.831	49*	2.909	.302
16	3.000	.894	50	2.636	.674
17*	3.000	1.054	51	3.455	.522
18*	1.909	.831	52	3.091	.701
19	2.909	.701	53*	3.364	.674
20	1.818	.982	54	2.636	.924
21*	3.400	.516	55	2.900	.568
22	2.818	1.250	56	3.273	.786
23	3.000	.775	57	3.455	1.036
24*	2.636	.809	58	2.273	1.009
25*	3.091	.701	59	2.000	.775
26	3.091	.831	60[a]	4.000	1.000
27	2.818	.874	61	4.500	.707
28	3.091	1.044	62*	2.000	1.732
29	2.455	.820	63	4.667	.577
30*	2.545	.934	64	4.667	.577
31	2.727	1.272	65	4.667	.577
32	3.273	1.009	66	4.667	.577
33	2.000	.894	67	3.667	1.155
34*	2.364	.674			

Note. n = 11.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

[a]Only three respondents completed questions 60 to 67.

Table 8

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	2.917	.669	35*	2.750	.452
2	2.333	.985	36*	1.583	.669
3*	2.417	.900	37*	2.333	1.073
4	1.833	.835	38	2.833	1.030
5*	2.500	.905	39*	1.917	1.165
6*	2.750	.866	40	3.000	.853
7	2.000	.426	41*	3.500	.522
8*	3.000	1.206	42	2.167	1.030
9	1.750	.754	43	2.250	.622
10*	2.500	1.195	44	3.250	.452
11*	1.750	.866	45	2.917	.996
12	2.417	.515	46	2.583	.669
13	2.333	.651	47	2.917	.515
14*	3.545	.522	48	2.417	.900
15	1.667	.985	49*	2.000	.953
16	1.500	.522	50	2.636	.924
17*	3.364	.674	51	2.818	.751
18*	2.083	.996	52	3.273	.467
19	3.417	.793	53*	1.727	1.009
20	2.833	.718	54	2.182	1.079
21*	3.417	.996	55	1.667	.651
22	2.583	.996	56	1.500	.905
23	1.833	.937	57	3.333	.985
24*	2.545	.820	58	2.333	1.371
25*	1.636	.924	59	2.364	.674
26	2.500	.798	60	4.250	.622
27	2.333	.651	61	3.500	1.000
28	2.417	1.084	62*	3.167	1.030
29	1.583	.793	63	3.667	.651
30*	3.500	.674	64	3.667	.888
31	1.500	.674	65	3.250	1.055
32	3.083	.669	66	3.833	.718
33	2.500	.674	67	4.000	1.206
34*	3.333	.651			

Note. n = 12.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

Table 9

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	3.714	.469	35*	2.929	.730
2	2.571	.938	36*	3.429	.852
3*	3.786	.426	37*	2.571	.646
4	3.929	.267	38	3.214	.579
5*	3.786	.579	39*	3.500	.760
6*	3.000	.877	40	3.857	.363
7	2.214	.802	41*	3.214	.975
8*	3.538	.967	42	4.000	.000
9	3.857	.363	43	3.714	.469
10*	3.833	.389	44	4.000	.000
11*	3.231	.832	45	3.929	.267
12	3.214	.802	46	4.000	.000
13	2.786	.802	47	4.000	.000
14*	3.385	.768	48	3.571	.756
15	3.692	.480	49*	2.929	.616
16	3.786	.802	50	3.714	.469
17*	3.357	.745	51	3.571	.514
18*	3.143	.949	52	3.643	.497
19	3.500	.650	53*	3.571	.514
20	3.357	.929	54	3.786	.426
21*	3.571	.852	55	3.500	.650
22	3.929	.267	56	3.714	.469
23	3.786	.579	57	3.214	1.051
24*	2.857	1.027	58	2.429	1.089
25*	3.462	.877	59	1.929	.730
26	3.929	.267	60	5.000	.000
27	3.071	.997	61	4.714	.469
28	4.000	.000	62*	4.286	1.139
29	4.000	.000	63	4.857	.363
30*	2.429	.756	64	4.714	.469
31	3.143	1.027	65	4.786	.426
32	3.429	.646	66	4.857	.363
33	2.857	.949	67	4.429	.938
34*	3.143	.770			

Note. $n = 14$.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

Table 10

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	3.588	.618	35*	3.063	.772
2	2.118	.781	36*	2.412	1.064
3*	3.471	.717	37*	2.176	.728
4	3.588	.712	38	2.235	.970
5*	3.647	.606	39*	3.600	.632
6*	3.500	.894	40	3.294	.849
7	1.882	1.054	41*	3.706	.588
8*	3.412	.870	42	3.529	.514
9	2.882	.857	43	3.118	.600
10*	2.375	1.204	44	3.059	.899
11*	2.588	1.064	45	3.529	.624
12	3.063	.574	46	3.235	.752
13	2.294	.849	47	2.882	.928
14*	4.000	.000	48	3.176	1.015
15	3.059	.899	49*	2.412	.795
16	3.412	.712	50	2.471	.874
17*	2.941	1.249	51	3.647	.493
18*	3.000	1.061	52	3.294	.686
19	3.118	.857	53*	2.765	.752
20	1.941	.827	54	3.412	.712
21*	3.647	.493	55	2.647	.862
22	3.353	.702	56	3.118	.993
23	3.588	.618	57	2.813	.981
24*	3.063	.854	58	2.313	1.014
25*	2.412	1.004	59	1.625	.500
26	3.706	.470	60	4.706	.470
27	1.882	.600	61	4.529	.514
28	3.647	.493	62*	4.000	.866
29	3.471	.717	63	4.647	.493
30*	2.313	.793	64	4.412	.712
31	2.765	.903	65	4.412	.618
32	3.412	.507	66	4.588	.507
33	2.059	.827	67	3.647	1.272
34*	2.600	.986			

Note. $n = 17$.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

Table 11

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	2.957	.825	35*	3.130	.815
2	2.609	.722	36*	2.043	.825
3*	3.391	.891	37*	2.348	.775
4	3.391	.941	38	2.609	.839
5*	3.391	.656	39*	3.130	.869
6*	3.652	.573	40	2.636	.727
7	2.478	.593	41*	3.500	.673
8*	3.130	.869	42	2.826	.834
9	3.217	.600	43	2.739	.689
10*	3.150	1.089	44	3.174	.887
11*	1.913	.949	45	3.696	.559
12	2.348	.647	46	3.348	.714
13	2.522	.790	47	3.652	.573
14*	2.609	.988	48	3.043	.706
15	3.087	.793	49*	2.652	.487
16	3.217	.795	50	3.000	.603
17*	2.500	1.100	51	3.087	.596
18*	1.739	.964	52	3.130	.694
19	3.000	.853	53*	2.391	.839
20	2.348	.832	54	3.000	.798
21*	2.913	.949	55	2.652	.647
22	3.043	.825	56	3.391	.722
23	3.391	.783	57	3.391	1.118
24*	2.304	.822	58	2.391	1.118
25*	1.870	1.014	59	2.043	.825
26	3.391	.583	60	4.652	.573
27	3.130	.920	61	4.174	.650
28	3.348	.832	62*	3.000	1.206
29	3.391	.783	63	4.217	1.043
30*	2.870	.815	64	3.652	1.152
31	1.957	.825	65	3.913	.996
32	2.696	.822	66	4.217	.998
33	2.957	.638	67	4.087	1.125
34*	2.870	.694			

Note. $n = 23$.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

Table 12

Descriptive Statistics for School

Question	Mean	SD	Question	Mean	SD
1	3.087	.733	35*	3.087	.949
2	2.261	.752	36*	3.087	.949
3*	3.609	.891	37*	2.783	.850
4	2.826	.937	38	2.826	.778
5*	2.913	.949	39*	3.227	1.020
6*	2.870	.869	40	3.261	.689
7	1.870	.548	41*	3.000	1.000
8*	3.609	.656	42	3.130	.815
9	2.913	.996	43	2.043	.976
10*	1.773	1.066	44	3.000	.853
11*	3.304	.765	45	3.522	.665
12	2.565	.896	46	3.130	.815
13	2.522	.790	47	3.609	.656
14*	3.652	.714	48	3.043	.767
15	2.739	.915	49*	2.500	.802
16	3.261	.964	50	2.913	.733
17*	3.435	.843	51	3.000	.674
18*	3.409	.666	52	3.130	.694
19	3.522	.665	53*	2.348	.935
20	2.565	1.199	54	3.087	.793
21*	3.478	.790	55	2.652	.832
22	3.304	.876	56	3.348	.832
23	3.261	.964	57	2.783	1.126
24*	2.348	.982	58	1.826	.887
25*	2.682	1.171	59	2.000	.798
26	2.783	.998	60[a]	4.909	.294
27	2.652	1.027	61	4.381	.590
28	2.957	.878	62*	3.727	.935
29	3.130	.815	63	4.227	.685
30*	2.478	.846	64	4.227	.685
31	2.522	1.201	65	4.364	.790
32	3.043	1.022	66	4.500	.512
33	2.522	.846	67	4.136	1.082
34*	2.435	.788			

Note. $n = 23$.

Note. The highest value response is considered the most desirable response. For questions 1 to 59, the starred (*) questions have been recoded: (4=1) (3=2) (2=3) (1=4). For questions 60 to 67, the starred (*) questions have been recoded: (5=1) (4=2) (3=3) (2=4) (1=5).

[a]One respondent did not complete questions 60 to 67.

OCDQ-RE Results

Varimax Solution

Table 13 shows the Varimax solution for the OCDQ-RE. Questions loading on each factor are listed in Appendix C. Questions loading greater than .50 on a factor were listed for that factor even though in some cases these primary loadings were not clearly on a single factor. The six questions that did not load above .50 on any factor are shown in Appendix D. Ten factors explained 62.8% of the variance.

Analysis of Variance and Student-Newman-Keuls Procedures

School means for the data collected from schools 2 to 12 were scored according to the OCDQ-RE scoring procedures. OCDQ-RE questions one to 42 were grouped in the six subtests identified by Hoy and Clover. There were three faculty subtests: Collegial, Intimate and Disengaged. Three subtests related to teachers' perceptions of principals, the Supportive, Directive and Restrictive. One-way Analyses of Variance of five of the subtests, Collegial (Table 14), Intimate (Table 15), Disengaged (Table 16), Supportive (Table 17), and Restrictive (Table 18), resulted in highly significant results, $p < .01$. For the Directive subtest (Table 19), $p < .05$. Both of the openness indices, Faculty Interactions (Table 20) and Principal Closedness, also called Principal-Teacher Relations (Table 21), also showed highly significant results, $p < .01$.

Student-Newman-Keuls procedures were used to identify pairs of schools significantly different at the .05 level.

In Figure 1 the school mean scores for the six subtests are compared to the minimum and maximum scores possible on the subtests.

Table 13

Varimax Solution for the OCDQ-RE Grouped by Factor

Factor	Question	I	II	III	IV	V	VI	VII	VIII	IX	X
	29	.84	.08	.09	-.001	.02	.07	.02	.03	.03	.03
	4	.81	.01	.10	-.07	.05	.06	.07	.004	.16	.06
	28	.81	-.05	.09	-.06	.23	-.10	-.10	-.01	-.03	.09
	23	.78	.15	.19	.05	.06	.07	.01	-.04	.21	.01
	16	.75	.17	.18	-.01	-.04	.18	.02	.08	.04	.01
	42	.75	-.04	.18	-.16	.34	-.10	-.12	-.04	.02	.02
	15	.72	.02	.13	.01	.07	.03	.12	.10	-.03	.20
	9	.70	.18	.04	-.10	.10	.08	.05	.10	-.10	.05
	22	.66	.19	.22	-.16	.19	-.27	-.12	-.005	.01	-.003
	26	.61	.19	-.09	-.02	.40	.08	.14	-.02	.01	-.10
	39	.51	-.09	.11	.15	-.10	.27	.20	.09	.34	.06
	33	.14	.77	.07	-.02	.09	-.002	-.01	.20	-.02	.01
	2	.03	.74	.16	-.03	-.01	.11	.11	-.08	-.03	-.002
II	38	.09	.66	.04	-.15	.25	.06	-.21	.14	.01	-.13
	7	.10	.65	-.11	-.004	-.08	.04	.23	-.05	-.02	.32
	27	.20	.54	.01	.04	.05	-.07	-.12	.05	-.01	.40
	36	.24	.09	.77	.10	.13	.10	.07	.05	.06	-.003
III	18	.09	.01	.76	-.05	.08	-.01	-.22	.15	.09	-.01
	11	.22	.06	.72	-.02	.01	.13	-.11	-.12	.09	.15
	25	.23	.08	.71	-.07	.06	.07	.07	.003	.01	-.21
	34	-.29	-.02	-.08	.73	.05	-.17	-.11	-.16	.02	-.06
	41	-.04	-.03	.11	.66	-.002	-.03	.03	-.17	-.13	.14
IV	35	-.10	-.09	-.03	.64	-.25	.06	-.10	.08	.23	.12
	30	-.40	.01	-.10	.60	-.15	-.32	-.14	-.08	.12	.07
	5	.30	-.07	-.06	.59	.11	.20	.05	.09	.11	-.08
	10	.07	-.03	-.05	.51	-.03	-.13	.12	.17	-.37	-.26
	40	.17	.28	.25	-.09	.73	.06	.09	-.05	.05	.06
	12	.18	.03	.14	.01	.61	.06	.22	.31	.10	.13
	32	.26	-.02	-.01	-.01	.60	.28	-.13	.03	.06	.19
VI	8	.12	.09	.10	-.11	.10	.68	-.03	.12	-.15	-.06
	37	-.05	.12	.07	.05	.08	.66	-.03	-.12	.26	.01
VII	6	.08	.002	-.09	-.09	.09	-.09	.83	-.08	-.05	-.07
VIII	20	.09	.30	.16	.04	.21	.02	-.23	.67	.04	-.01
	24	-.03	.003	.06	.43	.05	.12	-.05	-.64	.12	-.17
IX	17	.03	-.04	.14	.07	.12	.01	-.06	-.02	.84	-.11
X	13	.15	.24	.01	.05	.27	-.06	-.04	.13	-.08	.69
	1	.39	.32	.09	.03	.38	.17	-.24	-.14	-.32	-.08
Questions	3	.40	.16	.34	-.07	-.05	.33	.29	-.12	-.05	.10
loading less	14	-.08	-.19	.23	-.04	.33	.47	-.21	-.28	-.12	-.002
than .50 on	19	.10	.48	.09	-.15	.39	.38	-.10	.07	.04	.08
any factor	21	-.002	.22	.25	-.06	.30	.35	.13	-.23	.06	-.21
	31	.31	-.03	.47	-.05	.25	.13	.21	.03	-.17	.23

Table 14

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Subtest Collegial by School

Source	df	MS	F	P
Between Groups	10	37.1150	3.0883	.0012
Within Groups	166	12.0178		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	12	3	4	7	10	9	8	2	5	11	6
22.4167	12											
22.4545	3											
22.9333	4											
23.0435	7											
23.9130	10											
24.1429	9											
24.9091	8											
25.2000	2											
25.8235	5											
25.9412	11											
27.2143	6	*	*	*	*							

Note. * pairs of schools significantly differ at the .05 level.

Table 15

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Subtest Intimate by School

Source	df	MS	F	P
Between Groups	10	49.6364	3.8641	.0001
Within Groups	166	12.8457		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	3	5	8	2	4	12	10	9	11	7	6
13.6364	3											
14.4118	5											
15.4545	8											
16.0500	2											
16.2000	4											
17.1667	12											
17.2174	10											
17.2857	9											
17.7647	11											
18.6522	7	*	*									
20.0714	6	*	*	*	*							

Note. * show pairs of schools significantly different at the .05 level.

Table 16

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Subtest Disengaged by School

Source	df	MS	F	P
Between Groups	10	12.4118	3.0416	.0015
Within Groups	166	4.0806		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	5	10	6	11	2	4	8	9	3	12	7
5.4706	5											
5.6522	10											
5.7143	6											
5.8824	11											
6.1500	2											
6.2000	4											
6.5455	8											
6.6429	9											
7.3636	3											
7.5833	12											
7.9565	7	*	*	*	*							

Note. * show pairs of schools significantly different at the .05 level.

Table 17

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Subtest Supportive by School

Source	df	MS	F	P
Between Groups	10	329.7294	10.7795	.0000
Within Groups	166	30.5886		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	12	3	4	9	8	10	2	7	11	5	6
17.3333	12											
20.0909	3											
23.2000	4	*										
24.5714	9	*										
26.1818	8	*										
27.5217	10	*	*									
27.9000	2	*	*									
28.9130	7	*	*	*								
29.7647	11	*	*	*								
30.5294	5	*	*	*								
35.0000	6	*	*	*	*	*	*	*	*	*	*	

Note. * show pairs of schools significantly different at the .05 level.

Table 18

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Subtest Restrictive by School

Source	df	MS	F	P
Between Groups	10	81.2679	7.0383	.0000
Within Groups	166	11.5465		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	6	10	11	4	5	9	8	2	3	7	12
8.6429	6											
10.0000	10											
11.1176	11											
11.8000	4											
11.8235	5											
12.0714	9											
12.3636	8											
13.1500	2	*	*									
13.7273	3	*										
15.4783	7	*	*	*	*	*	*					
16.4167	12	*	*	*	*	*	*	*	*			

Note. * show pairs of schools significantly different at the .05 level.

Table 19

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Subtest Directive by School

Source	df	MS	F	P
Between Groups	10	37.2670	2.3990	.0110
Within Groups	166	15.5345		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	3	6	9	5	4	7	2	8	12	11	10
15.3636	3											
15.9286	6											
17.3571	9											
17.6471	5											
18.0000	4											
18.1739	7											
19.0000	2											
19.0000	8											
19.0833	12											
20.2353	11											
20.3043	10	*	*									

Note. * show pairs of schools significantly different at the .05 level.

Table 20

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Faculty Interactions by School

Source	df	MS	F	P
Between Schools	10	139.8174	2.7376	.0038
Within Schools	166	51.0725		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	3	12	4	7	8	5	9	2	10	11	6
28.7273	3											
32.0000	12											
32.9333	4											
33.7391	7											
33.8182	8											
34.7647	5											
34.7857	9											
35.1000	2											
35.4783	10											
37.8235	11	*										
41.5714	6	*	*	*	*				*	*		

Note. * show pairs of schools significantly different at the .05 level.

Table 21

One-way Analysis of Variance and Student-Newman-Keuls Procedure for OCDQ-RE Principal-Teacher Relations by School

Source	df	MS	F	P
Between Schools	10	629.4843	9.0903	.0000
Within Schools	166	69.2482		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	12	3	4	8	9	7	2	10	11	5	6
-18.1667	12											
- 9.0000	3	*										
- 6.6000	4	*										
- 5.1818	8	*										
- 4.8571	9	*										
- 4.7391	7	*										
- 4.2500	2	*										
- 2.7826	10	*										
- 1.5882	11	*										
1.0588	5	*										
10.4286	6	*	*	*	*	*	*	*	*	*	*	

Note. * show pairs of schools significantly different at the .05 level.

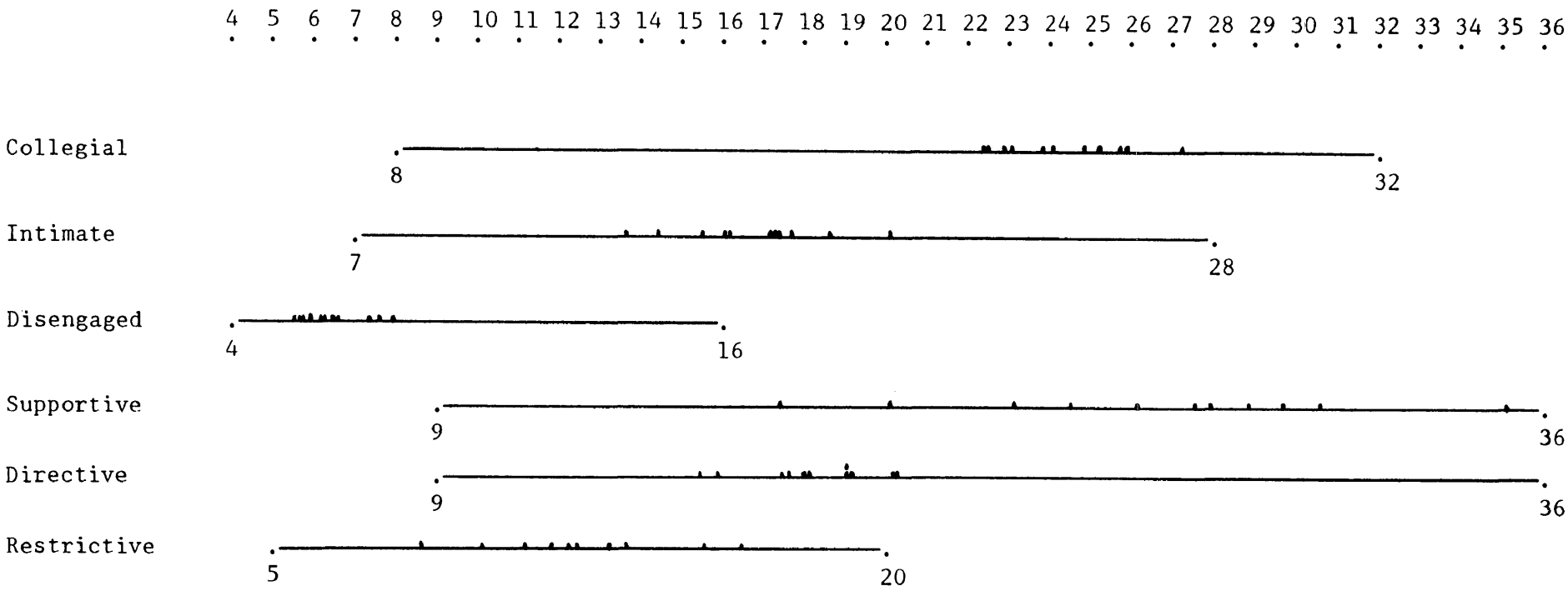

Figure 1. OCDQ-RE Subtest scores plotted in relationship to the minimum and maximum possible scores.

Cronbach's Alpha

Reliability scores are listed in Table 22 for the six OCDQ-RE subtests.

Discipline Questionnaire Results

Varimax Solution

The Varimax solution for the Discipline Questionnaire is shown in Table 23. Appendix E lists the questions loading on each of the three factors. The three factors explained 58.9% of the variance.

Analysis of Variance and Student-Newman-Keuls Procedures

One-way Analyses of Variance were performed for each question on the Discipline Questionnaire. Table 24 shows the F-ratio and probability level for each question. While the validity of using a single item to measure a concept is questionable, the purpose in this exploratory study was to gain a preliminary understanding of some issues involved.

Student-Newman-Keuls procedures for each question having significant results, $p < .05$, are shown in Tables 25 to 36. While the Analysis of Variance for question 49 was not significant, there did appear to be a meaningful difference between Schools 6 and 12.

One-way Analyses of Variance were also performed on the three factors identified by the factor analysis of the Discipline Questionnaire. Only questions with a primary loading clearly on a single factor were included in these Analyses of Variance. Results for the factor of Discipline Consistency, questions 45, 48 and 54, are shown in Table 37. The results of factor 2, designated Respect and comprised of questions 43, 51 and 52, are in Table 38. The third factor, Conformity, is shown in Table 39 and was made up of questions 49 and 53.

Table 22

Cronbach's Alpha for OCDQ-RE Subtests

Subtest	Hoy & Clover Data[a]	OPS Data[b]
Collegial	.90	.70
Intimate	.86	.76
Disengaged	.75	.54
Supportive	.95	.93
Directive	.89	.65
Restrictive	.80	.80

[a]The data in column 2 are from "Elementary School Climate: A Revision of the OCDQ" by W. K. Hoy and S. I. R. Clover, 1986, Educational Administration Quarterly, 22(1), p. 102. Copyright 1986 by The University Council for Educational Administration.

[b]n = 178.

Table 23

Varimax Solution for the Discipline Questionnaire Grouped by Factor

Factor	Question	I	II	III
	45	.87	-.01	.11
	54	.76	.27	.27
I	48	.71	.29	.20
	46	.69	.41	.25
	47	.64	.36	-.09
	44	.57	.28	-.10
	51	.15	.74	.17
II	52	.28	.69	.22
	43	.15	.66	.05
	50	.37	.53	.13
	49	.11	.02	.82
III	53	-.16	.29	.73
	55	.36	.37	.57
	56	.45	.03	.52

Note. The Discipline Questionnaire includes questions 43 to 56.

Table 24

One-way Analysis of Variance Significance Levels for Discipline Questionnaire Questions by School

Question	F	P
43	9.0003	.0000
44	4.5726	.0000
45	8.0991	.0000
46	4.3450	.0000
47	6.3590	.0000
48	7.2646	.0000
49	1.8108	.0622
50	3.7896	.0001
51	2.5627	.0066
52	1.1613	.3205
53	4.4901	.0000
54	6.0772	.0000
55	4.4140	.0000
56	4.7085	.0000

Table 25

Student-Newman-Keuls Procedure for "Students show school spirit and pride" by School

		School										
Mean	School	10	12	8	4	3	9	7	11	5	2	6
2.0435	10											
2.2500	12											
2.3636	8											
2.5333	4											
2.5455	3											
2.7143	9											
2.7391	7	*										
3.0000	11	*										
3.1176	5	*										
3.7000	2	*	*	*	*	*	*	*	*	*		
3.7143	6	*	*	*	*	*	*	*	*			

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 43, F = 9.0003 and p = .0000

Table 26

Student-Newman-Keuls Procedure for "Teachers help each other with student discipline" by School

		School										
Mean	School	3	8	9	4	11	2	10	5	7	12	6
2.4545	3											
2.5455	8											
2.6429	9											
2.7333	4											
2.7647	11											
2.8000	2											
3.0000	10											
3.0588	5											
3.1739	7											
3.2500	12											
4.0000	6	*	*	*	*	*	*	*	*	*	*	

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 44, F = 4.5726 and p = .0000

Table 27

Student-Newman-Keuls Procedure for "Students are disciplined according to a school-wide code" by School

		School										
Mean	School	9	4	2	12	11	3	8	10	5	7	6
2.1429	9											
2.2000	4											
2.7500	2											
2.9167	12											
3.1176	11	*	*									
3.2727	3	*	*									
3.3636	8	*	*									
3.5217	10	*	*	*								
3.5294	5	*	*									
3.6957	7	*	*	*								
3.9286	6	*	*	*	*							

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 45, F = 8.0991 and p = .0000

Table 28

Student-Newman-Keuls Procedure for "Methods used to manage student behavior help students mature" by School

		School										
Mean	School	9	12	4	11	8	3	2	10	5	7	6
2.4586	9											
2.5833	12											
2.7333	4											
2.9412	11											
3.0000	8											
3.0909	3											
3.1000	2											
3.1304	10											
3.2353	5											
3.3478	7	*										
4.0000	6	*	*	*	*	*	*	*	*	*	*	

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 46, F = 4.3450 and p = .0000

Table 29

Student-Newman-Keuls Procedure for "Students are appropriately rewarded for their good behavior" by School

		School										
Mean	School	4	8	9	5	12	11	3	2	10	7	6
2.6000	4											
2.7273	8											
2.8571	9											
2.8824	5											
2.9167	12											
3.0588	11											
3.0909	3											
3.4500	2	*										
3.6087	10	*	*	*	*	*						
3.6522	7	*	*	*	*	*						
4.0000	6	*	*	*	*	*	*	*				

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 47, F = 6.3590 and p = .0000

Table 30

Student-Newman-Keuls Procedure for "Teacher approaches to managing student behavior are consistent throughout the school" by School

		School										
Mean	School	4	9	12	11	2	3	8	7	10	5	6
1.6000	4											
1.9286	9											
2.4167	12	*										
2.4706	11	*										
2.6500	2	*										
2.7273	3	*										
2.7273	8	*										
3.0435	7	*	*									
3.0435	10	*	*									
3.1765	5	*	*									
3.5714	6	*	*	*	*	*						

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 48, F = 7.2646 and p = .0000

Table 31

Student-Newman-Keuls Procedure for "Students behave well in order to gain rewards" by School

		School										
Mean	School	4	9	3	5	8	12	11	2	10	7	6
2.4000	4											
2.4286	9											
2.4545	3											
2.4706	5											
2.6364	8											
2.6667	12											
2.7059	11											
2.8500	2											
2.9130	10											
3.0000	7											
3.7143	6	*	*	*	*	*	*	*	*	*	*	

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 50, F = 3.7896 and p = .0001

Table 32

Student-Newman-Keuls Procedure for "Teachers maintain their self-control with disruptive students" by School

		School										
Mean	School	12	3	9	10	4	7	2	11	8	6	5
2.8333	12											
3.0000	3											
3.0000	9											
3.0000	10											
3.0667	4											
3.0870	7											
3.3500	2											
3.3529	11											
3.4545	8											
3.5714	6											
3.6471	5	*			*							

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 51, F = 2.5627 and p = .0066

Table 33

Student-Newman-Keuls Procedure for "Disruptive student behavior interferes with teaching" by School

		School										
Mean	School	12	3	10	7	11	4	9	2	5	8	6
1.7500	12											
2.1818	3											
2.3478	10											
2.3913	7											
2.5294	11											
2.5333	4											
2.6429	9											
2.6500	2											
2.7647	5											
3.3636	8	*	*	*	*							
3.5714	6	*	*	*	*	*	*	*	*	*		

Note. * show pairs of school significantly different at the .05 level.

Note. For question 53, F = 4.4901 and p = .0000

Note. Responses have been recoded so that the lowest mean indicates the strongest agreement.

Table 34

Student-Newman-Keuls Procedure for "Discipline is consistent throughout the school" by School

		School										
Mean	School	9	12	4	2	8	11	3	7	10	5	6
2.0000	9											
2.1667	12											
2.3333	4											
2.5000	2											
2.6364	8											
2.7647	11											
2.9091	3											
3.0000	7	*										
3.0870	10	*	*									
3.4118	5	*	*	*	*							
3.7857	6	*	*	*	*	*	*		*	*		

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 54, F = 6.0772 and p = .0000

Table 35

Student-Newman-Keuls Procedure for "Disruptive students become more cooperative as the year progresses" by School

		School										
Mean	School	12	11	3	4	9	5	2	7	10	8	6
1.6667	12											
2.3529	11	*										
2.4545	3	*										
2.5333	4	*										
2.5714	9	*										
2.6471	5	*										
2.6500	2	*										
2.6522	7	*										
2.6522	10	*										
2.9091	8	*										
3.5000	6	*	*	*	*	*	*	*	*	*		

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 55, F = 4.4140 and p = .0000

Table 36

Student-Newman-Keuls Procedure for "The principal follows through with discipline consequences when appropriate" by School

		School										
Mean	School	12	9	3	5	4	2	8	11	10	7	6
1.5000	12											
2.5000	9	*										
2.7273	3	*										
3.1176	5	*										
3.1333	4	*										
3.2000	2	*										
3.2727	8	*										
3.2941	11	*										
3.3478	10	*										
3.3913	7	*	*									
3.7143	6	*	*									

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 56, F = 4.7085 and p = .0000

Table 37

One-way Analysis of Variance and Student-Newman-Keuls Procedure for Discipline Consistency by School

Source	df	MS	F	P
Between Schools	10	40.1573	9.4863	.0000
Within Schools	166	4.2332		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	9	4	12	2	11	8	3	10	7	5	6
6.0714	9											
6.1333	4											
7.5000	12											
7.9000	2		*									
8.3529	11	*	*									
8.7273	8	*	*									
8.9091	3	*	*									
9.6522	10	*	*	*	*							
9.7391	7	*	*	*	*							
10.1176	5	*	*	*	*							
11.2857	6	*	*	*	*	*	*	*				

Note. * show pairs of schools significantly different at the .05 level.

Note. This subtest includes questions 45, 48 and 54.

Table 38

One-way Analysis of Variance and Student-Newman-Keuls Procedure for Respect by School

Source	df	MS	F	P
Between Schools	10	12.8791	5.2339	.0000
Within Schools	166	2.4607		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	10	12	4	3	9	8	7	11	5	2	6
8.1739	10											
8.3333	12											
8.5333	4											
8.6364	3											
8.7143	9											
8.9091	8											
8.9565	7											
9.6471	11											
10.0588	5	*										
10.2500	2	*	*	*				*				
10.9286	6	*	*	*	*	*	*	*				

Note. * show pairs of schools significantly different at the .05 level.

Note. This subtest includes questions 43, 51 and 52.

Table 39

One-way Analysis of Variance and Student-Newman-Keuls Procedure for Conformity by School

Source	df	MS	F	P
Between Schools	10	6.7669	4.0382	.0001
Within Schools	166	1.6757		
Total	176			

Student-Newman-Keuls Procedure

		School										
Mean	School	12	3	10	7	5	4	9	2	11	8	6
3.7500	12											
4.8182	3											
4.8261	10											
5.0435	7	*										
5.1765	5	*										
5.2667	4	*										
5.2857	9	*										
5.3000	2	*										
5.3529	11	*										
6.2727	8	*										
6.5000	6	*	*	*	*				*	*		

Note. * show pairs of schools significantly different at the .05 level.

Note. This subtest includes questions 49 and 53.

Cronbach's Alpha

Reliability scores for the Discipline Questionnaire subtests are: Discipline Consistency .85, Respect .65, and Conformity .57.

Combining the OCDQ-RE and the Discipline Questionnaire

Hoy and Clover (1986) removed questions about students from the OCDQ-RE because those questions lost their conceptual identity in the factor analysis. In an attempt to include items about students with the OCDQ-RE, items from the OCDQ-RE with primary loadings clearly on a single factor were selected for factor analysis. Questions were retained if two or more loaded on the same factor in the OCDQ-RE factor analysis done for this study. Results are grouped by factor in Table 40. Items from the Discipline Questionnaire with clear primary loadings were also factor analyzed, resulting in Table 41. Finally, Table 42 shows results of a factor analysis run after combining both sets of questions.

Citizenship-Discipline Program Questionnaire Results

Varimax Solution

The Varimax solution for the Citizenship-Discipline Program Questionnaire resulted in two factors with eigenvalues greater than one (Table 43). Two factors explained 66.4% of the variance. Since the third factor, while less than one, explained 11.4% of the variance, a three factor solution was attempted and is shown in Table 44. The three factor solution explained 77.8% of the variance.

Table 40

Varimax Solution for Selected Questions from the OCDQ-RE Grouped by Factor

Factor	Question	I	II	III	IV	V	VI
	29	.84	.10	.07	.01	.05	.07
	28	.82	.06	-.08	-.05	.25	-.06
	4	.81	.15	.02	-.11	-.08	-.06
	23	.77	.23	.14	.01	.04	.05
I	16	.76	.18	.16	-.01	-.02	.15
	42	.76	.17	-.04	-.17	.30	-.03
	15	.75	.09	.07	-.02	.07	.03
	9	.71	.03	.18	-.13	.08	.10
	22	.66	.20	.14	-.17	.28	-.28
	18	.08	.78	.02	-.03	.15	-.08
II	11	.21	.77	.05	.03	.005	.11
	36	.26	.75	.07	.12	.17	.13
	25	.20	.74	.05	-.14	.03	.13
	33	.12	.08	.79	-.03	.17	-.01
III	2	.04	.17	.77	-.01	-.02	.19
	7	.13	-.14	.72	-.003	-.11	.01
	38	.06	.09	.67	-.19	.27	-.01
	34	-.27	-.11	-.09	.74	.09	-.07
IV	41	.01	.07	.02	.74	.001	-.04
	35	-.07	-.02	-.12	.74	-.18	.03
V	12	.20	.09	.02	-.01	.77	.08
	40	.19	.22	.24	-.08	.72	.14
VI	37	-.06	.11	.07	.08	.09	.77
	8	.13	.09	.06	-.17	.08	.76

Table 41

Varimax Solution for Selected Discipline Questionnaire Questions Grouped by Factor

Factor	Question	I	II	III
	45	.91	.005	.003
I	54	.82	.34	.14
	48	.80	.28	.10
	51	.23	.80	.08
II	43	.03	.72	.04
	52	.36	.68	.23
III	49	.19	.001	.84
	53	-.04	.22	.83

Table 42

Varimax Solution for Selected Questions from the OCDQ-RE and from the Discipline Questionnaire Grouped by Factor

Factor	Question	I	II	III	IV	V	VI	VII	VII
	29	.84	.08	.06	.13	.07	.01	.05	.09
	28	.80	.09	.11	.24	-.10	-.04	-.03	-.06
	4	.79	.12	.19	.001	.01	-.12	.12	-.06
	16	.76	.17	.12	-.01	.16	-.003	.06	.18
	23	.75	.22	.19	.07	.12	.02	.01	.10
	15	.72	.08	.01	.14	.07	-.03	.27	-.03
	42	.72	.21	.18	.28	-.07	-.17	-.01	-.05
	9	.67	.03	.15	.15	.16	-.14	.17	.07
	22	.64	.24	.12	.27	.11	-.14	-.06	-.22
	18	.09	.78	-.06	.13	.02	-.02	-.03	-.08
II	36	.23	.76	.14	.07	.06	.09	.15	.12
	11	.20	.75	.02	-.01	.05	.03	.15	.11
	25	.20	.71	.04	.05	.05	-.15	.05	.13
	45	.21	.03	.86	-.01	.07	.02	-.06	-.03
III	54	.30	.11	.80	.22	.13	-.07	.10	-.01
	48	.19	-.01	.78	.24	.09	-.03	.09	.08
	51	.23	-.06	.26	.64	.16	.03	.11	.15
	12	.18	.21	-.06	.64	-.001	.01	-.04	.09
IV	52	.17	-.03	.40	.61	.06	.02	.27	.01
	40	.12	.31	.23	.61	.19	-.09	-.06	.13
	43	.31	.09	.04	.49	.17	-.17	.14	-.08
	33	.13	.09	.08	.21	.77	-.01	-.09	.03
	2	-.01	.18	.18	-.01	.76	-.03	.12	.11
	7	.11	-.15	.02	-.03	.74	-.02	.18	-.05
	38	.08	.11	.01	.29	.65	-.16	-.22	.10
	41	-.01	.04	-.05	.08	.01	.75	.07	-.05
VI	34	-.28	-.09	-.02	.03	-.10	.74	-.02	-.06
	35	-.04	-.02	.03	-.28	-.09	.73	-.07	.05
VII	53	.16	.20	-.03	.22	.03	.07	.78	-.08
	49	.18	.12	.17	-.04	.01	-.08	.71	.29
VIII	37	-.06	.12	.02	.04	.07	.08	-.03	.80
	8	.09	.08	.01	.16	.06	-.17	.16	.70

Table 43

Varimax Solution for the Citizenship-Discipline Program Questionnaire by Question

Question	I	II
60	.58	.57
61	.75	.12
62	.36	.10
63	.89	.09
64	.79	-.11
65	.89	.12
66	.90	.08
67	-.05	.94

Table 44

Three Factor Varimax Solution for the Citizenship-Discipline Program Questionnaire by Question

Question	I	II	III
60	.58	.56	.11
61	.77	.12	-.03
62	.15	.05	.98
63	.86	.08	.21
64	.77	-.12	.17
65	.90	.12	.07
66	.89	.08	.11
67	-.05	.94	.01

The analyses of the Citizenship-Discipline Program Questionnaire included six schools even though seven schools in the study had implemented programs. Only three respondents in one school completed the Citizenship-Discipline Program Questionnaire. Therefore, that school was not included in the analyses.

Analysis of Variance and Student-Newman-Keuls Procedures

One-way Analyses of Variance were performed for each question on the Citizenship-Discipline Program Questionnaire in order to gain a preliminary understanding of some issues involved. Table 45 lists the F-ratio and probability level for each question.

Student-Newman-Keuls results are shown in Tables 46 to 52 for each question with $p < .05$.

Table 45

One-way Analysis of Variance Significance Levels for Citizenship-Discipline Program Questionnaire Questions by School

Question	F	P
60	4.5426	.0009
61	7.0316	.0000
62	3.7833	.0037
63	4.5320	.0010
64	4.9692	.0004
65	6.8809	.0000
66	4.1589	.0019
67	1.2331	.3000

Table 46

Student-Newman-Keuls Procedure for "Teachers made a great effort to plan our citizenship-discipline program" by School

		School					
Mean	School	12	7	5	3	10	6
4.2500	12						
4.6522	7	*					
4.7059	5	*					
4.7273	3						
4.9091	10	*					
5.0000	6	*					

Note. * show pairs of schools significantly different at the .05 level.

Note. for question 60, F = 4.5426 and p = .0009

Table 47

Student-Newman-Keuls Procedure for "Students are more cooperative since we began using our citizenship-discipline program" by School

		School					
Mean	School	12	3	7	10	5	6
3.5000	12						
3.6364	3						
4.1739	7	*	*				
4.3636	10	*	*				
4.5294	5	*	*				
4.7143	6	*	*				

Note. * show pairs of school significantly different at the .05 level.

Note. For question 61, F = 7.0316 and p = .0000

Table 48

Student-Newman-Keuls Procedure for "Our citizenship-discipline program increases the amount of time teachers spend disciplining students" by School

		School					
Mean	School	7	12	10	3	5	6
3.0000	7						
3.1667	12						
3.7273	10						
3.9091	3						
4.0000	5	*					
4.2857	6	*					

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 62, F = 3.7833 and p = .0037

Note. Responses have been recoded so that the lowest mean indicates strongest agreement.

Table 49

Student-Newman-Keuls Procedure for "Our citizenship-discipline program helps teachers maintain their self-control with disruptive students" by School

		School					
Mean	School	12	3	7	10	5	6
3.6667	12						
4.1818	3						
4.2174	7						
4.2273	10						
4.6471	5	*					
4.8571	6	*		*	*		

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 63, F = 4.5320 and p = .0010

Table 50

Student-Newman-Keuls Procedure for "Staff members are following through with our citizenship-discipline program" by School

		School					
Mean	School	3	7	12	10	5	6
3.6364	3						
3.6522	7						
3.6667	12						
4.2273	10						
4.4118	5		*	*			
4.7143	6	*	*	*			

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 64, F = 4.9692 and p = .0004

Table 51

Student-Newman-Keuls Procedure for "Using our citizenship-discipline program helps control disruptive students" by School

		School					
Mean	School	12	3	7	10	5	6
3.2500	12						
3.4545	3						
3.9130	7						
4.3636	10	*	*				
4.4118	5	*	*				
4.7857	6	*	*	*			

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 65, F = 6.8809 and p = .0000

Table 52

Student-Newman-Keuls Procedure for "Using our citizenship-discipline program helps a teacher be consistent with students" by School

		School					
Mean	School	12	3	7	10	5	6
3.8333	12						
4.0909	3						
4.2174	7						
4.5000	10	*					
4.5882	5	*					
4.8571	6	*	*	*			

Note. * show pairs of schools significantly different at the .05 level.

Note. For question 66, F = 4.1589 and p = .0019

OCDQ-RE Results by Implementation

Kruskal-Wallis and Binomial Procedures

OCDQ-RE subtest scores for individuals were regrouped into three levels (Table 53). Possible ranges of scores for the subtests differed due to the number of questions included in each subtest. Kruskal-Wallis One-way Analyses of Variance were performed on individual's scores for each subtest by level of implementation of a school-wide Citizenship-Discipline program. No implementation was designated level 2, beginning implementation was level 3 and full implementation was level 4. Chi-square results and significance levels for each OCDQ-RE subtest by implementation are shown in Table 54. Binomial procedures were performed for subtests with significance levels of $p < .05$ to identify which pairs of levels of implementation were significantly different at each of the three levels of each subtest. A two-tailed Binomial test was run.

Kruskal-Wallis and Binomial results are shown for Intimate in Table 55, for Disengaged in Table 56 and for Restrictive in Table 57.

Table 53

OCDQ-RE Subtest Scores Recoded into Three Levels

Subtest	Possible Range of Scores	Recoded Levels of Scores		
		1	2	3
Collegial	8 to 32	8 to 15	16 to 23	24 to 32
Intimate	7 to 28	7 to 13	14 to 20	21 to 28
Disengaged	4 to 16	4 to 7	8 to 11	12 to 16
Supportive	9 to 36	9 to 17	18 to 26	27 to 36
Directive	9 to 36	9 to 17	18 to 26	27 to 36
Restrictive	5 to 20	5 to 9	10 to 14	15 to 20
Faculty	- 1 to 56	- 1 to 17	18 to 36	37 to 56
Principal	-47 to 22	-47 to-25	-24 to -2	- 1 to 22

Table 54

Kruskal-Wallis One-way Analysis of Variance for OCDQ-RE Subtests by Implementation

Subtest	Chi-square	P
Collegial	1.3498	.5092
Intimate	14.7449	.0006
Disengaged	9.9461	.0069
Supportive	.0435	.9785
Directive	1.4531	.4836
Restrictive	7.2238	.0270
Faculty	2.3831	.3037
Principal	.8369	.6581

Table 55

Kruskal-Wallis and Binomial Procedures for OCDQ-RE Subtest Intimate by Implementation

Kruskal-Wallis

Mean Rank	Cases	Implementation Level
79.60	49	2 = no implementation
64.17	50	3 = beginning implementation
93.52	60	4 = full implementation

Chi-square = 14.7449 Significance = .0006

Binomial

Intimate Level	Implementation Level	P
1	3, 4	.0414
3	3, 4	.0015

Table 56

Kruskal-Wallis and Binomial Procedures for OCDQ-RE Subtest Disengaged by Implementation

Kruskal-Wallis

Mean Rank	Cases	Implementation Level
74.73	50	2 = no implementation
70.94	51	3 = beginning implementation
91.34	57	4 = full implementation

Chi-square = 9.9461 Significance = .0069

Binomial

Disengaged Level	Implementation Level	P
2	2, 4	.0216
2	3, 4	.0119

Table 57

Kruskal-Wallis and Binomial Procedures for OCDQ-RE Subtest Restrictive by Implementation

Kruskal-Wallis

Mean Rank	Cases	Implementation Level
74.46	49	2 = no implementation
68.93	49	3 = beginning implementation
90.00	58	4 = full implementation

Chi-square = 7.2238 Significance = .0270

Binomial

Restrictive Level	Implementation Level	P
3	2, 4	.0288
3	3, 4	.0104

Discipline Questionnaire Results by Implementation

Kruskal-Wallis and Binomial Procedures

Discipline Questionnaire subtest scores were regrouped into three levels. Discipline Consistency and Respect possible scores ranged from three to twelve and were recoded into Level 1 (3 to 5), Level 2 (6 to 8), and Level 3 (9 to 12). Conformity scores could range from two to eight and were recoded into Level 1 (2 to 3), Level 2 (4 to 5), and Level 3 (6 to 8). Kruskal-Wallis One-way Analyses of Variance were performed on individuals' scores for each subtest. Chi-square results and significance levels are listed in Table 58. Two-tailed Binomial procedures were performed for each of the three levels of the regrouped Discipline Consistency scores to identify which implementation levels differed for each Discipline Consistency level. Table 59 presents these results.

Table 58

Kruskal-Wallis One-way Analysis of Variance for Discipline Questionnaire Subtests by Implementation

Subtest	Chi-square	P
Discipline Consistency	27.7861	.0000
Respect	3.2669	.1953
Conformity	2.4397	.2953

Table 59

Kruskal-Wallis and Binomial Procedures for Discipline Questionnaire Subtest Discipline Consistency by Implementation

Kruskal-Wallis

Mean Rank	Cases	Implementation Level
57.03	51	2 = no implementation
95.33	50	3 = beginning implementation
88.22	59	4 = full implementation

Chi-square = 26.7861 Significance = .0000

Binomial

Discipline Consistency Level	Implementation Level	P
1	2, 3	.0039
2	2, 3	.0303
3	2, 3	.0050
3	2, 4	.0018

Chapter 4

DISCUSSION

Descriptive Statistics

Means and standard deviations for the three questionnaires and demographic questions for Schools 2 to 12 are listed in Tables 2 to 12. School numbers have been removed to maintain confidentiality. The OCDQ-RE questionnaire included questions one to 42. A response of Rarely Occurs was coded one, Sometimes Occurs was coded two, Often Occurs was three and Very Frequently Occurs was four.

The OCDQ-RE showed no school mean scores of less than two on Tables 2, 4, and 9. OCDQ-RE means of less than two were recorded one to four times for Tables 3, 5, 7, 10, 11 and 12. Table 6 showed nine means of less than two on the OCDQ-RE and Table 8 had eleven means less than two. School means of three (Often Occurs) or greater were shown 17 times on Table 2, 14 times on Table 3, 23 times on Table 4, 22 times on Table 5, 11 times on Table 6, 19 times on Table 7, 10 times on Table 8, 33 times on Table 9 (including three maximum mean scores of four), 25 times on Table 10 (including one maximum mean score of four), 19 times on Table 11 and 20 times on Table 12.

The Discipline Questionnaire was comprised of questions 43 to 56, a total of fourteen questions. School means of less than two (Sometimes Occurs) were shown none or one time on all tables except Table 8 where there were three scores of less than two. School means of three (Often Occurs) or greater were shown twice on Tables 2, 3, and 8, five times on Tables 6 and 7, six times on Tables 4 and 5, nine times on Tables 10 and 12, ten times on Table 11 and 13 times on Table 9 (including

one maximum mean score of four). Tables 6 to 12 represent schools that have implemented a Citizenship-Discipline program utilizing aspects of Assertive Discipline. The four schools with the greatest number of significantly positive school responses to the Discipline Questionnaire are all schools with a Citizenship-Discipline program.

The Citizenship-Discipline Program Questionnaire, questions 60 to 67, was scored on a five point scale. Strongly Disagree was scored one, Disagree was two, Neither Agree nor Disagree was three, Agree was four, and Strongly Agree, five. All mean scores on Tables 6, 8, 9, 10, and 12 were greater than three.

OCDQ-RE

Varimax Solution

The Varimax solution for the present research (Table 13) verifies somewhat the factor structure reported by Hoy and Clover (1986). The factor structures are compared in Table 60. The Hoy and Clover solution indicates the "six factors with eigenvalues from 12.9 to 1.62 explaining 67.2% of the variance (that) were retained" in their solution (p. 102). In the present research, ten factors, all those with eigenvalues greater than one, explained 62.8% of the variance.

Some of the 42 items of the OCDQ-RE that were retained by Hoy and Clover did not have a primary loading clearly on a single factor. The exact items assigned but not loading clearly on Hoy and Clover's factors were not available for this study. However, the numbers of such items are apparent from Hoy and Clover's article, p. 103. Three of the nine Directive items, three of the eight Collegial items, two of

Table 60

Comparison of Varimax Solutions

Item	Question	Hoy & Clover	OPS Data
4	The principal goes out of his/her way to help teachers.	Supportive	Supportive
9	The principal uses constructive criticism.	Supportive	Supportive
15	The principal explains his/her reasons for criticism to teachers.	Supportive	Supportive
16	The principal listens to and accepts teachers' suggestions.	Supportive	Supportive
22	The principal looks out for the personal welfare of teachers.	Supportive	Supportive
23	The principal treats teachers as equals.	Supportive	Supportive
28	The principal compliments teachers.	Supportive	Supportive
29	The principal is easy to understand.	Supportive	Supportive
42	The principal goes out of his/her way to show appreciation to teachers.	Supportive	Supportive
2	Teachers' closest friends are other faculty members at this school.	Intimate	Intimate
7	Teachers invite other faculty members to visit them at home.	Intimate	Intimate
13	Teachers know the family background of other faculty members.	Intimate	Factor X
20	Teachers have fun socializing together during school time.	Intimate	School support for socializing
27	Teachers have parties for each other.	Intimate	Intimate
33	Teachers socialize with each other on a regular basis.	Intimate	Intimate
38	Teachers provide strong social support for colleagues.	Intimate	Intimate
11	Routine duties interfere with the job of teaching.	Restrictive	Maintenance
18	Teachers have too many committee requirements.	Restrictive	Maintenance
25	Administrative paperwork is burdensome at this school.	Restrictive	Maintenance
31	Clerical support reduces teachers' paperwork.	Restrictive	none
36	Teachers are burdened with busywork.	Restrictive	Maintenance
5	The principal rules with an iron fist.	Directive	Directive
10	The principal checks the sign-in sheet every morning.	Directive	Directive
17	The principal schedules the work for the teachers.	Directive	Factor IX
24	The principal corrects teachers' mistakes.	Directive	School support for socializing
30	The principal closely checks classroom (teacher) activities.	Directive	Directive
34	The principal supervises teachers closely.	Directive	Directive
35	The principal checks lesson plans.	Directive	Directive
39	The principal is autocratic.	Directive	Supportive
41	The principal monitors everything teachers do.	Directive	Directive
1	The teachers accomplish their work with vim, vigor and pleasure.	Collegial	none
6	Teachers leave school immediately after school is over.	Collegial	Factor VII
12	Most of the teachers here accept the faults of their colleagues.	Collegial	Collegial
19	Teachers help and support each other.	Collegial	none
26	Teachers are proud of their school.	Collegial	Supportive
32	New teachers are readily accepted by colleagues.	Collegial	Collegial
37	Teachers socialize together in small, select groups.	Collegial	Exclusivity
40	Teachers respect the professional competence of their colleagues.	Collegial	Collegial
3	Faculty meetings are useless.	Disengaged	none
8	There is a minority group of teachers who always oppose the majority.	Disengaged	Exclusivity
14	Teachers exert group pressure on non-conforming faculty members.	Disengaged	none
21	Teachers ramble when they talk at faculty meetings.	Disengaged	none

the seven Intimate items, four of the five Restrictive items and all four of the Disengaged items did not show clear factor loadings. Most of the factor identifications for the OPS research (column four of Table 60) represent clear primary loadings on those factors. The six questions that did not have primary loadings greater than .50 are marked "none."

The Supportive factor explains the most variance in both sets of research. It explains 22.7% of the variance in the OPS data. Hoy and Clover's research resulted in nine items on that factor while the present research added two more, item 39, "The principal is autocratic," and item 26, "Teachers are proud of their school." While these two items had primary loadings of over .50, each had strong secondary loadings as well. Reliability is highest for this factor: .95 for Hoy and Clover's data and .93 for the OPS data using the nine questions reported by Hoy and Clover (Table 22).

Five of Hoy and Clover's seven Intimate items loaded clearly on that factor while the OPS data had five items with loadings greater than .50, though item 27 had a strong secondary loading. There is a .10 difference in reliability, .86 to .76 between the two data sets.

While Hoy and Clover's Restrictive factor had only one item of five with a clear loading, four items in the OPS research loaded on a similar factor, renamed Maintenance. These items seem to relate more closely to the Maintenance function of an organization than to restrictiveness of the principal. Using Hoy and Clover's five items, the alpha for both sets of data is the same, .80.

Six of Hoy and Clover's nine Directive items clearly loaded on that

factor. The research involving the OPS data had six items loading above .50 on the Directive factor, though three items did not show clear primary loadings. There was a .24 difference in reliability for this factor, with Hoy and Clover's data at .89 and the OPS research, .65 (using Hoy and Clover's nine items).

Hoy and Clover reported eight Collegial items, five of which had clear loadings. However, the present research showed only three items loading on the Collegial factor. Other of Hoy and Clover's Collegial items loaded on Supportive, a new factor termed Exclusivity, a one-item factor, "Teachers leave school immediately after school is over," or on no factor. Alphas were .90 (Hoy and Clover) and .70.

The Disengaged factor was composed of four items that did not indicate clear factor loadings in Hoy and Clover's research. Three of those items showed no clear loading in the OPS research while the fourth loaded on the new factor, Exclusivity. The alphas for Disengaged were .75 (Hoy and Clover) and .54.

The present research seems to support Hoy and Clover's identification of several factors important in school climate: Supportive Principal Behavior, Intimate Faculty relations, and Directive Principal Behavior. It adds credibility to their description of a factor called Restrictive Principal Behavior by indicating clear factor loadings of four of the items involved. However, it is suggested that this factor may be describing teachers' perceptions of a maintenance function in schools rather than a principal behavior.

In summary, the OPS data verifies some of the factor structure described by Hoy and Clover. Several different factors are suggested,

such as School Support for Socializing, Exclusivity and Maintenance. In other cases, only one item loaded strongly on a factor. It may be possible to discover an issue in these isolated items that has a strong influence on school climate.

Individual Items

Some items on the OCDQ-RE seem open to different interpretations indicating that more than one issue is involved in the item. Several items without clear factor loadings are examples. Item one, "The teachers accomplish their work with vim, vigor and pleasure," had similar loadings of .39, .32, .38 and -.32 on Supportive, Intimate, Collegial, and Factor IX (item 17, "The principal schedules the work for the teachers"). The issue could be, for example, accomplishment, work, enthusiasm, or cooperation. Item 3, "Faculty meetings are useless," indicated some loading on Supportive, Restrictive (Maintenance), Exclusivity, and Factor VII (item 6, "Teachers leave school immediately after school is over"). Item 14, "Teachers exert group presure on non-conforming faculty members," showed some relationship to the issues in the Collegial and Exclusivity factors.

Other items did load greater than .50 on a factor, but had strong secondary loadings. For example, item 26, "Teachers are proud of their school," had a primary loading of .61 on Supportive and a secondary loading of .40 on Collegial.

The wording chosen for some items seemed to build ambiguity into those questions. Item 8 states, "There is a minority group of teachers who always oppose the majority." The word minority may refer to a small group, a racial minority or some other issue. The word "work"

may be unclear in item 17, "The principal schedules the work for the teachers." The work could refer to lunch or playground duty, committee assignments, duties such as teachers' lounge clean-up, the schedule for art, physical education or music specialists, or the academic schedule of the classroom. In departmentalized elementary schools, principals may have more scheduling duties than in buildings with self-contained classrooms.

In some items, the qualifiers provide a lack of clarity. Examples are item eight, "There is a minority group of teachers who always oppose the majority," item 41, "The principal monitors everything teachers do," and item 10, "The principal checks the sign in sheet every morning." Do the minority teachers always oppose rarely, sometimes, often or very frequently? Does the principal monitor everything rarely, sometimes, often or very frequently? Is the sign in sheet checked every morning rarely, sometimes, often or very frequently? In these and other cases, the four point answer scale may not give respondents a complete enough range of answer choices. Each of the four answer choices provided implies some degree of agreement with the item. Alternatives would be to rewrite the OCDQ-RE answer choices on a five, seven, or nine point Likert scale including options for disagreement and neutrality, or on a scale built in terms of truth: Almost Never True, Infrequently True, Sometimes True, Frequently True, Almost Always True.

Some subjects wrote in responses to the OCDQ-RE as they completed the instrument. These responses indicate potentials for misunderstanding or for different understandings. Item six, "Teachers leave school immediately after school is over," prompted several

responses. The item could mean that teachers leave at 3:25 when students leave, or at 4:00, the end of the duty day. One respondent wrote in, "It depends on the teacher." Another respondent replied, "They come very early." Hoy and Clover included this item in the Collegial factor. However, teachers simply may have to pick their children up from the babysitter by 5:00. Also, some teachers find their most productive work time to be from 7:00 to 8:30 a.m. while others work from 4:00 to 5:30 p.m., or take their paperwork home, or all three.

There were similarly diverse comments concerning item 25, "Administrative paperwork is burdensome at this school." One teacher changed "this" to "any." Another wrote, "This is the district, not the building requirement," which indicates a unit of analysis other than the building. In another case, "administrative paperwork" was considered something the principal does, not the teachers.

Some questions offered different interpretations depending on who was the recipient of the action. Item 5 states, "The principal rules with an iron fist." A respondent replied, "Rarely with students, very frequently with staff."

Some items were simply left blank by respondents. Of the 178 OCDQ-RE responses, six of the 42 questions were left blank five or more times. Those questions were (with number of non-responses in parentheses): item 10, "The principal checks the sign in sheet every morning" (35), item 17, "The principal schedules the work for the teachers" (11), item 24, "The principal corrects teachers' mistakes" (6), item 25, "Adminstrative paperwork is burdensome at this school" (5), item 34, "The principal supervises teachers closely" (5), and item 39, "The

principal is autocratic" (10). Of these six items, five (numbers 10, 17, 24, 34, and 39) are part of the Directive subtest. Item 10 received question marks, "I don't know"s and inquiries concerning why the principal would check the sign in sheet since teachers phone in if they will be absent. An almost 20% lack of response to this question indicates a need for revision or deletion.

In summary, some items could be rewritten to improve clarity, to focus each item on one issue only, or to offer respondents a more complete set of answer choices. Deletion of other items may provide for a more concise testing instrument.

Analysis of Variance and Student-Newman-Keuls Procedures

With the foregoing reservations concerning the items and factors of the OCDQ-RE, the next step in this study was to perform One-way Analyses of Variance and Student-Newman-Keuls procedures for the six subtests and the faculty interactions and principal-teacher relations indices by school. Eleven schools, including 177 respondents, were included in these analyses. Comparisons were made within the sample since national norms have not been established.

Hoy and Clover designated Collegial, Intimate and Disengaged as faculty subtests. Analysis of Variance of the Collegial subtest resulted in $p = .0012$. Table 14 shows that School 6 was perceived as significantly more Collegial than Schools 12, 3, 4, and 7. Schools 6 and 7 were significantly more Intimate (Table 15) than Schools 3 and 5, while School 6 was also significantly more Intimate than Schools 8 and 2. The Intimate Analysis of Variance yielded $p = .0001$. School 7 was perceived as significantly more Disengaged than Schools 5, 10,

6 and 11 (Table 16, p = .0015).

Three subtests were considered by Hoy and Clover as Principal subtests, Supportive, Directive and Restrictive. Many significant differences between schools were evident in the Supportive subtest, Table 17, p = .0000. The principal of School 6 was perceived as significantly more Supportive than all other principals in this study. Principals 5, 11, and 7 were each significantly more Supportive than principals of Schools 12, 3, and 4. Principals of Schools 2 and 10 were significantly different from principals in Schools 12 and 3. The principals of Schools 8, 9, and 4 were each significantly more Supportive than the principal of School 12.

The Restrictive subtest (Table 18, p = .0000) showed that the principal of School 12 was considered significantly more Restrictive than principals 6, 10, 11, 4, 5, 9, 8, and 2. The principal of School 7 was seen as more Restrictive than those of Schools 6, 10, 11, 4, 5, and 9. The principal of School 3 was seen as more Restrictive than the principal of School 6. The principal of School 2 was considered more Restrictive than principals of Schools 6 and 10. Restrictive is the subtest that has been renamed as the Maintenance function of the school in this research. An issue other than restrictiveness of the principal may be in focus here.

Table 19 shows the results of the Directive subtest, p = .0110. The principal of School 10 was significantly more Directive than the principals of Schools 3 and 6.

In summary, School 6 faculty were perceived to be significantly more Collegial than four other schools and more Intimate than four

schools, three of which were different than the Collegial school differences. School 7 faculty were more Intimate than two other faculties. Faculties of Schools 5, 10, 6, and 11 were less Disengaged than the School 7 faculty. In the Principal subtests, there were many significant differences between schools, with principal 6 being more Supportive than all other principals. Eight principals were more Supportive than one, two or three other principals. The principal of School 12 was significantly more Restrictive than eight principals. The principal of School 7 was more Restrictive than six other principals. Principal 3 was more Restrictive than one principal while principal 2 was more Restrictive than two others. In all four of those Restrictive sets, the principal of School 6 was less Restrictive, and principal 10 was less Restrictive than three of the four most Restrictive principals. Again, maintenance may be an alternate reading for Restrictive. The principal of School 10 was more Directive than principals 3 and 6.

Combining the Faculty subtests, Collegial, Intimate and Disengaged, into the Faculty Interactions (Faculty Openness) index (Table 20, $p = .0038$) showed School 6 faculty as significantly more open than Schools 3, 12, 4, 7, 2, and 10. The School 11 faculty was more open than School 3. The three principal subtests, Supportive, Directive and Restrictive, were combined to form the Principal-Teacher Relations index, $p = .0000$, shown in Table 21. The Principal-Teacher Relations in School 6 were significantly more open than all ten other schools, while the Principal-Teacher Relations in School 12 were more closed than all others.

It appears that School 6 and principal 6 are at or near the best scores in all six subtests and two indices: more Collegial than four others, more Intimate than four others, one of the least Disengaged, a more Supportive principal than all others, one of the least Restrictive, and one of the least Directive. That school may have one of the more open faculties and the most open principal of all schools in this study. The faculty of School 12 was perceived as less Collegial, and the principal less Supportive and more Restrictive than some other schools. School 7 faculty were considered less Collegial than School 6, were among the most Intimate faculties and were significantly more Disengaged than four schools. The faculty of School 7 was facing a temporary circumstance during data gathering for this research that may have been considered stressful. This possibly negative experience may have yielded stronger feelings of intimacy among the faculty and more disengaged behaviors in spite of having a Supportive principal. Restrictiveness was significantly high at School 7 also, perhaps indicating a high level of organizational maintenance that was needed at that time.

Each school was comprised of a complex system of interacting and related parts, facing a unique set of circumstances with a unique staff. It does appear, however, that there were significant differences among these eleven OPS schools with regard to climate as measured by the OCDQ-RE.

There may be many explanations for these observed differences. A faculty and principal may be a good "match," may work successfully together, while the same principal might not be as effective in

another school. Some faculties may exhibit more heterogeneity than others. For some teachers, a heterogeneous faculty may seem more Collegial than a homogeneous one.

What is highly valued in one school may not be considered as important in another. The School 5 faculty perceived itself as one of the least Intimate groups, yet also one of the least Disengaged. The principal was considered Supportive. Faculty Interactions were not considered significantly less open than the most open school, School 6. Here is a school that, according to the OCDQ-RE results, feels its principal is Supportive and seems cooperatively and productively engaged in professional activity. But, the faculty do not consider themselves Intimate. Perhaps in this school, a high level of intimacy may not be a key part of a successful school climate.

Many other aspects of school life likely affect climate besides those measured by the OCDQ-RE. Behaviors of students and support staff were not evaluated. Each physical plant and the size of each school population was different. Schools have different types and amounts of contact with parents, administrators, and administrative directives from outside the school. Yet, in the narrow scope of this exploratory study, there do appear to be significant differences in climate among the eleven schools.

Discipline Questionnaire

Varimax Solution

Factor analysis of the fourteen questions of the Discipline Questionnaire yielded three factors shown in Table 23. Eight questions

with primary loadings clearly on one factor were retained when grouping questions into subtests. The three subtests were called Discipline Consistency, Respect, and Conformity. Those subtests are identified in Table 61.

Analysis of Variance and Student-Newman-Keuls Procedures

One-way Analyses of Variance and Student-Newman-Keuls procedures were first performed for each question in order to gain a preliminary understanding of some issues involved. Analyses of Variance for item 49, "A student repeats unacceptable behavior," and item 52, "A teacher is consistent with discipline procedures with different students," did not show significant results. All other items resulted in $p < .01$.

According to Table 25, "Students show school spirit and pride" significantly more frequently at School 6 than eight other schools, and more frequently at School 2 than at nine other schools. Three schools, 5, 11, and 7, were more positive on this measure than School 10. Of the schools mentioned, 6, 5, 7, and 10 had a school Citizenship-Discipline program at the time of data gathering.

School 6 teachers all gave the maximum possible answer to "Teachers help each other with student discipline," Table 26. School 6 was significantly different from all other schools on this item whether or not the other schools had a Citizenship-Discipline program.

Results for "Students are disciplined according to a school-wide code" are shown in Table 27. Schools 6, 7, 5, 10, 8, 3, and 11 were each significantly more positive than Schools 9 and 4. There were other differences as well. In all except two of those cases, faculties with a Citizenship-Discipline program scored themselves more positively

Table 61

Discipline Questionnaire Subtests

Item	Question	Factor Name
45	Students are disciplined according to a school-wide code.	Discipline Consistency
54	Discipline is consistent throughout the school.	Discipline Consistency
48	Teacher approaches to managing student behavior are consistent throughout the school.	Discipline Consistency
51	Teachers maintain their self-control with disruptive students.	Respect
52	A teacher is consistent with discipline procedures with different students.	Respect
43	Students show school spirit and pride.	Respect
49	A student repeats unacceptable behavior.	Conformity
53	Disruptive student behavior interferes with teaching.	Conformity

than faculties without a Citizenship-Discipline program. The two exceptions were that School 6 was significantly more positive on this question than School 12. Both schools had a Citizenship-Discipline program. School 11, without a program, scored higher than Schools 9 and 4, also without programs.

Question 46 (Table 28), "Methods used to manage student behavior help students mature," was given the maximum score of four by all faculty members at School 6, which scored significantly different from all other schools. School 7 (with a Citizenship-Discipline program) recorded a significantly higher response to this question than School 9 (without a program).

Three of the four schools scoring significantly higher on "Students are appropriately rewarded for their good behavior" (Table 29) have Citizenship-Discipline programs. School 6 teachers again gave their school the maximum possible score. That school was significantly different from seven other schools, some with and some without programs. Schools 7 and 10, both with programs, differed from five schools each, some with and some without programs. The fourth school that scored significantly higher on this question was School 2, which did not have a Citizenship-Discipline program utilizing aspects of Assertive Discipline. It scored higher than School 4, also without a program. It may be noted that circumstances in School 4 during data gathering may have contributed to the lower scoring by faculty on some of these discipline questions.

Table 30 provides the results of "Teacher approaches to managing student behavior are consistent throughout the school." Nine schools

scored significantly higher on this question than School 4. Four of those nine schools (all with programs) also scored higher than School 9 (without a program). School 6 was significantly more consistent than Schools 12, 11, and 2 as well as 4 and 9.

The results for "Students behave well in order to gain rewards" (Table 31) show that the School 6 faculty responded significantly more positively than all other schools in the study. School 5 faculty recorded a significantly higher score to "Teachers maintain their self-control with disruptive students" (Table 32) than did the faculties of Schools 10 and 12. All three schools had Citizenship-Discipline programs.

School 6 received a significantly lower score for "Disruptive student behavior interferes with teaching" (Table 33) than all other schools except School 8. School 8 recorded less disruption to teaching than Schools 12, 3, 10, and 7, all four of which had Citizenship-Discipline programs.

School 6 recorded the strongest agreement with "Discipline is consistent throughout the school," Table 34, showing significant differences with eight other schools. School 5 scored significantly more consistent than four schools, School 10 than two schools, and School 7 scored more frequently consistent than one school. The school scoring the least consistent was School 9. Schools 6, 5, 10, and 7 all had programs.

The results in Table 35, for "Disruptive students become more cooperative as the year progresses" were significantly higher at School 6 than all other schools except School 8. Ten schools showed significant differences from School 12, whose faculty marked that this happened the

least often.

School 12 showed a significantly lower score for "The principal follows through with discipline consequences when appropriate," Table 36, than all other schools according to teachers' perceptions. Schools 6 and 7 had a significantly higher score on this item than School 8.

For eleven of the twelve items described in Tables 25 to 36, School 6 showed the strongest mean score and some or many significant differences with other schools. School 6 also had some of the most positive scores on the OCDQ-RE subtests and indices. It appears that there is a consistently strong faculty perception of both school climate and school discipline at School 6.

While some schools implementing Citizenship-Discipline programs received significantly stronger scores than some without, there seems to be no readily apparent pattern of "with program" schools and "without program" schools in these results.

One-way Analyses of Variance and Student-Newman-Keuls procedures for the three subtests of the Discipline Questionnaire are shown in Tables 37 to 39. Many significant differences were shown among Discipline Consistency subtest scores, Table 37. School 6 teachers scored their discipline significantly more consistent that Schools 9, 4, 12, 2, 11, 8, and 3. Schools 5, 7, and 10 were more consistent than Schools 9, 4, 12, and 2. Schools 3, 8, and 11 were perceived as more consistent than Schools 9 and 4. School 2 scored more consistent than School 4.

School 6 had a significantly higher score on the Respect subtest than Schools 10, 12, 4, 3, 9, 8, and 7 (Table 38). School 2, without

a discipline program, was significantly higher on the Respect subtest than Schools 10, 12, 4, and 7, three of which did have programs. School 5 recorded a significantly higher mean than School 10.

The Conformity subtest, Table 39, included two questions relating to disruptiveness of student behavior and the frequency of the behavior. School 6 faculty perceived significantly more Conformity than did faculties of Schools 12, 3, 10, 7, 2, and 11. School 12 showed significantly less student conformity than eight other schools.

Each school was unique. Again, School 6 appeared to have the most significantly consistent discipline program, to show the most Respect among the school population, and to have the least disruptive student behavior. School 2 faculty perceived their students to show school spirit and pride more frequently than nine other faculties. The School 2 faculty also recorded the second highest Respect score, significantly higher than four other schools. School 2 faculty, without a formal Citizenship-Discipline program, gave itself high marks on the issues of Respect and student school spirit.

Combining Questions from the OCDQ-RE and the Discipline Questionnaire

Hoy and Clover (1986) removed questions about students from the OCDQ-RE when their attempt to include them resulted in a loss of the conceptual identity of the student questions. In an attempt to combine some questions about pupil behavior from the Discipline Questionnaire with the OCDQ-RE, items from each questionnaire were retained if they had clear primary loadings on a single factor. Table 40 shows the resultant shortened version of the OCDQ-RE. Twenty-four of the original

42 questions were retained in six factors. Factor I retained the original nine Supportive items (see Table 60). Factor II included four Maintenance items, 11, 18, 25, and 36 (renaming the Restrictive factor of the OCDQ-RE). Items 2, 7, 33, and 38 formed the new Factor III, Intimate. Factor IV, Directive, was made up of items 34, 35, and 41. Factor V was comprised of two of the items, 12 and 40, belonging to the original Collegial factor. Finally, Factor VI was created by items 8 and 37, and named Exclusivity. In this way, five of the six Hoy and Clover OCDQ-RE factors were retained in some form.

The Discipline Questionnaire was also revised and shortened from fourteen to eight items, shown in Table 41. Three items, 45, 48, and 54 loaded clearly on Factor I, Discipline Consistency (see Table 61). Factor II retained three items, 43, 51, and 52, and was called Respect. This factor included questions about teachers and students. The third factor, Conformity, was formed of items 49 and 53 and focussed on unacceptable student behavior.

A factor analysis of the combined 32 items, six factors from the OCDQ-RE and three from the Discipline Questionnaire, produced an eight factor solution, shown in Table 42. Five factors from the shortened OCDQ-RE, Supportive, Maintenance, Intimate, Directive, Exclusivity, and two from the abbreviated Discipline Questionnaire, Discipline Consistency and Conformity, remained as factors. The questions that loaded on those seven factors were the same as on the two separate instruments. The remaining two factors, Collegial from the OCDQ-RE and Respect from the Discipline Questionnaire, combined to form one factor. Item 51, "Teachers maintain their self-control with disruptive

students," item 12, "Most of the teachers here accept the faults of their colleagues," and item 40, "Teachers respect the professional competence of their colleagues," seemed to have clear primary loadings on the new factor. Two items, number 52, "A teacher is consistent with discipline procedures with different students," and item 43, "Students show school spirit and pride," did not show clear primary loadings. Item 52 showed a secondary loading on Discipline Consistency. Item 43's secondary loading was on Supportive.

These results seem to support a general statement of an exploratory nature: It seems possible to include items about students, here Discipline Consistency and Conformity, in a climate questionnaire as separate factors. In other cases, factors including items about the principal, teachers and students together may reveal important issues in school climate. Attention to such concerns as unit of analysis would be necessary to produce a reliable and valid instrument.

Citizenship-Discipline Program Questionnaire

Eight questions were specifically focussed on aspects of the Citizenship-Discipline programs that were being implemented in Schools 3, 5, 6, 7, 8, 10, and 12. Six of those schools had sufficient responses to the Citizenship-Discipline Program Questionnaire to be included in the analyses. The five part response scale for that questionnaire was Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree and Strongly Agree.

A two factor Varimax solution explained 66.4% of the variance (Table 43). The third factor, which had an eigenvalue of less than

one, explained 11.4% of the variance, so a three factor solution was attempted and is shown in Table 44. Five of the eight items clearly loaded on Factor I, while one item each loaded on Factor II and Factor III. Because of this, no further studies were done of the factor structure although it appeared that responses were directed to at least three issues in this questionnaire.

Individual items were studied by One-way Analysis of Variance and Student-Newman-Keuls procedures for each school. The F-ratios and probability levels for each question are listed in Table 45. While the use of one item to measure a concept can be questioned from a validity standpoint, the purpose of these analyses was to gain a preliminary understanding of some of the issues involved. Analyses of Variance of seven of the eight items resulted in $p < .01$. The results of analysis of item 67, "Teachers spent many months preparing our citizenship-discipline program" were not significant.

Item 60, "Teachers made a great effort to plan our citizenship-discipline program" received significantly stronger agreement by faculties in Schools 6, 10, 5, and 7 than in School 12. The School 6 mean was the maximum score of five, Strongly Agree (Table 46). The same four schools, 6, 5, 10, and 7, each differed significantly from Schools 12 and 3 on item 61, "Students are more cooperative since we began using our citizenship-discipline program," Table 47. School 7, however, agreed most strongly with item 62, "Our citizenship-discipline program increases the amount of time teachers spend disciplining students," Table 48. Here School 7 was significantly different from Schools 6 and 5.

On item 63, "Our citizenship-discipline program helps teachers maintain their self-control with disruptive students," Table 49, there was a significant difference between the schools in strongest agreement, 6 and 5, and School 12. School 6 also responded more positively than Schools 7 and 10 on this item.

Schools 6 and 5 recorded the most positive scores to item 64, "Staff members are following through with our citizenship-discipline program," Table 50. School 6 differed significantly from Schools 3, 7, and 12, while School 5 differed from Schools 7 and 12.

Faculties at Schools 6, 5, and 10 most strongly agreed that "Using our citizenship-discipline program helps control disruptive students," item 65, Table 51. Each of those three faculties differed significantly from School 12 and School 3. School 6 also differed from School 7.

Item 66, Table 52, "Using our citizenship-discipline program helps a teacher be consistent with students," was scored as happening the most frequently at Schools 6, 5, and 10. Each was significantly different from School 12. School 6 also differed significantly from Schools 3 and 7.

It is interesting to note that in this preliminary study School 6 recorded the strongest agreement with each of the Citizenship-Discipline Program questions that were significant and also had some of the most positive responses on the Discipline Questionnaire and the OCDQ-RE. School 5 showed a pattern of significant differences on the Citizenship-Discipline Program Questionnaire very similar to School 6, though involving two less schools on questions 63 and 66 and one less school on questions 64 and 65. School 10 was similar to School 5 for about

half the questions while School 7 matched School 10 for the two questions in which it significantly differed from the other schools.

These six schools, all of which had implemented a Citizenship-Discipline program were significantly different in their responses to seven of the eight items. The difference did not appear to be between schools fully implementing the program and those beginning implementation. The faculty of School 6 reported the most positive perceptions of school climate, school discipline and its Citizenship-Discipline program. Faculties in Schools 5, 10, and 7 also frequently reported positive responses to items or subtests on each of the three questionnaires.

It should also be noted that teachers have differing opinions concerning what constitutes positive discipline. For example, in "Using our citizenship-discipline program helps a teacher be consistent with students," Table 52, some teachers might value consistency very highly while others may consider consistency as a lack of individual attention to different students' differing needs.

Relationship of a Citizenship-Discipline Program and Climate

The third research question proposed for this study was: "How does implementation of a Citizenship-Discipline program relate to teachers' perceptions of school climate?" In order to examine the data with regard to this question, individual respondents' scores for each OCDQ-RE subtest and the two indices were grouped into three broad categories, low, medium and high. These ranges of scores are listed in Table 53. Kruskal-Wallis One-way Analyses of Variance for each of these regrouped scores by level of implementation produced the Chi-square values and

probability levels shown in Table 54. Three subtests showed a significant difference between levels of implementation of a Citizenship-Discipline program: Intimate, Disengaged and Restrictive. Two-tailed Binomial procedures were used to discover which levels of implementation of a Citizenship-Discipline program (level 2 = no implementation, level 3 = beginning implementation, and level 4 = full implementation) were significantly different for each of the three levels (1 = low, 2 = medium, and 3 = high) of individuals' subtest scores.

Table 55 shows that for the low range of Intimate subtest scores (level 1) individuals in schools beginning implementation of a Citizenship-Discipline program scored themselves as significantly less Intimate than those in schools that had fully implemented a program. The same resulted at the high (3) range of Intimate scores: persons who taught at schools beginning implementation of a program scored significantly less Intimate than teachers at schools with full implementation of their programs.

The results for the middle set of Disengaged scores (level 2) showed that teachers who had not implemented a Citizenship-Discipline program and those who had begun implementation of a program were significantly less Disengaged than teachers who had fully implemented a program (Table 56).

The Restrictive subtest results were similar to the Disengaged results, as seen in Table 57. At the high range of Restrictive scores, level 3, teachers at schools without a Citizenship-Discipline program and those at schools beginning implementation of a program perceived their principals as significantly lower on the Restrictive subtest

than teachers at schools with a fully implemented program. Or, teachers at schools with a Citizenship-Discipline program perceived a significantly higher Maintenance function of their schools than did those without a program.

These results seem to indicate that teachers at schools beginning implementation of a Citizenship-Discipline program feel less intimate than teachers at schools where the program has been fully implemented. One reason for this may be that beginning a new program allows for a whole range of uncertainties. How will this work out? How will students respond? Will I be successful? Will my colleagues follow through? Will I master all the paperwork? How will parents respond? Teachers at the beginning stage of a program may be less intimate with colleagues due to these stresses. Teachers who have, with their colleagues, gone through the process of fully implementing a program, whether the results have been positive or negative, have a shared experience which may help bind the faculty together.

While the faculties in full implementation of a Citizenship-Discipline program may be more intimate than faculties beginning to implement a program, they also are apparently more disengaged and feel that their principals are more restrictive. According to Hoy and Clover's descriptions of the subtests in Table 1, teachers who have gone through a common experience of implementing a Citizenship-Discipline program may be putting less effort into professional activities and group efforts (higher disengagement). Table 56 shows significant differences in disengagement between teachers without a program and those fully implementing one. There is also a difference in disengagement between

teachers beginning a program and those fully implementing one. A negative experience with such a program could yield negative perceptions of organizational activities.

According to Hoy and Clover (1986, p. 101), "Restrictive behavior hinders rather than facilitates teacher work." Whether the label Restrictive or the label Maintenance is used for this subtest, teachers in schools fully implementing a program apparently feel restricted by their principals or by routine duties, paperwork and other such demands on their time and effort. Table 57 shows that teachers who are fully implementing a program perceive significantly more restrictiveness than both those without a program and those beginning one. Thus, there appears to be a set of stresses on teachers fully implementing a Citizenship-Discipline program.

Relationship of a Citizenship-Discipline Program and Discipline

Different degrees of implementation of a Citizenship-Discipline program also appeared to be related to teachers' perceptions of school discipline. Kruskal-Wallis One-way Analyses of Variance were performed for respondents' scores on the three Discipline Questionnaire subtests, Discipline Consistency, Respect, and Conformity, by level of implementation of a Citizenship-Discipline program. The three levels of implementation were level two, no implementation, level three, beginning implementation, and level four, full implementation. Results are presented in Table 58.

Two tailed Binomial tests for Discipline Consistency, $p = .0000$, identified which pairs of levels of implementation of a Citizenship-

Discipline program were significantly different for the three levels of individual scores. Each individual's scores had, as with the OCDQ-RE subtest scores, been recoded into low, medium and high levels. Results are presented in Table 59. At all three levels of Discipline Consistency scores, teachers at schools that were beginning implementation of their programs perceived more consistency in their schools' discipline programs than teachers at schools without the programs. Also, at the high range of Discipline Consistency scores, teachers at schools in full implementation of a program scored their discipline programs significantly more consistent than teachers at schools without a Citizenship-Discipline program. No significant differences were apparent among teachers beginning programs and those fully operating programs.

At all three levels of subtest scores, teachers working with a newly implemented Citizenship-Discipline program felt it offered more consistency in student management than did teachers without a program. It should be noted that at all schools, including those without a Citizenship-Discipline program, there are procedures for the management of students. Teachers and principals act in certain ways and each anticipates the others' actions. Teachers in schools fully implementing a Citizenship-Discipline program recorded high marks for program consistency significantly more often than did teachers without the program.

Chapter 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Conclusions

This exploratory study has provided a look at how teachers in eleven Omaha Public Schools perceive school climate and school discipline. Perceptions of school climate were examined by use of an existing instrument, the OCDQ-RE. To study teachers' perceptions of school discipline, two preliminary questionnaires, a Discipline Questionnaire and a Citizenship-Discipline Program Questionnaire, were written. Relationships between school climate, school discipline and Citizenship-Discipline programs were also considered.

Analyses of teacher responses to the OCDQ-RE showed significant differences among teachers' perceptions of climate in the eleven schools. For each of the OCDQ-RE subtests, Collegial Faculty Behavior, Intimate Faculty Behavior, Disengaged Faculty Behavior, Supportive Principal Behavior, Directive Principal Behavior, and Restrictive Principal Behavior, significant differences were demonstrated between two or more pairs of schools. Significant differences were also apparent in teachers' perceptions measured by the two OCDQ-RE indices, Faculty Interactions and Principal-Teacher Relations. The supportiveness of principals appears to be a crucial aspect of an open climate as perceived by teachers.

School 6 means showed significantly positive teacher perceptions on all six subtests and both indices. On two of the subtests School 6 scored significantly more positively than all other schools. This may indicate a model open climate school, from which the Omaha Public

Schools may learn how to enhance school climate in many schools. Alternately, the positive perceptions may reveal an excellent teacher-teacher and principal-faculty match. An excellent match at a different school may produce different climate results.

School scores may have different meanings for different schools. As an example, School 3 and School 6 each had a significantly less Directive score than School 10. Other results for School 6 were high for Collegial, Intimate, Supportive, Faculty Interactions and Principal-Teacher Relations and low on Disengaged and Restrictive. This may indicate that School 6 faculty members consider low directiveness as a positive value. School 3 had means significantly lower than at least one other school for Collegial, Intimate, Supportive, Restrictive, Faculty Interactions and Principal-Teacher Relations. Perhaps in this case a low Directive score may have a different meaning than in School 6.

Another aspect of this research was directed at differences in teachers' perceptions of school discipline. This question was approached in three ways. One-way Analyses of Variance were performed on individual items of the Discipline Questionnaire, on the three subtests of the Discipline Questionnaire, and on individual items of the Citizenship-Discipline Program Questionnaire. While the results of Analyses of Variance on single items used to measure a concept are questionable from a validity standpoint, the purpose in these analyses was to gain a preliminary understanding of some of the issues involved.

All three measures showed significant differences among schools. For eleven of the twelve items on the Discipline Questionnaire showing significant differences, School 6 recorded the highest mean, significantly

different from two to ten schools. School 6 also showed significant positive differences with other schools on the three subtests, Discipline Consistency, Respect, and Conformity. Again, this may mean it is a model for other schools, or a combination of a unique faculty and a unique principal into a well-working team, the characteristics of which are yet to be described. Other schools that were implementing Citizenship-Discipline programs also recorded significantly positive results on questions and subtests. However, schools with a Citizenship-Discipline program recorded significantly lower results as well.

The Citizenship-Discipline Program Questionnaire resulted in School 6 receiving the most significantly positive mean scores. The results of this questionnaire indicate significant differences among schools that have versions of a Citizenship-Discipline program. The same pairs of schools repeatedly showed differences.

These three analyses of school discipline seem to indicate that a program is not the key to successful management of students, but some combinations of open climate and discipline procedures may be more helpful than others in meeting the needs of children in the classroom.

An attempt was also made to follow up on Hoy and Clover's (1986) interesting statement that items relating to students, such as pupil control, were included then removed from the revised OCDQ because those items lost their conceptual identity on factor analysis. In the study reported here, an attempt was made to include the subtests of the Discipline Questionnaire with the OCDQ-RE subtests. Only items that had clear primary loadings for both instruments were retained for this

purpose. A factor analysis of the two abbreviated instruments showed five of the six OCDQ-RE factors from the shortened questionnaire and two of the three factors from the Discipline Questionnaire retaining their conceptual identity after combination. The two remaining factors together formed a new factor. It is suggested that with careful addition, deletion and revision of items, a climate questionnaire including items about students, teachers and principals could be created.

A third research question concerned the relationship between climate and the implementation of a Citizenship-Discipline program. The results of this investigation revealed significant differences in the Intimate, Disengaged and Restrictive OCDQ-RE subtests with regard to the discipline program. Teachers in schools beginning implementation of a Citizenship-Discipline program were less Intimate than those in full implementation of a program. Teachers in schools fully implementing Citizenship-Discipline programs scored themselves significantly more Disengaged and more Restricted than those without programs or beginning programs. Intimacy may decline as a faculty begins to utilize a new program because of uncertainties and stresses teachers face, but then may increase after participation in a common experience, whether positive or negative. Increases in positive feelings of intimacy were accompanied by increases of negative feelings of disengagement and of being restricted. It is possible that while a Citizenship-Discipline program does not affect overall school climate, it does indeed affect individuals' interpersonal feelings.

Concerning the relationship between discipline and implementation

of a Citizenship-Discipline program, teachers without a Citizenship-Discipline program scored the discipline procedures in their schools as less consistent than did teachers in schools implementing Citizenship-Discipline programs. Children may be treated with more consistency using a Citizenship-Discipline program, but at what cost of stress to teachers in terms of disengagement and feelings of being restricted?

Limitations

There are some limitations associated with this research project concerning research design, data analysis and interpretation.

The OCDQ-RE was selected for this study because it purported to measure school climate, the unit of analysis was the building, the subjects of the instrument were teachers (who are more available for research projects in OPS than students), reliability scores of the subtests seemed high and there appeared to be appropriate construct validity. A limitation of this instrument is that it was not designed to include principals and students as respondents, though they are also involved in the climate of the school. The reliability scores on the OCDQ-RE subtests in this research were not consistent with the high scores presented by Hoy and Clover. Also, the newly-revised OCDQ-RE had only been tested in New Jersey prior to Hoy and Clover's 1986 presentation of results. Perhaps some items are culture-specific to the schools in the original tests of the instrument. Finally, Hoy and Clover's results were based on as few as four respondents in some of the schools included in their research.

The order of items on the OCDQ-RE may affect the way subjects

respond. Another issue is that the four response categories on the OCDQ-RE all indicate some measure of agreement with each item. A Likert type response scale, from strongly disagree to strongly agree, and including "neither agree nor disagree" may offer options that would result in different choices. A response scale could also be written in terms of truth, with choices ranging from almost always true to almost never true.

For all these reasons, while the OCDQ-RE was selected for this research, another available organizational climate instrument might have been more appropriate.

There were also limitations in sample selection. The selection of the schools for this research was initiated by the Coordinator of Research for the Omaha Public Schools. He suggested schools partly because those principals might be willing to participate and partly based on degree of implementation of a Citizenship-Discipline program. Elementary principals chose to participate or not to participate in the study. While principals agreed to allow participation of their faculties, individual teachers generally participated by choice. Inasmuch as schools were chosen for specific reasons and thus did not provide a random sample, generalizing beyond those schools should be done with caution. However, there is no reason to suppose these results would be misleading from what would be found in any school.

Questions for the Discipline Questionnaire and the Citizenship-Discipline Program Questionnaire were written by the researcher in consultation with some teachers who had recently developed a Citizenship-Discipline program but had not yet begun to implement it. The questions

are only very preliminary attempts to identify some issues involved in school discipline.

The Discipline Questionnaire and the Citizenship-Discipline Program Questionnaire were pilot tested at one school. The small number of respondents (17) provided only the most cursory indication of the usefulness of the items tested. The OCDQ-RE was also pretested at that school and provided information for a superficial factor analysis showing that some questions were loading on factors in a way similar to that reported by Hoy and Clover (1986).

Concerning data analysis, it has been repeated throughout this report that an Analysis of Variance on a single item may be questioned from a validity standpoint. A preliminary understanding of some issues related to discipline was provided in this exploratory study. A question might also arise concerning use of Analysis of Variance on data not known to be interval data.

No analysis was done relating climate in individual schools and discipline in those schools. Such an analysis could have offered a clearer explanation of the relationship between climate and discipline.

Interpretation of the data was also subject to limitations. Because of the many individual characteristics of teachers and schools, and because schools are complex systems that are each implementing different sets of programs and projects, only general explanations of the findings were possible. This research project was intended to explore some aspects of school climate and school discipline without implying causal relationships.

Recommendations

Some recommendations for future research are suggested as an outgrowth of this study.

Revision of the OCDQ-RE could produce less ambiguous questions and enhance the factor structure and reliability of the instrument. A revision might include a Likert type response scale, giving respondents options for neutral and negative answers based on agreement or truth rather than occurrence.

Including principals and students with teachers as respondents to a climate questionnaire would possibly improve the quality of the data gathered.

National norms should be established for the OCDQ-RE so that generalizations beyond one's own sample could be profitably made.

Longitudinal studies of climate and discipline would provide valuable information about stability or change in school climate. Statistical analyses of longitudinal data could reveal possible inverse relationships in the data.

Much research, revision and evaluation of items comprising a Discipline Questionnaire and a Citizenship-Discipline Program Questionnaire would have to be done to develop reliable and valid instruments.

Finally, in the light of the information gained through this research project, the Omaha Public Schools may wish to pursue more studies of climate and discipline. An evaluation of the benefits and costs involved in implementing Citizenship-Discipline programs would help in deciding whether the benefits are worth the costs.

Appendix A

University of Nebraska at Omaha

College of Arts and Sciences
Department of Communication
Omaha, Nebraska 68182-0112
(402) 554-2600
Broadcasting (402) 554-2520
Journalism (402) 554-2520
Speech (402) 554-2600

November 1988

Dear Teaching Colleague:

Much research has been done concerning how elementary teachers perceive their schools. We are interested in determining how teaching professionals in the Omaha Public Schools perceive their schools and the management of students.

We are asking you to complete the following two page questionnaire, which has been approved for use in OPS by the Research Department. The time required to fill out the questionnaire should be less than 15 minutes. Make all of your responses on the questionnaire, and please work individually. Do not confer with anyone else. It is extremely important that you answer all questions in each section. The last section of the questionnaire, however, does not apply to all schools. Be assured that complete confidentiality will be maintained--individuals will in no way be identified.

When you have completed the questionnaire, place it in the white envelope supplied. Then place the sealed white envelope in the box provided. Please try to complete the questionnaire today. Summary results of the survey will be provided to your school.

If the survey is to be meaningful, we need responses from as many individuals in your school as possible. Thank you for your cooperation.

Dorothy Menousek

Dorothy Menousek

O C D Q - R E

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 VF=VERY FREQUENTLY OCCURS

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

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 VF=VERY FREQUENTLY OCCURS

43. Students show school spirit and pride.---------- RO SO O VF
44. Teachers help each other with student discipline.---------- RO SO O VF
45. Students are disciplined according to a school-wide code.---------- RO SO O VF
46. Methods used to manage student behavior help students mature.---------- RO SO O VF
47. Students are appropriately rewarded for their good behavior.---------- RO SO O VF
48. Teacher approaches to managing student behavior are consistent throughout the school.---------- RO SO O VF
49. A student repeats unacceptable behavior.---------- RO SO O VF
50. Students behave well in order to gain rewards.---------- RO SO O VF
51. Teachers maintain their self-control with disruptive students.---------- RO SO O VF
52. A teacher is consistent with discipline procedures with different students. RO SO O VF
53. Disruptive student behavior interferes with teaching.---------- RO SO O VF
54. Discipline is consistent throughout the school.---------- RO SO O VF
55. Disruptive students become more cooperative as the year progresses.-------- RO SO O VF
56. The principal follows through with discipline consequences when appropriate.---------- RO SO O VF

DIRECTIONS: Please circle the most appropriate response.

57. How many years have you taught elementary school?
    0-2 3-5 6-10 over 10

58. In how many elementary schools have you taught?
    1 2-3 4-5 over 5

59. How many years have you taught at this school?
    less than 3 3-10 more than 10

DIRECTIONS: Some schools have developed a citizenship/discipline program utilizing aspects of Lee Canter's Assertive Discipline Program. Answer the following questions only if your school has developed such a program and has begun to implement the program with students. Please indicate the extent to which each statement characterizes your school by circling the appropriate responses.

SD=STRONGLY DISAGREE D=DISAGREE N=NEITHER AGREE NOR DISAGREE A=AGREE SA=STRONGLY AGREE

60. Teachers made a great effort to plan our citizenship/discipline program.- SD D N A SA
61. Students are more cooperative since we began using our citizenship/discipline program.---------- SD D N A SA
62. Our citizenship/discipline program increases the amount of time teachers spend disciplining students.---------- SD D N A SA
63. Our citizenship/discipline program helps teachers maintain their self-control with disruptive students.---------- SD D N A SA
64. Staff members are following through with our citizenship/discipline program.---------- SD D N A SA
65. Using our citizenship/discipline program helps control disruptive students.---------- SD D N A SA
66. Using our citizenship/discipline program helps a teacher be consistent with students.---------- SD D N A SA
67. Teachers spent many months preparing our citizenship/discipline program.- SD D N A SA

Appendix B

Teacher Perceptions Questionnaire
Information for Principals

This project has been approved by Dr. Irv Young for use in OPS elementary schools. It concerns teachers' perceptions of your school and of the management of students there.

Please distribute the questionnaires, at a staff meeting if possible, to full-time certified teaching staff, including librarians/media specialists. Teachers who are half-time or more at your school (such as half-day kindergarten or specialists who teach in your building half of the week or more) are also requested to participate.

I will certainly appreciate every encouragement you give your teachers to complete and return the questionnaire. I am attempting to include every teacher at your school who is half-time or more rather than selecting a smaller sample. If the survey is to be meaningful, I need responses from as many of your teachers as possible.

The following paragraphs may be read to the teachers when the questionnaires are distributed:

Would you please complete this questionnaire. It concerns your perceptions of our school and the management of students, and has been approved by Irv Young of the OPS Research Department. I have agreed to distribute it to you for completion.

The project concerns your perceptions as professional educators and should take only about 15 minutes of your time. It is important for the accuracy of the survey that all full-time certified teaching staff, including librarians/media specialists, participate. Any teaching staff members who are in the building half the week or more are also included.

When you have completed the questionnaire, put it in the attached white envelope. Place the sealed envelope in this box. Please try to complete the questionnaire today. The box will be in the teachers' work room until it is picked up on _____.

Please complete questions 1 - _____. your responses will be completely confidential and summary results will be provided to us.

MANY THANKS!

Dorothy Menousek

Dorothy Menousek
Highland School

Appendix C

Primary Factor Loadings for the OCDQ-RE

Factor	Question	Also Loaded
Factor 1		
.84	29. The principal is easy to understand.	
.81	4. The principal goes out of his/her way to help teachers.	
.81	28. The principal compliments teachers.	
.78	23. The principal treats teachers as equals.	
.75	16. The principal listens to and accepts teachers' suggestions.	
.75	42. The principal goes out of his/her way to show appreciation to teachers.	
.72	15. The principal explains his/her reasons for criticism to teachers.	
.70	9. The principal uses constructive criticism.	
.66	22. The principal looks out for the personal welfare of teachers.	
.61	26. Teachers are proud of their school.	.40 on factor 5
.51	39. The principal is autocratic.	.27 on factor 6
		.20 on factor 7
		.34 on factor 9
Factor 2		
.77	33. Teachers socialize with each other on a regular basis.	
.74	2. Teachers' closest friends are other faculty members at this school.	
.66	38. Teachers provide strong social support for colleagues.	
.65	7. Teachers invite other faculty members to visit them at home.	.32 on factor 10
.54	27. Teachers have parties for each other.	.20 on factor 1
		.40 on factor 10
Factor 3		
.77	36. Teachers are burdened with busywork.	
.76	18. Teachers have too many committee requirements.	
.72	11. Routine duties interfere with the job of teaching.	
.71	25. Administrative paperwork is burdensome at this school.	
Factor 4		
.73	34. The principal supervises teachers closely.	
.66	41. The principal monitors everything teachers do.	
.64	35. The principal checks lesson plans.	
.60	30. The principal closely checks classroom (teacher) activities.	-.40 on factor 1
		-.32 on factor 6
.59	5. The principal rules with an iron fist.	.30 on factor 1
		.20 on factor 6
.51	10. The principal checks the sign-in sheet every morning.	-.37 on factor 9
		-.26 on factor 10
Factor 5		
.73	40. Teachers respect the professional competence of their colleagues.	
.61	12. Most of the teachers here accept the faults of their colleagues.	.31 on factor 8
.60	32. New teachers are readily accepted by colleagues.	.26 on factor 1
		.28 on factor 6

Factor 6			
.68	8.	There is a minority group of teachers who always oppose the majority.	
.66	37.	Teachers socialize together in small, select groups.	
Factor 7			
.83	6.	Teachers leave school immediately after school is over.	
Factor 8			
.67	20.	Teachers have fun socializing together during school time.	.30 on factor 2
-.64	24.	The principal corrects teachers' mistakes.	.43 on factor 4
Factor 9			
.84	17.	The principal schedules the work for the teachers.	
Factor 10			
.69	13.	Teachers know the family background of other faculty members.	

Note. Additional factor loadings are listed if their difference from the primary loading is .40 or less.

n = 178.

Appendix D

OCDQ-RE Questions Loading Less Than .50 On Any Factor

Question	Loadings
1. The teachers accomplish their work with vim, vigor and pleasure.	.39 on factor 1
	.32 on factor 2
	.38 on factor 5
	-.32 on factor 9
3. Faculty meetings are useless.	.40 on factor 1
	.34 on factor 3
	.33 on factor 6
14. Teachers exert group pressure on non-conforming faculty members.	.33 on factor 5
	.47 on factor 6
19. Teachers help and support each other.	.48 on factor 2
	.39 on factor 5
	.38 on factor 6
21. Teachers ramble when they talk at faculty meetings.	.30 on factor 5
	.35 on factor 6
31. Clerical support reduces teachers' paperwork.	.31 on factor 1
	.47 on factor 3

Note. Factor loadings of .30 or greater are listed.

Appendix E

Primary Factor Loadings for the Discipline Questionnaire

Factor	Question		Also Loaded
Factor 1			
.87	45.	Students are disciplined according to a school-wide code.	
.76	54.	Discipline is consistent throughout the school.	
.71	48.	Teachers approaches to managing student behavior are consistent throughout the school.	
.69	46.	Methods used to manage student behavior help students mature.	.41 on factor 2
.64	47.	Students are appropriately rewarded for their good behavior.	.36 on factor 2
.57	44.	Teachers help each other with student discipline.	.28 on factor 2
Factor 2			
.74	51.	Teachers maintain their self-control with disruptive students.	
.69	52.	A teacher is consistent with discipline procedures with different students.	
.66	43.	Students show school spirit and pride.	
.53	50.	Students behave well in order to gain rewards.	.37 on factor 1
Factor 3			
.82	49.	A student repeats unacceptable behavior.	
.73	53.	Disruptive student behavior interferes with teaching.	
.57	55.	Disruptive students become more cooperative as the year progresses.	.36 on factor 1 .37 on factor 2
.52	56.	The principal follows through with discipline consequences when appropriate.	.44 on factor 1

Note. Additional factor loadings are listed if their difference from the primary loading is less than .30.

n = 178.

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