### CHAPTER 1

### Introduction

# Background

In a middle school not making Adequate Yearly Progress in which 46% of the students received federal-subsidized lunch, student discipline and classroom management were at the heart of most faculty discussions. The school leadership team developed a new program for students exhibiting consistent disruptive behaviors. Based on William Glasser's work and patterned after a successful model in another school district, disruptive students could be assigned to an alternative classroom taught by a teacher with specialized skills and training in emotional difficulties. Students returned to regular classrooms after they developed a plan to change their own behaviors and demonstrated progress toward that change. It was perfect on paper, with high administrative support, teacher input into design, professional development for the faculty, an emphasis on student responsibility, a skilled teacher, and parental support. A year later, it was abandoned, yet another failed effort at school reform.

Even programs that have a long history of positive results succeed in some schools and fail in others. MicroSociety® was a program with mixed results (Cherniss, 2006). This program involved students in running their own society with government and commerce for usually an hour a day. Obstacles in schools that dropped the program included lack of teacher buy-in, excessive demands on time, difficulty linking district curriculum to the MicroSociety® program, faculty conflict, and confusion during initial implementation (Cherniss, 2006). Those schools that successfully implemented and sustained the program attributed success to positive relationships among the teachers and the principal, the right program at the right time, parent and

community involvement, principal support, teacher input, prior planning, additional funding, teacher choice, and realistic goals (Cherniss, 2006).

Other research recognized the readiness state of the school as a factor in implementation of a reform initiative. In North Carolina, schools were categorized from Category I (*Premature Change State*) to Category IV (*Established Change State*) (Wetherill & Applefield, 2005). Seven school factors were considered: (a) an understanding of change; (b) stakeholder commitment to the initiative; (c) school vision; (d) level of conflict; (e) teacher involvement; (f) professional development; and (g) change in beliefs and/or behavior (Wetherill & Applefield, 2005).

Researchers conducted a meta-analysis of 29 comprehensive school reform (CSR) programs (G. Borman, Hewes, Overman, & Brown, 2003). To explain the differences in results, the researchers concluded, "differences in the effectiveness of CSR are largely due to unmeasured program-specific and school-specific differences in implementation" (p.166). Borman et al. suggested that four components were necessary for effective implementation: ongoing professional development, measurable goals for student achievement, faculty buy-in, and an innovative curriculum (Borman et al., 2003)

Finally, in a National Science Foundation initiative, piloted in four large urban school districts with teacher professional development designed to improve science achievement, results were disappointing (K. B. Borman et al., 2005). Despite extensive training to increase student-centered learning, four years later 82% of all classrooms were still teacher-centered (K. B. Borman et al., 2005). Teachers in schools with higher degrees of implementation took more classes and participated in study groups. District-level training with follow-up in schools was the most effective method of delivery. Teachers' beliefs about curriculum interfered with the reform

efforts (K. B. Borman et al., 2005). Although school culture was not one of the drivers of professional development investigated in the study, researchers found that school culture had a positive direct relationship to student achievement.

Clearly, the transfer of professional development into teacher practice is difficult to achieve. Teacher beliefs, school culture, and method of delivery for professional development play key roles.

### Statement of the Problem

In examining mission and vision statements, the purpose of schools, in general, is to prepare students to be future functioning members of society. Mission and vision goals are achieved through daily interactions among students, teachers, parents, and administrators. Elmore (2004) commented:

"...the core of schooling-defined as the standard solutions to the problem of how knowledge is defined, how teachers relate to students around knowledge, how teachers relate to other teachers in the course of their daily work, how students are grouped for purposes of instruction, how content is allocated to time and how student work is assessed-changes very little, except in a small proportion of schools and classrooms where the changes do not persist for very long. The changes that do tend to 'stick' in schools are those that are most distant from the core." (p. 15)

Successful implementation of changes in curriculum, instruction, and practices are struggles common to most school districts, schools, and teachers. With the investment of time, energy,

and resources, the transfer of professional development into classroom practices is important and worthy of study.

Noted educational researchers and authors have stressed the importance of professional development to improve instruction. In *Breakthrough* (Fullan, Hill, & Crevola, 2006), the authors wrote, "Over the past decade it has become a given that any major reform initiative must be accompanied by investments in professional development." (p. 22) Prior to that, Guskey wrote, "One constant finding in the research literature is that notable improvements in education almost never take place in the absence of professional development." (Guskey, 2000, p. 4) In one study, less than 10% of mandated training in science instruction actually transferred to the classroom level (D. K. Cohen & Hill, 2001). As educators defined and prioritized needs in districts and schools, they selected professional development activities to meet those needs. Purposes, costs, method of delivery, and length of training varied. It became critical for educators to make wise decisions to ensure that professional development resulted in improved instruction. This study can help leaders examine the context of organizational climate and collective teacher beliefs as antecedents for degree of implementation of professional development.

## Purpose of the Study

The purpose of the study was to investigate the roles of teacher beliefs and organizational climate in the implementation of teacher professional development. With the degree of implementation of professional development as the dependent variable, the study examined the relationships among the degree of implementation and the following factors: teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and

faculty mindfulness. The study also investigated the relationship between degree of implementation of professional development and academic optimism, which is the latent construct for the combined variables of collective teacher efficacy, faculty trust in clients, and academic emphasis.

## **Research Questions**

- 1. Was there a significant relationship between faculty demographics such as gender, ethnicity, years of teaching experience, years of teaching experience in the school, and the constructs of teacher beliefs, academic optimism, enabling bureaucracy, and faculty mindfulness?
- 2. Was there a significant relationship among the constructs of teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, faculty mindfulness, and degree of implementation of professional development?
- 3. Did the constructs of collective teacher efficacy, faculty trust in clients, and academic emphasis combine to form the latent construct of academic optimism?
- 4. Was there a significant relationship between the construct of academic optimism and degree of implementation of professional development?
- 5. Was there a significant relationship between faculty demographic data such as gender, ethnicity, years of teaching experience, years of teaching experience in the school, and degree of implementation of professional development?
- 6. Did teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness predict the degree of implementation of professional development?

### Theoretical Framework

Teachers function independently and collectively within a school. The school environment, or its organizational climate, is defined as "the characteristics of the total environment in a school building." (Owens, 2004, p. 178) It is developed from the interaction among four dimensions (Tagiuri, 1968):

- 1. Ecology: the building and its materials-age, size, design, and condition
- 2. Milieu: the group of people, its size, motivation, morale, and job satisfaction
- 3. Organization: the formal structure, rules, control, instruction, and supervision
- 4. Culture: the assumptions, values, norms, beliefs, ways of thinking, and history Organizational climate differs significantly from school culture: the culture is the underlying norms and assumptions of the group while the organizational climate is the perception of those norms and assumptions (Owens, 2004). Culture is inferred from observations while organizational climate, or the *perceptions* of the staff, can be measured quantitatively and qualitatively. Figure 1 displays the relationships among the four dimensions of school environment. The organizational climate of the school is the intersection of the four dimensions, although the four dimensions may not affect the organizational climate equally (Owens, 2004). Applying Figure 1 to this study, teacher beliefs, collective teacher efficacy, faculty trust, and academic emphasis are included in the culture of the school. Enabling bureaucracy is a component of the organization of the school. Mindfulness is related to both culture and organization because it is a way of thinking and behavior patterns (culture) and also a mindset for the communication patterns and decision-making processes (organization). Collecting and examining demographic information on teachers and students is related to the milieu of

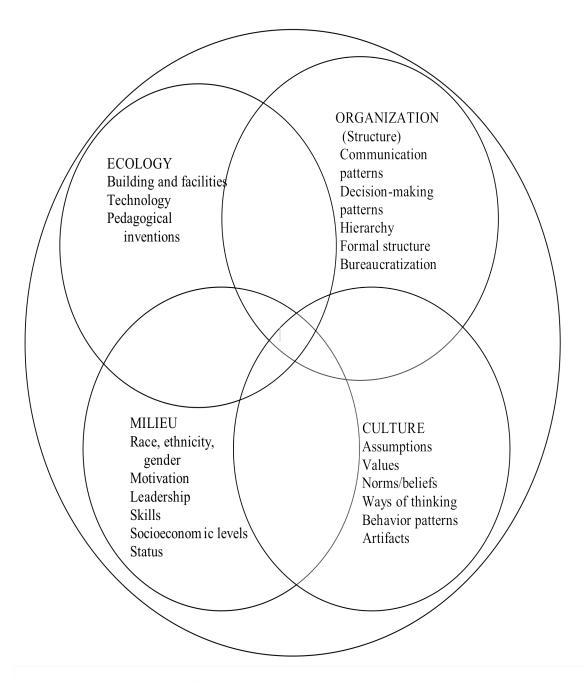


Figure 1 Four Dimensions of an Organization

The four internal dimensions of the organization are dynamically interactive within the organization. Organizational climate arises from overlapping and interaction of four key organizational factors. (Owens, 2004, p. 181; Tagiuri, 1968)

organizational climate. Although the constructs of teacher beliefs, collective teacher efficacy, faculty trust in clients, and academic emphasis, faculty mindfulness, and enabling bureaucracy are components of culture, this study will measure teachers' perceptions of the constructs. Thus, it will measure them as variables of organizational climate.

Professional development for teachers is designed to improve student achievement. Guskey (2000) suggested that an integrated design that combines district and school level professional development is advantageous to successful implementation of professional development. He also recommended that, to be successful, professional development should (a) have a clear focus on learning and learners, (b) keep an emphasis on individual and organizational change, (c) make small changes guided by a grand vision, and (d) be ongoing and embedded in teacher practices. Guskey also proposed a model of teacher change depicted in Figure 2 that asserts that a change in teacher beliefs occurs only after teachers see changes in student learning (Guskey, 2002). The method of delivery for teacher professional development in this study reflects the integrated design outlined by Guskey. It contains both district and ongoing school-based training designed to support teacher reflections on their beliefs and practices about classroom management.

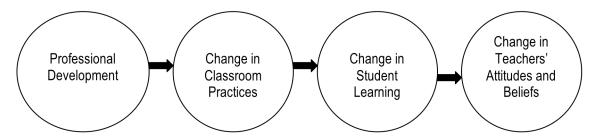


Figure 2: A model of teacher change (Guskey, 2000, p. 139)

The degree of implementation of professional development depends on individual teachers and the choices they make in the classroom. Teacher decisions about classroom management are complex processes, difficult to define and measure. Current categories of teacher beliefs about classroom management are based on the degree of teacher power exerted: relationship-listening (belief that students control their own behavior), confronting-contracting (intervention with questioning techniques), and rules and consequences (Wolfgang, 1999). Self-determination theory may also explain why those choices are made and may help to accurately interpret the results of this investigation (Deci & Ryan, 2002). Self-determination theory explained human behavior in individual and social contexts (Deci & Ryan, 2002) by integrating four theoretical components:

- Cognitive Evaluation Theory included intrinsic and extrinsic motivation both
  individually and in a social setting. The premise for self-determination theory is that
  intrinsic motivation is hindered by tangible rewards and enhanced by positive
  feedback.
- 2. Organismic Integration Theory explicates the internalization of experiences in a continuum of behavior ranging from non-regulated through intrinsically regulated. The mid-section of the continuum explains extrinsically regulated behavior as a range from external regulation ("I comply to avoid punishment") to integrated regulation ("I comply because I see the benefits").
- 3. Causality Orientation Theory categorizes the three relatively stable personality orientations of autonomy (self-actualized), controlled (pressured by outside forces to perform), and impersonal (characterized by low self-esteem and depression).

4. Basic Needs Theory defines the human needs of autonomy, competence, and relatedness, common to all cultures and age groups.

# Conscious Discipline

Conscious Discipline is a program that focuses on building strong student-teacher relationships (Bailey, 2000). Its goal is to help students and teachers meet the human needs of safety and connectedness so that the brain's higher-level thinking frontal lobe is accessed to make decisions and solve problems. In the large southeastern school district, the setting of this study, after a presentation to the entire faculty at the request of the principal, central office specialists facilitated monthly school-based book study groups. The monthly topics included teacher composure, encouragement of students, teacher assertiveness, student choices, positive intent, empathy, and consequences (Bailey, 2000). In addition to the book clubs, the district provided funding for representatives from each elementary school to attend sessions conducted by Dr. Becky Bailey, the designer of Conscious Discipline. Individual schools and teachers selected components of Conscious Discipline to implement in their schools. The degree of implementation varied from school to school.

Facets of organizational climate may play a role in the degree of implementation of professional development. Figure 3 illustrates the conceptual model for the study. Academic optimism (the combined factors of collective teacher efficacy, faculty trust in clients, and academic emphasis), organizational structures, and the degree of implementation of professional development are related. The effectiveness of professional development is dependent upon the method of delivery, principal support, perceived need, and the quality of the training. The study

investigates the effectiveness of *Conscious Discipline* book study groups with the hypothesis that higher levels of teacher beliefs, academic optimism, enabling bureaucracy and faculty mindfulness will result in a greater degree of implementation of *Conscious Discipline*.

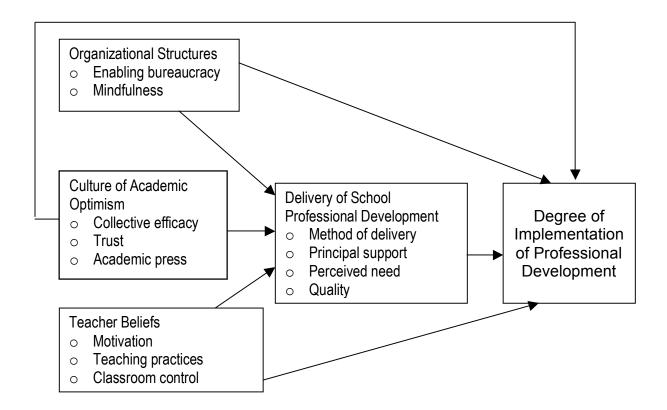


Figure 3 Conceptual model for degree of implementation of professional development

Definition of Terms

- 1. <u>Academic optimism</u> is a latent variable for three constructs: collective teacher efficacy, trust, and academic emphasis (McGuigan, 2005).
- 2. <u>Collective teacher efficacy</u> is defined as "the judgment of teachers in a school that the faculty as a whole can organize and execute the course of action necessary to have positive effects on students." (Goddard, 2001, p. 809)

- 3. <u>Trust</u> is defined as "one's willingness to be vulnerable to another based on the confidence that the other is benevolent, reliable, competent, honest, and open." (Tschannen-Moran & Hoy, 2000, p. 556)
- 4. <u>Academic emphasis</u>, or academic press, is "the extent to which the school is driven by a quest for academic excellence-a press for academic achievement." (W. K. Hoy, Tarter, & Hoy, 2006a, p. 5)
- 5. <u>Mindfulness</u> is "the combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness and capability to invent new expectations that make sense of unprecedented events, a more nuanced appreciation of context and ways to deal with it, and identification of new dimensions of control that improve foresight and current functioning." (Weick & Sutcliffe, 2001, p. 42)
- 6. <u>Enabling bureaucracy</u>, or enabling school structure, is defined as "a hierarchy authority structure that helps rather than hinders as well as a system of rules and regulations that guides problem solving." (Sweetland, 2001, p. 582)
- 7. Organizational climate is "a 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." (Tagiuri, 1968, p. 27.)
- 8. <u>Professional development programs</u> are "systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcome of students." (Guskey, 2002, p. 381)

#### Limitations

The study has limitations. First, surveys of organizational climate are the perceptions of teachers completing the survey. The perceptions may contain bias that may include the tendency of people to portray themselves in the most favorable light. Recent events, unknown to the researcher, might temporarily affect teacher perceptions. Self-assessments, as perceptions, may be inaccurate. Second, it takes time to fully implement professional development, especially if a change in teacher beliefs may be required. The study analyzes results, in some cases, after one year of implementation. In other schools, the study analyzes the results after two years of implementation. Next, the study examines practices in 17 elementary schools in one suburban school division in southeastern United States. Interpretation of results cannot be generalized to settings beyond this school district to urban, suburban, rural, or secondary schools. Finally, the number of teachers in the population may not be adequate for reliable results.

### **Delimitations**

In defining the boundaries of the study, several restrictions must be noted. The study was conducted in 17 elementary schools in a large suburban school district in southeastern United States. It evaluated the outcomes of professional development by assessing the degree of implementation of *Conscious Discipline*. Although data was triangulated to include surveys, teacher focus groups, and observations to document evidence of implementation, the study did not examine student behaviors or elicit student opinions. Neither did the study include the views of school administrators or the role of principal in the school. The leadership of a principal affects school outcomes (Marzano, Waters, & McNulty, 2005), but that variable is not a component of this study.

## Summary

This chapter introduced the purpose of the study, the significance, and the theoretical framework for teacher beliefs about classroom management, organizational climate, and professional development. Research questions to guide the study were listed. Significant terms used in the study were defined. The three key components of the study, teacher beliefs, organizational climate, and degree of implementation of professional development were summarized both in text and in the conceptual framework. Finally, limitations and delimitations of the study were addressed. The introduction segues to the review of literature, which will highlight and synthesize current research on key constructs: teacher beliefs, collective teacher efficacy, faculty trust, academic emphasis, mindfulness, enabling bureaucracy, and professional development.

### **CHAPTER 2**

### Review of Related Literature

### Introduction

The purpose of this literature review is to analyze theories and research on teacher beliefs about classroom management; academic optimism, the latent construct for collective teacher efficacy, trust, and academic emphasis; organizational structures, which include enabling bureaucracy and mindfulness; and professional development. Relevant studies accentuate the significance of each construct, measures, research findings and research limitations. The research will clarify why these factors of organizational climate were selected for further study. Tables summarizing the research studies completed on each construct can be found in the appendixes. Finally, a summary will transition to the methodology of this research study.

According to the conceptual model, an important component of a school's organizational climate is the collective beliefs of teachers. Organizations are comprised of the combined beliefs and attitudes of the people in the organization. The beliefs of teachers about children, discipline and classroom management, and teaching practices will be the starting point for the review of literature.

## Teacher Beliefs

There are two opposing sets of beliefs about classroom management: some believe that teachers control classrooms with a system of rewards and consequences; others believe that children control themselves by learning to make the right choices for the right reasons.

According to researchers (Deci, Koestner, & Ryan, 2001), rewards can be defined as positive feedback (which can be perceived as informational or controlling) or tangible rewards (which

can be task-completion, engagement-contingent, or performance-contingent). A meta-analysis was completed to synthesize results of 128 studies on student motivation and behavior (Deci, Koestner, & Ryan, 2001). The analyses found that positive feedback improved intrinsic motivation if given as information and decreased intrinsic motivation if perceived as controlling. The effect was stronger for college students than for children. Tangible rewards were found to decrease interest, persistence, and pursuit of challenging activities; further, the negative effect was greater with children. In the meta-analysis, researchers found that unexpected rewards had no effect on intrinsic motivation, but expected rewards decreased intrinsic motivation. A second meta-analysis divided tasks into interesting and dull, finding that intrinsic motivation was not affected by dull tasks (Deci, Koestner, & Ryan, 2001).

A more recent study on extrinsic and intrinsic motivation used separate measures for intrinsic and extrinsic motivation, contrasting other studies that examined them on a continuum. Researchers (Lepper, Corpus, & Iyengar, 2005) found some evidence that extrinsic and intrinsic motivations can coexist, although they were concerned that their interpretation of intrinsic motivation may be too limited. They also found that intrinsic motivation decreased from grades three to eight, while extrinsic motivation did not change. Examining grades and standardized test achievement, researchers found a positive correlation between intrinsic motivation and both grades and standardized test results. A negative correlation between extrinsic motivation and both grades and standardized test results was found. Researchers found that motivation did not correlate significantly with gender or ethnicity, although the study investigated only Caucasian and Asian American students (Lepper, Corpus, & Iyengar, 2005).

Thirty studies have investigated both teacher and student behaviors in the classroom (Reeve, 2002). Researchers have concluded that student success in the classroom is dependent upon the quality of the student-teacher relationship and the willingness of the teacher to support student autonomy. Teacher behaviors that support autonomy rather than control behavior include listening more, giving students time for independent work, and giving fewer solutions to students' problems. When talking, autonomy-supportive teachers praise the quality of student work, respond to students' questions, and make more empathy statements. Teachers tend to be controlling in the classroom because of preservice training, the intensive demands of the job, the pervasive societal beliefs that extrinsic incentives motivate people, and the cultural values of classroom control expressed by parents, administrators, and other teachers (Reeve, 2002). However, Reeve (2002) has evidence to support his conclusion that teachers can change from controlling students to supporting autonomy if they believe the autonomy supportive style is more effective. In a study conducted with 20 high school teachers participating in an hour-long workshop in autonomy support, in three observations with interrater reliability ranging from .65 -.86, teachers did exhibit autonomy supportive behaviors which were found to increase student engagement (Reeve, Jang, Carrell, Jeon, & Barch, 2004).

The relationship between teacher beliefs and classroom practices is difficult to define. In a mixed methodology study investigating teacher beliefs about classroom management, researchers found that experienced teachers with traditional certification tended to be more non-interventionist in classroom instruction, allowing students more control over choice of instructional activities in the classroom. However, by both years of experience and method of

licensure, teachers did not vary significantly in their beliefs about control of student behavior (Ritter & Hancock, in press)

Results of the Ritter and Hancock study mirror a study of 62 student teachers and 135 preservice teachers (Rimm-Kaufman, Storm, Sawyer, Pianta, & LaParo, 2006). They found that student teachers receiving first-year training in *Responsive Classroom* differed from student teachers and preservice teachers with no *Responsive Classroom* training in discipline, behavior management, and teaching practices. However, the beliefs about children, with subscales of perception of student motivation and understanding of student needs, did not vary among the teacher groups. Problems with this study included small unequal sample size and incorrect completion of the measure for teacher beliefs by 12 participants, invalidating their responses. However, the study successfully attempted to identify changes in teacher beliefs as a result of professional development.

A later study with 163 teachers investigated the relationship between training in classroom management, years of teaching experience, and gender (N. Martin, Yin, & Mayall, 2006). Researchers found that female teachers were more controlling in the management of instruction than males, although no differences were found in the management of student behaviors. More experienced teachers were more controlling in the management of instruction and less controlling in the management of student behaviors than teachers with less than six years of teaching experience. Finally, teachers receiving training in classroom management were less controlling in the management of student behaviors, although no differences in the management of instruction were found.

To deepen an understanding of how teachers form beliefs about classroom control, researchers analyzed the results of three surveys completed by 172 preservice teachers: the Personal History of Punishment Inventory, the Personal History of Reward Inventory, and the Personal Teaching Style Questionnaire measuring the direct (controlling) and indirect teaching styles (J. H. Cohen & Amidon, 2004). They found that predictors of a direct teaching style were gender (male) and low scores on the reward inventory. High scores on the reward inventory and age of students (older) were predictors of indirect teaching style. Researchers also found significant positive correlations between use of rewards and higher socioeconomic status (SES), between Caucasians and use of rewards, and between African Americans and punishment.

A study of 182 preservice teachers examined beliefs about efficacy, control, motivation, and bureaucracy (Woolfolk & Hoy, 1990) correlated the results of four surveys: (a) the Pupil Control Ideology measuring a continuum from custodial to humanistic; (b) Problems in School Inventory measuring teachers as highly controlling, moderately controlling, moderately autonomous, or highly autonomous in how they solve typical classroom problems; (c) Work Environment Preference Schedule measuring orientation to bureaucracy; and (d) Gibson and Dembo's Teacher Efficacy Scale measuring both teaching efficacy (the ability of a teacher to make a difference) and personal efficacy (the personal ability to reach students). They found that teachers with both high teaching and personal efficacy were more humanistic; teachers with low teaching efficacy and high personal efficacy and high personal efficacy. A study examining personality types, teacher efficacy, and teacher beliefs found that an extroverted personality, as measured by the Myers-Briggs Type Indicator, predicted a non-interventionist approach to

people management, as measured by the ABCC. The Myers-Briggs Type Indicator did not predict teaching efficacy, although researchers found a correlation between extroversion and high teaching efficacy (Henson & Chambers, 2002). See Appendix A for a summary of research.

Measure of Teacher Beliefs

Teacher beliefs range from personal to role-related. They are a function of a combination of past experiences, personality traits, and situational environments. Measurement of teachers beliefs about children and the teacher's control of the classroom were generally self-reported by survey, as measured by several reliable instruments. An early highly-reliable instrument (r = .80- .91), the Pupil Control Ideology (Willower, Eidell, & Hoy, 1973) measured collective teacher beliefs along a continuum from custodial (control with rewards and punishment) to humanistic (democratic and autonomous). A more recent instrument, the Attitudes and Beliefs on Classroom Control (ABCC), with reliabilities ranging from .69 - .82, initially measured three components of classroom management: instruction, people, and behavior (N. Martin, Yin, & Baldwin, 1998b). Later the measure was amended to combine people management and behavior management into one subscale, people management (Henson & Chambers, 2002; N. Martin, Yin, & Mayall, 2006). The ABCC categorizes teachers according to the classroom management types of interventionists, teachers who exert a high degree of control over the classroom using rewards and consequences; interactionalists, teachers who share classroom management with students; and non-interventionists, teachers who allow students considerable autonomy and rely on students' inner motivation to guide classroom management (Glickman & Tamashiro, 1980). Finally, the Teacher Belief Q-Sort, the most recent measure of teachers' beliefs and approaches to both classroom management and instructional practices (Rimm-Kaufman, Storm, Sawyer,

Pianta, & LaParo, 2006), forces teachers to prioritize beliefs. Correlations ranged from .50 - .95, with a mean of .71.

## Academic Optimism

The next section of the literature review highlights collective teacher efficacy, faculty trust, and academic emphasis. Considered components of the school's culture, the three variables have been identified as academic optimism, a latent construct. The latent construct encompasses the cognitive, affective, and behavioral aspects of organizational climate. Collective teacher efficacy is the cognitive belief that teachers in a school can make a difference; faculty trust is an affective, emotional construct; and academic emphasis is the behavior associated with the belief that the school can achieve along with the belief that the people involved are trustworthy (W. K. Hoy, Tarter, & Hoy, 2006b). The constructs of collective teacher efficacy, faculty trust, and academic emphasis formed the latent construct of academic optimism; academic optimism independently predicted student achievement, controlling for SES (W. K. Hoy, Tarter, & Hoy, 2006a).

## Collective Teacher Efficacy

Collective teacher efficacy in education found its origin in Bandura's research on social cognitive theory (Bandura, 1997). His theories of personal and teacher efficacy grounded his theory of collective teacher efficacy. First, teacher efficacy has been defined as "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated." (Guskey & Passaro, 1994, p. 4) The construct of teacher efficacy has been studied for over twenty years (Tshannen-Moran, Hoy, & Hoy, 1998). Bandura (1997) defined four sources of teacher efficacy: (a) mastery experiences, (b) physiological and emotional states, (c)

vicarious experiences, and (d) social persuasion. The first source of teacher efficacy, mastery experiences, were teachers' perceptions that their performance has been successful (Tshannen-Moran, Hoy, & Hoy, 1998). The second source, physiological and emotional states, related to the intensity of emotions involved in teaching experiences. The greater the positive affect, the greater the teacher efficacy. The third source of efficacy, vicarious experiences, included observing other teachers respected by their peers. Finally, social persuasion might be a motivational conversation with a mentor or administrator, or positive encouragement from colleagues.

Teacher and collective teacher efficacy were related. According to Bandura (1997), "Perceived personal and collective teacher efficacy differ in the unit of agency, but in both forms efficacy beliefs have similar sources, serve similar functions, and operate through similar processes." (p. 478) Collective teacher efficacy has been defined as "the judgment of teachers in a school that the faculty as a whole can organize and execute the course of action necessary to have a positive effect on students" (Goddard, 2001, p. 809) The first source of collective teacher efficacy, collective mastery experiences, can be simply defined as prior school successes. One research study (Goddard, 2001) concluded that mastery experiences, as defined by past examples of high student achievement, account for almost two thirds of the variances in schools' collective teacher efficacy beliefs. Bandura's second source, affective states, defined the school's ability to withstand negative pressures, which has been studied at the individual level, but not the organizational level. Third, vicarious experiences at the organizational level can be defined as learning from other organizations, such as observing or researching practices in look-alike schools (Goddard, Hoy, & Hoy, 2004). Finally, social persuasion was the collective discussions

and interactions of the faculty (Goddard, Hoy, & Hoy, 2004). Schools with strong social persuasion would have faculty members engaging in professional discourse and demonstrating social norms like a strong work ethic.

Measures of collective teacher efficacy.

Historically, researchers have developed measures of collective teacher efficacy at the school level (Goddard, Hoy, & Hoy, 2004). Goddard et al. (2004) summarized four approaches: (a) Find the mean of aggregated teacher efficacy measures; (b) Find the mean of aggregated group efficacy measures; (c) Find a group consensus on its collective teacher efficacy; and (d) Find agreement about collective teacher efficacy among group members. Research by Goddard (2001) corroborated Bandura's theory (1997) that the group mean of a faculty's perception of group capability more accurately explained variance among schools than the group consensus method that considers within-school variability. As a result of their research, the mean of a group's collective teacher efficacy was the measure educational researchers have used. This review of literature found three surveys most commonly used to measure collective teacher efficacy: (a) the 21-item Collective Teacher Efficacy Scale developed by Goddard and colleagues (2001) which measured group competence and task analysis (r = .96); (b) his shorter 12-item Collective Teacher Efficacy Scale (Goddard, 2002) which weighted group competence and task analysis equally (r = .94); and (c) Tschannen-Moran's (2004) Collective Teacher Belief Scale (r = .97). Goddard's surveys were based on two dimensions of collective teacher efficacy—task and teaching competence. The Collective Teacher Belief Scale, an adaptation of the Collective Teacher Efficacy Scale (Goddard, 2002) was the most recently developed survey to measure collective teacher efficacy. The Collective Teacher Belief Scale contained subscales

of instructional strategies and student discipline. This new scale was the result of research into the various collective teacher efficacy scales involving the collaboration of Tschannen-Moran and Goddard (M. Tschannen-Moran, personal communication, January 26, 2006).

Synthesis of research findings.

The construct of collective teacher efficacy in educational research was new; as a result, research was emerging and current. Included in the review are benchmark studies in the role of collective teacher efficacy on various school constructs: student achievement, student discipline, collaborative school processes and structures, school finance, teacher efficacy, and trust. The review of literature will be synthesized, comparing and contrasting samples, variables of study, methodology, analysis of data, and findings.

In research dating back to 2001, settings for studies on collective teacher efficacy encompassed all school levels. Researchers examined the impact of collective teacher efficacy in 243 high schools in three studies (Geist, 2002; Goddard, LoGerfo, & Hoy, 2004; Tschannen-Moran, 2001), 66 middle schools (Barr, 2002; Tschannen-Moran & Barr, 2004), and 279 elementary schools in three studies (Goddard, 2001; Goddard & Goddard, 2001; Goddard & Skria, 2006; Ross, Hogaboam-Gray, & Gray, 2004). A study on the effect of teacher demographics on collective teacher efficacy was conducted in a 41 schools with a K-8 configuration (Goddard & Skria, 2006).

Although the majority of studies on collective teacher efficacy were quantitative, one study used a mixed methodology (Tschannen-Moran, 2001). In that study, quantitative data measured student achievement; qualitative data included the use of document analysis and interviews to assess implementation of a conflict management initiative. In this study and in all

others, collective teacher efficacy was measured by surveys with Likert responses, completed in school faculty meetings. The surveys sometimes included teacher demographic information. For example, one study (Goddard & Skria, 2006) analyzed the relationship between collective teacher efficacy and teacher demographics such as gender, ethnicity, and years of experience.

Because most studies involving collective teacher efficacy were quantitative, statistical analyses were completed. Methods of analyses varied among the research studies. For example, in Barr's dissertation (2002), statistical analysis included descriptive statistics, correlations, and a multiple regression to find both independent and combined effects of collective teacher efficacy and SES on student achievement.

However, in other studies researchers (Goddard, 2001, 2002; Goddard & Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; Goddard & Skria, 2006), completed more complex statistical analyses. Hierarchical linear modeling (HLM) was used instead of multiple regression in three studies because data was aggregated at both school and individual levels (Goddard, 2001, 2002; Goddard & Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; Goddard & Skria, 2006). For example, both individual teacher efficacy scores and group collective teacher efficacy scores were correlated to student achievement (Goddard & Goddard, 2001). Researchers found that the variance in teacher efficacy was entirely predicted by differences in collective teacher efficacy. In addition to this example, Goddard (2002) reduced the 21-item Collective Teacher Efficacy Scale to a shorter 12-item form by the completion of a principal axis factor analysis of the 21-item survey, selection of 12 items, completion of an additional principal axis factor analysis, and then completion of a multi-level HLM to analyze the data.

Research variables and findings.

Most studies on collective teacher efficacy either controlled for or considered socioeconomic status (SES) as a variable because of its significant correlation to student achievement. It is common knowledge in the field of education that students from lower SES tend to have lower achievement scores in standardized tests. Typically, measures of SES were defined as the ratio of students qualifying for free or reduced lunch, although Ohio composite measures of income, level of education, and professional leanings were used to measure SES (W. K. Hoy, Sweetland, & Smith, 2002). The study conducted by Ross et al (2004) in Ontario, Canada, measured SES as the mean income of a zip code. This could be considered a weakness in the study since average per capita income in a zip code could vary significantly. Tschannen-Moran (2001) did not consider SES in her study evaluating the implementation of conflict management initiatives in 50 Ohio high schools.

Next, the bulk of research on collective teacher efficacy examined the correlation between collective teacher efficacy and student achievement. Each study with student achievement as a variable found a significant correlation between collective teacher efficacy and student achievement (Barr, 2002; Goddard, 2001; Goddard & Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; Goddard & Skria, 2006; W. K. Hoy, Sweetland, & Smith, 2002; Ross, Hogaboam-Gray, & Gray, 2004; Tschannen-Moran & Barr, 2004). Goddard's first venture (2001) into collective teacher efficacy found that grade four state-mandated reading and mathematics assessments had a significant positive correlation with collective teacher efficacy in 91 elementary schools in a large urban Midwestern school district. Hoy et al. (2002) found that collective teacher efficacy was a strong predictor of high school mathematics achievement in 97

Ohio high schools. Following that study, researchers (Goddard, LoGerfo, & Hoy, 2004) conducted a comprehensive study and found collective teacher efficacy to be a strong predictor of grade 12 achievement in five subject areas in 96 high schools in a large Midwestern state. In 66 Virginia middle schools, Tschannen-Moran and Barr (2002; 2004) found a significant correlation between collective teacher efficacy and student achievement in grade eight mathematics, reading, and writing. Clearly collective teacher efficacy significantly predicted student achievement; no research has been completed on its relationship with professional development.

In addition to outcomes influenced by collective teacher efficacy, researchers also investigated Bandura's (1997) sources of collective teacher efficacy. Again, Bandura's four sources of collective teacher efficacy were mastery experiences, physiological and emotional states, vicarious experiences, and social persuasion. First, mastery experiences were identified as prior student achievement in several studies (Adams & Forsyth, 2006; Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; Ross, Hogaboam-Gray, & Gray, 2004). In those studies, researchers found that prior student achievement had a significant positive correlation with collective teacher efficacy. Goddard (2001) found that prior student achievement predicted 65% of the variance in collective teacher efficacy among schools and explained more variance than SES and ethnicity combined. Later, along with other researchers (Goddard, LoGerfo, & Hoy, 2004), he found that prior student achievement and collective teacher efficacy were related: .57 (p < .05) in the mathematics and science model and .44 (p < .05) in the verbal achievement model. In a more recent study (Adams & Forsyth, 2006), researchers found that prior student achievement

SES, and three levels of schools predicted an additional 20% of the variance in collective teacher efficacy. Schools with higher SES and higher grade levels (high schools) had lower collective teacher efficacy, and schools with a more enabling bureaucracy had higher levels of collective teacher efficacy. Researchers also investigated Bandura's social persuasion as a source of collective teacher efficacy by labeling the variable as academic press (W. K. Hoy, Sweetland, & Smith, 2002). Defined as "the extent to which the school is driven by a quest for academic excellence" (W. K. Hoy, Sweetland, & Smith, 2002, p. 79), researchers found that academic press only indirectly impacted student achievement through collective teacher efficacy. Both academic emphasis and collective teacher efficacy will be school variables in this proposed study.

Conducted in 141 Canada elementary schools, researchers investigated all four sources, or predictors, of collective teacher efficacy: mastery experiences defined as prior student achievement; and physiological and emotional states, vicarious experiences, and social persuasion, all defined as collaborative school processes (Ross, Hogaboam-Gray, & Gray, 2004). Collaborative school processes encompassed shared goals, the extent of collaboration, the school plan and its fit with existing school needs, professional development opportunities for teachers, and school leadership. These five constructs were synthesized and examined as two domains: School Cohesiveness and Shared Decision-Making. Both domains were stronger predictors of collective teacher efficacy than prior student achievement. This made sense because collective teacher efficacy, or beliefs, was a component of the school's culture (W. K. Hoy & Miskel, 2005).

Finally, aside from student achievement and the four sources of collective teacher efficacy, additional variables that correlated positively with collective teacher efficacy included school climate (Tschannen-Moran, 2001) and faculty trust in stakeholders (Smith & Birney, 2005; Tschannen-Moran, 2001). In a study on the effects of a conflict management initiative in schools, Tschannen-Moran (2001) found that sustained implementation of the initiative resulted in stronger collective teacher efficacy, an improved school climate, and greater teacher trust in all stakeholders.

All researchers validated collective teacher efficacy as a significant construct in schools, except for the results of one school finance study. In this study (Cybulski, Hoy, & Sweetland, 2005), researchers did not find a significant correlation between collective teacher efficacy and the school district funding for instruction, although a significant positive relationship was found between collective teacher efficacy and student achievement. Allocation of resources is one of few variables that did not correlate with collective teacher efficacy.

### Limitations.

Collective teacher efficacy has been identified as a powerful construct, positively correlated with student achievement in every research study on their relationship (Barr, 2002; Goddard, 2001; Goddard & Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; Goddard & Skria, 2006; W. K. Hoy, Sweetland, & Smith, 2002; Ross, Hogaboam-Gray, & Gray, 2004; Tschannen-Moran & Barr, 2004). It has also positively correlated with collaborative school processes (Ross, Hogaboam-Gray, & Gray, 2004), implementation of one secondary school-wide conflict resolution initiative (Tschannen-Moran, 2001), and individual teacher efficacy (Goddard & Goddard, 2001). With current research demonstrating the significance of this construct, further

research is needed to investigate its role in other school processes. Researchers have surfaced questions about collective teacher efficacy and listed opportunities for future research. Research could investigate the relationship of collective teacher efficacy to the following variables: school improvement efforts, school climate, faculty trust, student bullying, principal leadership, professional development, and student behavior (Ross, Hogaboam-Gray, & Gray, 2004; Smith & Birney, 2005; Tschannen-Moran & Barr, 2004). Research evidence finding that 46% of the variance in collective teacher efficacy among schools was the result of a school's SES, student ethnicity, prior student achievement, years of teaching experience, teacher gender, and teacher ethnicity (Goddard & Skria, 2006) is important. An investigation to find other factors, i.e., principal leadership, faculty turnover rates, and school climate, to account for the other 54% of variance is worthy of study.

Clearly, collective teacher efficacy is a powerful construct. In this era of accountability, it has implications for the myriad challenges facing educators. Appendix A summarizes the research on the construct, collective teacher efficacy.

### Faculty Trust

Trust was not easily defined. Researchers analyzing trust (Tschannen-Moran & Hoy, 2000) listed 17 definitions. However, in educational research, the most common definition was one's willingness to be vulnerable to another based on the confidence that the other is benevolent, honest, open, reliable, and competent (Tschannen-Moran, 2004; Tschannen-Moran & Hoy, 2000). In addition to the five facets of trust mentioned in the definition, researchers (Tschannen-Moran & Hoy, 2000) have added both confidence and vulnerability, the willingness to take risks in relationships, to this list. Research has examined the construct of trust as the

social foundation of schools. The factors of faculty trust included trust in the principal, trust in colleagues, and trust in clients (students and parents). They were weakly or moderately correlated to each other (W. K. Hoy, Smith, & Sweetland, 2002; Smith & Birney, 2005).

Measures of trust.

Various surveys have been used to measure faculty trust. In an analysis of trust in schools, Tschannen-Moran and Hoy (2000) listed seven surveys used by researchers to measure organizational trust. Lagging 20 years behind measures of business organizational trust, measures of trust in schools were not developed until 1985 (W. K. Hoy & Kupersmith, 1985). Tschannen-Moran and Hoy (1998) used the Hoy and Kupersmith scale to develop and validate a 37-item instrument that included measures of faculty trust in administrators, colleagues, students and parents. After analyzing the results of factor analyses, researchers combined faculty trust in students and faculty trust in parents into a combined measure, faculty trust in clients (Smith, Hoy, & Sweetland, 2001). In 2003, Hoy and Tschannen-Moran reduced the number of items to 26 with the development of the Omnibus T-scale. (W. K. Hoy & Miskel, 2005). In addition, Tschannen-Moran (2004) developed and validated trust surveys measuring principal trust in teachers, students, and parents; parent trust in the principal and the school; and student trust in the principal.

Research findings.

To begin, researchers studied the overall effects of trust in a school. Of significance is its relationship to student achievement. Researchers (Goddard, Tschannen-Moran, & Hoy, 2001) investigated the role of trust in student achievement in 47 urban elementary schools in a large Midwestern school district. Researchers found that half of the variance in trust among schools

was due to students' level of poverty. However, trust positively predicted student achievement in mathematics and reading even after controlling for SES. A longitudinal study in 12 Chicago schools (Bryk & Schneider, 2002) found that relational trust, controlling for teacher backgrounds, student mobility, and SES, still significantly predicted student achievement. This study was significant because Chicago schools implemented the Chicago School Reform Act after being named the worst school system in the nation in 1988 by then Secretary of Education, William Bennett. Included in this comprehensive reform was the election of independent Local School Councils for each school. These councils, comprised of six parents, two community members, two teachers, the principal, and a student (in high schools only), had authority to hire and fire the principal and allocate funding for instruction (Bryk & Schneider, 2002). In another study, researchers (Smith, Hoy, & Sweetland, 2001) found that, in the 98 high schools studied, all seven aspects of organizational health positively correlated with all factors of faculty trust. Finally, a research study investigating the relationships among trust, collective teacher efficacy, SES, politics, and enabling school structures in 145 elementary schools (Tarter & Hoy, 2004) found that faculty trust was both an indirect predictor of student achievement through collective teacher efficacy and an independent predictor of the faculty's perception of the overall effectiveness of the school.

Next, a review of research found several significant relationships among faculty trust of colleagues and other school factors. Researchers found faculty trust in colleagues the most significant predictor ( $\beta$  = .34, p < .01) in the protection of students from student bullying (Smith & Birney, 2005). In a study examining the relationship between organizational health and trust, Smith et al. (2001) found that only the organizational health variable of morale made a

significant independent contribution to faculty trust in colleagues ( $\beta$  = .48, p < .01). Gage (2004) found, using multiple regression, that faculty trust in colleagues did not predict enabling bureaucracy even though the constructs showed significant correlations (r = .66, p < .01).

Researchers also had evidence to support faculty trust in the principal as a significant variable. Gage (2004) found a significant relationship between faculty trust in the principal and enabling bureaucracy. In another study, the only factors in the measure of organizational health found to be significant independent predictors of faculty trust in the principal were initiating structure and consideration (Smith, Hoy, & Sweetland, 2001). Later, in correlations between organizational climate and trust, the same researchers (W. K. Hoy, Smith, & Sweetland, 2002) found a significant correlation between faculty trust in the principal and the organizational climate factor of collegial leadership (r = .77, p < .01). No study has found a direct relationship between faculty trust in the principal and student achievement.

Faculty trust in clients (parents and students) correlated with student achievement and other school factors. In a study on 40 Ohio elementary schools (McGuigan, 2005), faculty trust was analyzed independently and also in a grouping with collective teacher efficacy and academic emphasis under the construct, academic optimism. Academic optimism was found to be a strong predictor of student achievement in math and reading, controlling for SES. The researcher did not find significant relationships when analyzing the constructs to value-added achievement gains.

Gage (2004), in a study of 75 middle schools, found the relationship between faculty trust in clients and collective teacher efficacy so strong (r = .97, p < .01) that the researcher

considered the two constructs inseparable. Using multiple regression, he also found that faculty trust in clients indirectly impacted school mindfulness through collective teacher efficacy.

Researchers have also analyzed relationships between faculty trust in clients and academic press (W. K. Hoy, Smith, & Sweetland, 2002; Smith, Hoy, & Sweetland, 2001). The researchers examined organizational health in 98 high schools and organization climate in 97 high schools, respectively. In the first study they found that academic press had a strong independent relationship with faculty trust in clients ( $\beta$  = .51, p < .01), a relationship verified in the second study on organizational climate (r = .67, p < .01). The researchers (W. K. Hoy, Smith, & Sweetland, 2002; Smith, Hoy, & Sweetland, 2001) also surmised that trust in parents to support teachers and trust in students to meet high expectations led to teachers' trust in both parents and students.

Researchers have also found that faculty trust in clients is a significant independent predictor in the prevention of bullying (Smith & Birney, 2005). Conducted in 106 Texas elementary schools, researchers found that faculty trust of the principal did not independently correlate with prevention of bullying. Researchers hypothesized this was due to a trusting faculty's interconnectedness with parents and students.

Limitations of research.

Studies of trust in schools have been conducted only in the last ten years. Despite the paucity of studies, each study has shown faculty trust to be significantly tied to student achievement directly or indirectly through school processes. Since trust was also considered a component of a school's culture (W. K. Hoy & Miskel, 2005), it is worthy of further investigation. Research studying the role of principal trust in stakeholders and parent trust in

schools on achievement and school structures and climate has not been conducted. Research on its relationship to mindfulness and enabling bureaucracies has been published only within the last several years. No studies have been completed on its relationship to professional development or changes in teacher practices. See Appendix A for a synthesis of research on trust.

# Academic Emphasis

Academic emphasis, or academic press, is the extent to which schools focus on academic excellence. It can also be interpreted as high expectations for students. This section of the literature review will discuss its measure and findings in educational research.

Measures of academic emphasis.

In educational research, academic emphasis was measured with a subscale of the Organizational Health Inventory (OHI) for elementary, middle or high schools (Alig-Mielcarek, 2003; W. K. Hoy, Hannum, & Tschannen-Moran, 1998; W. K. Hoy, Smith, & Sweetland, 2002; W. K. Hoy, Sweetland, & Smith, 2002; McGuigan, 2005; Smith, Hoy, & Sweetland, 2001; Sweetland & Hoy, 2000; Tschannen-Moran & Hoy, 1998). The measure quantified the perception of teachers regarding the ability of the students to meet high academic expectations by hard work and cooperation (W. K. Hoy, Tarter, & Kottkamp, 1991). Eight items measure academic emphasis in the Organizational Health Inventory (OHI) for secondary schools; nine items measure academic emphasis in middle schools; and five items measure academic press in elementary schools. The versions differ because of the increasing organizational complexity from elementary schools to high schools (W. K. Hoy & Miskel, 2001). Some studies have

measured academic press with three subsets of the OHI: academic emphasis, resource support, and principal influence (Alig-Mielcarek, 2003; W. K. Hoy, Sweetland, & Smith, 2002).

Research findings.

Research on academic emphasis was conducted in elementary schools (Alig-Mielcarek, 2003; McGuigan, 2005), middle schools (W. K. Hoy, Hannum, & Tschannen-Moran, 1998; Sweetland & Hoy, 2000; Tschannen-Moran & Hoy, 1998), and high schools (W. K. Hoy, Smith, & Sweetland, 2002; Smith, Hoy, & Sweetland, 2001). The studies investigated the relationships between academic emphasis, school climate, faculty trust, leadership, and student achievement. First, the role of academic emphasis in school climate is summarized. Because academic emphasis is a subtest of OHI, research frequently analyzed its relationship with other school climate factors. Researchers (W. K. Hoy, Hannum, & Tschannen-Moran, 1998; Sweetland & Hoy, 2000) compared the 50-item Organizational Climate Description Questionnaire (OCDQ), which measures the openness of a school climate, and the 45-item OHI to find common ground measuring four components of climate: environmental press, collegial leadership, teacher professionalism, and academic emphasis in middle schools. In findings, Hoy et al. (1998) reported that academic emphasis was a significant independent predictor of achievement in mathematics ( $\beta = .27$ , p < .01), in reading ( $\beta = .22$ , p < .01), and in writing ( $\beta = .24$ , p < .01). Sweetland and Hoy (2000) also reported that academic emphasis significantly correlated with teacher empowerment (r = .58) and predicted teacher empowerment. Teacher empowerment then predicted student achievement in mathematics ( $\beta = .25, p < .01$ ) and reading ( $\beta = .26, p < .01$ ) .01). The feeling of teachers that they have control relates to both efficacy and the selfdetermination theory of autonomy, a basic human need.

Next, researchers (W. K. Hoy, Smith, & Sweetland, 2002) compared the same Organizational Climate Description Questionnaire (OCDQ) and the OHI to find common ground for a new measure, Organizational Climate Index (OCI), to measure environmental press, collegial leadership, teacher professionalism, and academic emphasis in high schools. The 27-item OCI measured four dimensions of school climate: institutional vulnerability, or the relationship between the school and the community, (r = .87); collegial leadership, the relationship between teachers and the principal, (r = .94); professional teacher behavior, the relationship among teachers, (r = .88); and achievement press (r = .92). The researchers labeled academic emphasis as achievement press because academic emphasis was an internal focus, and achievement press included pressure from the community.

The previous study also examined the relationship between climate and faculty trust (W. K. Hoy, Smith, & Sweetland, 2002). Achievement press correlated significantly with faculty trust in clients (r = .67, p < .01). In a similar high school study (Smith, Hoy, & Sweetland, 2001)used the OHI for secondary schools to find that academic emphasis predicted faculty trust in clients ( $\beta = .51$ , p < .01). Researchers have not found significant relationships between academic emphasis and either faculty trust in colleagues or in the principal (W. K. Hoy, Smith, & Sweetland, 2002; Smith, Hoy, & Sweetland, 2001; Tschannen-Moran & Hoy, 1998).

Two studies combined the OHI dimensions of academic emphasis, resource support, and principal influence to form a second-order factor, academic press. A study in 97 high schools (W. K. Hoy, Smith, & Sweetland, 2002) added collective teacher efficacy as a variable and examined the relationships among academic press, collective teacher efficacy, and student achievement. Researchers found that academic press only indirectly predicted student

achievement through collective teacher efficacy. Then, in 146 elementary schools, instructional leadership (Alig-Mielcarek, 2003) was added as a variable, and the relationships among academic press, instructional leadership, and student achievement was examined. Findings included positive correlations between academic press and all aspects of instructional leadership. In addition, academic press significantly predicted reading achievement ( $\beta$  = .16, p < .01) and math achievement ( $\beta$  = .23, p < .01). Instructional leadership indirectly worked through academic press to predict student achievement.

One study examined school and teacher demographics as predictors of overall organizational health. Researchers (Bevans, Bradshaw, Miech, & Leaf, 2007) found that the overall measure of organizational health and the subscale measures of collegial leadership, staff affiliation and academic emphasis correlated significantly and negatively with school demographic data: staff affiliation with enrollment; the overall measure, staff affiliation and academic emphasis with faculty turnover; and academic emphasis both with student mobility and the percentage of students receiving free or reduced lunch. Academic emphasis also correlated significantly and positively with the student attendance rate, reading scores, and math scores. It correlated significantly and negatively with the rate of school suspensions.

Returning to academic emphasis, a comprehensive study in 40 elementary schools compared the variables of academic optimism (academic emphasis, collective teacher efficacy, and faculty trust), SES, and enabling bureaucracy to student achievement and value-added student achievement (McGuigan, 2005). Findings included a significant correlation between academic optimism and enabling bureaucracy (r = .37, p < .05), student achievement in mathematics (r = .70, p < .05), and student achievement in reading (r = .59, p < .05). In addition,

academic optimism had a much stronger relationship to student achievement than SES, although the researcher could not find relationships to value-added student achievement. Appendix D summarizes research on academic emphasis.

Limitations of research.

As noted in the previous section, researchers found that academic emphasis, as a component of school climate, predicted faculty trust in clients and student achievement.

Collective teacher efficacy, faculty trust, and academic emphasis were constructs that positively impacted student achievement. The last study mentioned (McGuigan, 2005) combined the three variables documented to independently predict student achievement into one construct, academic optimism, at the elementary level. Gaps include the relationship between academic optimism and student achievement at the middle and high school levels. Although one study has examined the relationship between instructional leadership and academic optimism, no study has investigated the relationship between academic optimism and the impact of professional development.

## School Organizational Structure

### Enabling Bureaucracy

Hoy (2003) defined an enabling school structure as "a hierarchy of authority and a system of rules and regulations that help rather than hinder the teaching-learning mission of the school." (p. 5) A new conceptual model of bureaucracy, based on the literature suggesting most employees work in bureaucratic organizations with rules and procedures (Adler & Borys, 1996), contrasted the negative views of bureaucracy with more favorable impressions. Using the term "enabling formalization" Adler and Borys (1996) maintained that enabling bureaucracies can be

characterized by the procedures for routine tasks and innovation for non-routine tasks. Applying the concept to schools (DiPaola & Hoy, 2001), teachers and administrators in schools with enabling formalization recognized the importance of confronting and working through both cognitive and affective conflicts, not controlling or ignoring them.

Initially, researchers hypothesized that enabling bureaucracy contained two independent factors, each with two dimensions: formalization of rules and procedures could be enabling or hindering, and centralization of decision-making authority could be enabling or hindering (W. K. Hoy & Sweetland, 2000). However, analysis of a measure of enabling school structures found that all enabling items loaded positively and all coercive items loaded negatively on the same factor. Table 1 depicts the characteristics of enabling and coercive school structures.

In a qualitative study on effective schools with enabling school structures, researchers found: (a) Rules were flexible, informal, and implemented with input from teachers; (b) schools were smaller in size with open communication and shared decision making; (c) principals were open, respectful, and supportive; and (d) teachers were trusting and respectful (Sinden, Hoy, & Sweetland, 2004).

Measures of enabling bureaucracy.

Researchers used a 12-item Likert scale for Enabling School Structures (ESS) in numerous studies, finding the measure reliable and valid. For example, Tarter and Hoy (2004) used the ESS survey to assess elementary school quality in 145 Ohio elementary schools and found the instrument a reliable measure ( $\alpha = .94$ ).

	Enabling and Hindering School Structures		
	Enabling	Hindering	
Formalization	Promotes flexible rules and procedures Views problems as learning opportunities Values differences Encourages initiative Fosters trust	Enforces rigid rules and procedures Views problems as constraints Demands consensus Punishes mistakes Fosters suspicion	
Centralization	Facilitates problem solving Promotes cooperation Encourages openness Protects teachers Encourages innovation Seeks collaboration	Demands compliance Embraces control Fosters mistrust Punishes teachers Discourages change Rules autocratically	
Processes	Participatory decision making Problem solving	Unilateral decision making Enforcement	
Context	Teacher trust Truthfulness and authenticity Cohesiveness Teacher sense of power	Teacher distrust Truth spinning and deception Conflict Teacher sense of powerlessness	

Table 1: Two types of school structures: Enabling and hindering (Hoy & Miskel, 2005, p. 105).

Research findings.

The first studies developed the characteristics of enabling and coercive school structures (W. K. Hoy & Sweetland, 2000, 2001). In developing a measure for enabling school structures, Hoy and Sweetland (2000) found that faculty trust in colleagues correlated positively with enabling school structures. Powerlessness, dependence on rules, and dependence on authority correlated negatively with enabling school structures. Conducting a study in 97 high schools, Hoy and Sweetland (2001) found that schools with greater enabling school structure also had greater trust in the principal, less truth spinning, and less role conflict, explaining 78% of the variance in enabling school structures. Additionally, surveys of 116 teachers in 116 schools found that schools with more enabling school structures had more authentic and honest communication among teachers and administrators. Further, teachers felt more power in schools with enabling bureaucracies (Sweetland, 2001).

Later, a study of 75 middle schools (Gage, 2004) found that enabling school structure correlated with faculty mindfulness (r = .56, p < .01), principal mindfulness (r = .87, p < .01), and overall school mindfulness (r = .66, p < .01). Enabling school structure also correlated with faculty trust in the principal (r = .65 p < .01) and faculty trust in colleagues (r = .41, p < .01). Faculty trust in the principal independently predicted enabling bureaucracy ( $\beta = .59$ , p < .01), and enabling bureaucracy independently predicted principal mindfulness ( $\beta = .53$ , p < .01) and school mindfulness ( $\beta = .40$ , p < .01). Enabling bureaucracy did not predict faculty mindfulness. Finally, a study (Adams & Forsyth, 2006) found that enabling bureaucracy independently predicted collective teacher efficacy ( $\beta = .36$ , p < .001). Additional research on the effects of enabling bureaucracy in elementary schools was more encompassing. The first study, involving

145 elementary schools (Tarter & Hoy, 2004) found that enabling bureaucracy had a significant negative correlation with school politics and significant positive correlations with collective teacher efficacy, trust, student achievement, and overall school effectiveness. School politics was an indirect negative predictor of student achievement through enabling bureaucracy, and enabling structure was an indirect predictor of overall school effectiveness through school politics. Later, a study in 99 elementary schools (McGuigan, 2005) found a positive correlation between enabling bureaucracy and academic optimism, a construct comprised of collective teacher efficacy, faculty trust, and academic emphasis.

In analyzing the research, bureaucracy was not a necessary evil in schools; it was a characteristic of schools that fostered trusting relationships and the critical thinking associated with mindfulness. Enabling bureaucracy was positively linked to student achievement.

Leadership played an important role. Enabling bureaucracy was a component of organizational climate, Tagiuri's dimension of Organization (1968), which identified communication patterns, decision-making patterns, structure, formalization, and bureaucratization. These routines provide safety and trust for teachers, important basic needs in self-determination. Appendix A synthesizes research on enabling bureaucracy.

Limitations of research.

Research in enabling bureaucracy was recent to educational research. Initial findings were promising. Elementary studies should be replicated at secondary levels and vice versa. Demographic characteristics of teachers and administrators in schools with enabling bureaucracies have not been completed. More research should clarify the relationship between enabling bureaucracy and school mindfulness because both hold promise.

## Mindfulness

The concept of mindfulness that originated in social psychology was adopted and applied to business. A study in a nursing home (Langer, 1989) showed that, if residents had opportunities to make small decisions about the care of plants, they were more active, thoughtful, and lived longer. Langer's research landed at the University of Michigan's School of Business and was applied to highly reliable organizations such as aircraft carriers and nuclear power plants (Weick & Roberts, 1993; Weick & Sutcliffe, 2001). In these stressful environments, error can be catastrophic, and the researchers conducted case studies of the cultures of these organizations. On an aircraft carrier, the extent to which the group exhibited "collective mind" depended on each individual's "heedful interrelating" (Weick & Roberts, 1993). They concluded that, for safety, aircraft carriers must have high numbers of individuals who were alert and thoughtful, not just routinely following procedures. The researchers (Weick & Sutcliffe, 2001) identified five characteristics of mindful organizations: (a) Preoccupation with failure, not focusing on success; (b) Reluctance to simplify, looking for the complexity in events; (c) Sensitivity to operations, scrutinizing operations for small errors; (d) Commitment to resilience, able to bounce back from setbacks; and (e) Deference to expertise, permitting those closest to the problem to solve it. Only recently has the concept been applied in educational research.

The relationship between mindfulness and enabling bureaucracy (W. K. Hoy, 2003) was hypothesized to be complementary. Hoy proposed that schools that are mindful and enabling were learning organizations. Schools that were mindless and hindering could be considered coercive. Examining the characteristics of schools and individuals, Hoy (2003) guessed that enabling bureaucracy helped but didn't ensure mindfulness, but collective mindfulness ensured

an enabling bureaucracy. He also hypothesized that openness increased mindfulness and authoritarianism decreased it.

Measures of mindfulness.

An instrument measuring mindfulness was developed by researchers at Ohio State University (Gage, 2004). They generated 111 statements to measure the five qualities of mindfulness (Weick & Sutcliffe, 2001). Items were field tested with teachers and two pilot studies. Reliability and validity were verified. The result was a 20-item 6-point Likert survey (M Scale).

Research findings.

Educational research on collective mindfulness is limited. Gage (2004) developed the instrument to measure mindfulness. He surveyed teachers in 75 middle schools for mindfulness, collective efficacy teacher, enabling bureaucracy, and faculty trust. Findings included no correlation between principal mindfulness and school mindfulness, a strong correlation between faculty trust in the principal and enabling bureaucracy (r = .65, p < .01), a strong correlation between enabling bureaucracy and school mindfulness (r = .66, p < .01), a strong correlation between faculty trust in clients and collective teacher efficacy (r = .97, p < .01), and a strong correlation between collective teacher efficacy and school mindfulness (r = .69, p < .01). Analysis of several multiple regressions indicated that collective teacher efficacy and enabling bureaucracy independently predicted school mindfulness ( $\beta = .47$ , p < .01 and  $\beta = .40$ , p < .01, respectively). Faculty trust in clients independently predicted collective teacher efficacy ( $\beta = .97$ , p < .01) and indirectly, through collective teacher efficacy, predicted school mindfulness ( $\beta = .46$ , p < .01). Faculty trust in the principal independently predicted enabling bureaucracy ( $\beta = .46$ , p < .01). Faculty trust in the principal independently predicted enabling bureaucracy ( $\beta = .46$ , p < .01).

.59, p < .01) and indirectly, through enabling bureaucracy, predicted school mindfulness ( $\beta = .24, p < .01$ ). Faculty trust in colleagues was not significant. A multiple regression of the variables on faculty mindfulness resulted in similar findings except the findings that predictive power of collective teacher efficacy on faculty mindfulness was stronger ( $\beta = .75, p < .01$ ) and that no relationship between faculty mindfulness and enabling bureaucracy was found. A multiple regression of the variables on principal mindfulness showed a strong predictive power of enabling bureaucracy on principal mindfulness ( $\beta = .53, p < .01$ ).

Later researchers examined the relationship between school mindfulness and faculty trust (W. K. Hoy, Gage, & Tarter, 2006). Participants who completed the M-Scale and the Omnibus T-Scale included 2600 teachers in 75 middle schools. The researchers found strong positive correlations between the subscale measures of each construct ranging from lowest (r = .47, p < .01) between faculty trust in colleagues and faculty trust in the principal to the highest (r = .97, p < .01) between faculty trust in the principal and principal mindfulness. Faculty trust in colleagues and faculty trust in the principal together explained 94% of the variance in school mindfulness ( $\beta = .36$ , p < .01 and  $\beta = .72$ , p < .01, respectively). Faculty trust in the principal explained 94% of the variance in faculty mindfulness ( $\beta = .95$ , p < .01). Finally, faculty trust in colleagues ( $\beta = .71$ , p < .01), faculty trust in clients ( $\beta = .15$ , p < .05), and faculty trust in the principal ( $\beta = .17$ , p < .05) explained 85% of the variance in faculty mindfulness.

Limitations of research.

A major limitation of the research on mindfulness is the lack of it. Mindful schools are schools in which individuals reflect on practices, bounce back quickly after setbacks, learn from mistakes, listen to each other, and deal with conflict constructively. Introductory research is

promising, and further research is needed. See Appendix A for a summary of research on mindfulness.

# Professional Development

Professional development has become more important in recent years. In *Breakthrough*, the authors wrote, "Over the past decade it has become a given that any major reform initiative must be accompanied by investments in professional development." (Fullan, Hill, & Crevola, 2006, p. 22) Guskey commented, "One constant finding in the research literature is that notable improvements in education almost never take place in the absence of professional development." (Guskey, 2000, p. 4). He continued, "Professional development programs are systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcome of students." (Guskey, 2002, p. 381) Clearly, noted authors in the field recognize its importance.

Four principles of effective professional development (Guskey, 2000) are: (a) a clear focus on learning and learners; (b) an emphasis on individual and organizational change; (c) small changes guided by a grand vision; and (d) ongoing professional development that is procedurally embedded.

The landscape is littered with failed attempts at educational reform. Guskey (2002) suggests that professional development programs are unsuccessful for two reasons: (a) planners do not consider the motivation of teachers to participate in professional development, and (b) planners do not understand how teachers typically change. According to Guskey (2002), teachers want practical ideas that they can immediately use in their classrooms. He believes that planners of professional development believe they should change teachers' beliefs first.

However, his model of teacher change reverses the conventional model with the change in teacher beliefs and attitudes last. As shown in Figure 4, professional development can lead to a change in classroom practices. If that results in an improvement in student learning, the beliefs and attitudes of the teacher will then change.

Evaluation of Professional Development Programs

"Evaluation is the systematic investigation of merit or worth." (Guskey, 2000, p. 41)

Research has measured the success of programs designed to build character, manage classrooms, and improve discipline. Five studies are reviewed because of their relationship to the intended outcome of professional development in this study. Each study will be summarized and synthesized with other studies.

Two quantitative studies investigated the implementation of cooperative learning (Abrami, Poulsen, & Chambers, 2004; Sikorski, 1991). A quantitative investigation compared the effects of teacher demographic characteristics, school climate, and outcomes of staff development to implement cooperative learning (Sikorski, 1991). School climate, based on Tagiuri's model (Tagiuri, 1968), was measured with the OCDQ-RE developed by Hoy and Clover in 1986. Ecology was defined as class size. Teacher demographic data included age, gender, ethnicity, marital status, level of education, endorsement, years in present school, and years of experience. A cooperative learning survey measured teachers' knowledge, use of

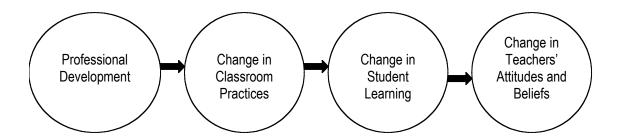


Figure 4: A model of teacher change (Guskey, 2000, p. 139)

structure, perceptions of student learning, and attitudes toward cooperative learning. Findings included: 67% of the variance in teacher attitudes toward professional development are explained by a combination of perception of student outcomes (the strongest predictor), knowledge of staff development, and years in present position; and 34% of the variance in perception of student outcomes is explained by a combination of open school climate and use of staff development.

School climate did not predict the knowledge or use of staff development after training. The researcher concluded that, because the staff development was an optional individual teacher choice and not related to school or district mandates, school climate was significant as a predictor but not as powerful as other variables. The finding that teachers' attitudes toward staff development are related to their perceptions of student learning supports Guskey's model (Guskey, 2000), which hypothesized that change in teacher beliefs occurred after teachers saw evidence of increased student learning. These results also parallel the Abrami et al. study (2004), which found that teachers use the professional development if they believe they understand cooperative learning, they are confident they can implement it, and they believe students will be able to work together.

Despite Sikorski's caveat (1991) that teacher-selected professional development may have greater implementation rates, schools have experienced success with a school-wide implementation model. For example, a mixed methodology assessment conducted with 204 teachers in ten elementary schools correlated the ten implementation factors of a character education program (community participation, character education policy, identified and defined character education traits, integrated curriculum, experiential learning, evaluation, adult role models, staff development, student leadership, and sustaining the program) to the school culture indicators of collaborative leadership, teacher collaboration, professional development, unity of purpose, collegial support, and learning partnerships (Denbow, 2004). The researcher used the School Culture survey, a 35-item Likert scale with reliabilities ranging from .658 - .910, to measure culture. To assess degree of program implementation, the researcher used CharacterPlus Degree of Implementation survey, with alpha reliabilities ranging from 0.75 – 0.86. Results included significant correlations among all factors ranging from .231 - .679. In multiple regressions the most significant finding was that 56.7% of the variance in sustaining the program was explained by the culture factors of collaborative leadership, collegial support, unity of purpose, and learning partnership. The school culture variable of teacher collaboration independently predicted only one implementation variable, evaluation. The culture variables of unity of purpose and learning partnership were significant predictors of all factors in implementation. Follow-up interviews validated results; community involvement and common goals were recurrent themes. The previous study compared with an evaluation of the implementation of Peacebuilders, a school-wide program designed to alter the culture of the school by increasing resilience and social competence in children, in eight elementary schools

(Flannery et al., 2003). Older students completed a survey; approximately one-half of the younger students were interviewed. Surveys included items regarding both aggressive and peace building behaviors. Teachers completed surveys assessing student social competence and aggressive behaviors in addition to evaluating training and their implementation of the model. Although the teacher training was mandated, students did show improvements in prosocial behaviors: In the first year, statistically significant improvements in teacher-rated K-2 social competence and in student-rated grades 3-5 peace-building were found as well as a reduction in older students' aggressive behavior. In addition, year two data showed an increase in K-2 prosocial behavior.

Not all affective social programs experience success. A study investigating the effectiveness of a middle school program, Capturing Kids' Hearts (Yeager, 2004), reported mixed results. In pre- and post-surveys, 25 middle school teachers reported greater success with the program than the students reported. The 264 students reported that their relationships with teachers declined by the end of the year. Eighth grade students reported improvements in attentiveness in class, engagement, and achievement, while sixth grade students reported a decrease in those domains. The researcher facilitated a focus group with seven teachers to interpret the unexplained results. In the focus group, seven teachers theorized that sixth grade students did not take the surveys seriously, or they did not understand the survey questions. Teachers also thought that eighth grade students spent more time in the program and showed greater growth.

Lack of successful implementation can be found at the elementary level, too. A case study conducted in an elementary school with three student-teacher pairs investigated whether the use of Banking Time improved the quality of student-teacher relationships (Attwood, 2005). Using the 10-15 minute Banking Time developed by Pianta and Hamre in 2001, teachers

interacted with the student by listening, allowing the student to lead the conversation, and verbally noticing the child's behavior, all to build a more positive relationship with the child. The researcher used the Student-Teacher Relationship Scale developed by Pianta in 2001 to identify the dyads. Teachers completed the Abbreviated Child Behavior Rating Form developed by Van Egeren in 1999 to record both oppositional and compliant behaviors. Classroom observers over a 4-week period used a computer software program to record observational data (Ecobehavioral Assessment Systems Software). Interrater reliability in coding classroom behavior for this study was 96%. As a post-assessment, the three teachers completed the Behavior Intervention Rating Scale (BIRS). In reporting results, Banking Time had no significant effect on Dyad 1. In Dyad 2, the teacher reported increasing student behavior problems; the observer reported decreasing student behavior problems. In Dyad 3, the teacher reported improvements, but observations showed minimal effect. Hypotheses on the lack of evidence to support Banking Time included incongruence between Banking Time and classroom practices, the inability to change behavior in only 4 weeks, the inability of teachers to objectively assess behaviors, degree of implementation of Banking Time by the teacher, and the high level of time on instruction despite the challenging student behaviors.

Another study conducted in four elementary school classrooms investigated performance feedback as a method of professional development to reduce student problem behaviors by increasing the incidences of teacher praise (Reinke, 2005). The researcher observed four different classroom teachers, graphed the number and types of teacher praise (specific or general) and the number of student disruptive behaviors, and provided performance feedback by discussing results with the teacher. Follow-up observations were conducted. Next, teachers self-monitored their teacher praise. Finally, the researcher conducted follow-up observations one month later. The reported results included the following:

- The self-reported treatment integrity was greater than the observed teacher rate of praise.
- 2. Following the sharing of visual performance feedback using the Classroom Check Up as a data collection tool, teacher praise, especially specific praise, increased.
- Following the sharing of visual performance feedback with the teachers, classroom disruptions decreased, and the level of praise was greater than the level of student disruptive behaviors.
- 4. One month later, only one of the four teachers maintained a consistent, although lower, level of teacher praise. The other three teachers returned to initial levels of teacher praise.

Although performance feedback did result in changes in the levels of teacher praise, the changes were not maintained over time with just self-monitoring. The researcher recommended conducting research with different methodology, using longer time frames and additional opportunities for teachers to receive visual performance feedback.

Implications for Further Research

Programs, whether they are self-selected or mandated, can be successful. The earliest study evaluating implementation of cooperative learning (Sikorski, 1991) found that an open climate positively impacted implementation of cooperative learning, even though the professional development was self-selected. The study of the impact of school culture (Denbow, 2004) found that school culture significantly correlated with implementation of a school-wide character development, although it was limited to ten elementary schools and the degree of implementation was measured by teacher perceptions. The proposed study, larger in scope, compared recent constructs of organizational climate to professional development in elementary schools. More important, measure of degree of implementation included observations, not just

teacher perceptions. No study has assessed the impact of the specific organizational climate domains of this literature review that have been so significant in predicting student achievement.

Appendix A contains a summary of research on professional development.

## **Summary**

Teacher beliefs about classroom management affect the myriad decisions teachers make daily. Collective teacher efficacy, faculty trust, and academic emphasis have documented connections with student achievement. If collective teacher efficacy is cognitive, faculty trust is affective, and academic emphasis is behavioral or enacting, then academic optimism may be a powerful characteristic of school climate. Mindfulness and enabling bureaucracy are also powerful constructs, although their recent addition to educational research means research is limited. Since implementation of professional development has mixed results, organizational climate measures may explain the contextual factors that predict successful implementation.

#### CHAPTER 3

## Methodology

The literature review contained a plethora of quantitative studies. Quantitative data had great value because they helped define the perceptions of teachers. Studies with surveys to quantitatively measure organizational climate have been found to be valid and reliable. Some limitations existed because quantitative methodology cannot explain why changes in perceptions occur. The change process in teachers can also be measured qualitatively. Meaningful professional development involved changes in teacher beliefs and behavior. Listening to teachers discuss professional development, its impact in classrooms, and its effect on their beliefs could paint a richer picture of the change process. Using these ideas, this mixed methodology study used quantitative methods supported by qualitative methods in a non-experimental design.

## Sample

Twenty-one elementary schools in a large suburban school district in the southeastern United States were conducting professional development based on Bailey's work on *Conscious Discipline*. Some had participated in book study groups for at least one year; others initiated book study groups in the 2006-2007 school year. The sample for this study consisted of the population of teachers in the elementary schools agreeing to participate in the study, which included 800 teachers. The teachers worked in the same district in close proximity to the researcher, so the sample can be considered a sample of convenience. A smaller sample for focus groups, selected with predetermined criteria, included those teachers in four elementary schools participating in the *Conscious Discipline* book study.

## **Data Collection**

Data were scheduled to be collected over a four-month time period. First, quantitative data were scheduled to be collected starting in November with an online survey. Qualitative data

were also collected, with the observations taking place in November and December, followed by focus groups meetings scheduled to meet in January.

## Quantitative Data Collection

A 72-item survey with Likert scale responses was designed to measure academic optimism (collective teacher efficacy, faculty trust, and academic emphasis), teacher beliefs about classroom management, enabling bureaucracy and mindfulness. Prior to initiating the study, a pilot group of doctoral candidates documented the time needed to complete the survey. An additional three survey items measuring teacher perceptions of their school's implementation of Conscious Discipline were added for a measure of self-reported degree of implementation. See Appendix B for a list of survey items.

Principals in the schools participating in *Conscious Discipline* were sent letters explaining the study and were asked to distribute letters to instructional staff working at least half time in their schools. Copies of the letters are included in Appendix C. Teachers in the population were sent an e-mail with a link to the survey. Surveys also included teacher demographic data including the number of years of teaching experience, gender, number of years in the current school, and participation in the Conscious Discipline book club. The school system website provided the student enrollment and percentage of student body identified as economically disadvantaged. Book club facilitators identified the number of years each school participated in the book club. Demographic data were analyzed for significant variance.

### *Qualitative Data Collection*

Two methods measured the implementation of *Conscious Discipline* at each school. First, three separate observations were conducted in each school by the researcher or trained book club facilitators. The researcher and book club facilitators had attended a minimum of ten days of workshops conducted by Bailey and were trained to identify evidence of implementation of

Conscious Discipline in the classroom. Two observations looked for how students were greeted in the morning by their teachers. One observation was a walk-through of classrooms to document evidence of Conscious Discipline structures in the classrooms. Examples of Conscious Discipline structures include the Friends and Family Board, the Safe Place, the Time Machine, the Celebration Center, and the Job Board (Bailey, 2000). A sample of the observation checklists used by the facilitators and researcher can be found in Appendix D.

Second, focus groups were conducted to assess the impact of professional development as it relates to the delivery of professional development, teacher beliefs, and organizational climate. The four schools are described below:

- A school in its first year of implementation of *Conscious Discipline* with a high percentage of faculty participation in book clubs and strong evidence of implementation as identified in the three observations.
- 2. A school in its second year of implementation of *Conscious Discipline* with a high percentage of faculty participation in book clubs and strong evidence of implementation as identified in the three observations.
- 3. A school in its first year of implementation of *Conscious Discipline* with a low percentage of faculty participation in book clubs and weak evidence of implementation as identified in the three observations.
- 4. A school in its second year of implementation of *Conscious Discipline* with a low percentage of faculty participation in book clubs and weak evidence of implementation as identified in the three observations.

Focus groups consisting of five to ten teachers were conducted using the Nominal Group

Technique (Stewart, Shamdasani, & Rook, 2007) process followed by open-ended questions. A

scribe recorded teachers' views while the researcher led the discussion. See Appendix E for a list

of the questions. The focus group facilitator had the flexibility to ask follow up questions to clarify answers or probe for additional insights.

### Survey Instruments

Attitudes and Beliefs on Classroom Control Inventory

Teacher beliefs on classroom management were measured by the Attitudes and Beliefs on Classroom Control Inventory (ABCC) (N. Martin, Yin, & Baldwin, 1998b). The ABCC measured two elements of classroom management: instruction management and people management. The instructional management element measured routines, distribution of materials, and monitoring of students' completion of work. The people management element examines teacher beliefs about teacher-student relationships and how rules, consequences, rewards, etc., are used in the classroom to prevent misbehavior.

To develop the inventory, researchers generated a list of 48 items based on classroom experiences and observations (N. Martin, Yin, & Baldwin, 1998b). Using a four-category Likert response, high scores on the measure would indicate a more controlling interventionist teacher; low scores would indicate a less-controlling non-interventionist teacher. 282 elementary and secondary teachers in three southwestern United States school districts completed the survey.

To validate the survey, results were compared to six personality traits of the Personality Factor Questionnaire: dominance, rule consciousness, abstractness, openness to change, perfectionism, and impression management. Five analyses were conducted:

 An exploratory factor analysis was conducted with .35 as a cutoff for factor loading, resulting in 14 items retained for instructional management, 8 items for people management, and 4 items for behavior management.

- 2. Reliability for the remaining 26 items was measured with Cronbach's coefficient alphas: .82 for the instructional management subscale and .69 for both people management and behavior management subscales.
- 3. An item analysis resulted in acceptable standards of item-total correlations with no negative inter-item correlations and mean inter-item correlations for each subscale greater than .20 (.45 for instructional management, .39 for people management, and .48 for behavior management).
- 4. Pearson product-moment correlations were completed for the ABCC and the Personality Factor Questionnaire (16PF). Significant relationships were found between the instructional management subscale and dominance (r = .216, p < .001), consciousness (r = .247, p < .001), abstractedness (r = -.226, p < .001), openness to change (r = -.3104, p < .001), and perfectionism (r = .363, p < .001). Significant relationships were also found between people management and consciousness (r = .1793, p < .01), abstractedness (r = .1507, p < .05), and openness to change (r = .2728, p < .001). Significant relationships were found between behavior management and abstractedness (r = .1372, p < .05), openness to change (r = .3029, p < .001), and perfectionism (r = -.1695, p < .01). Researchers concluded that personality characteristics and classroom management beliefs were related (N. Martin, Yin, & Baldwin, 1998b).
- 5. Finally, a 2x2 MANOVA compared gender by level of teaching. Analysis of results found acceptable levels for distribution normality, homogeneity and linearity. A statistically significant difference in the behavior management subscale was found between elementary and secondary teachers, with elementary teachers tending to be more interventionist. Researchers surmised that elementary teachers would tend to

intervene more frequently because children were younger and still learning appropriate behaviors (N. Martin, Yin, & Baldwin, 1998b).

An additional study was conducted to further validate the ABCC and also to measure the effects of class size and graduate study on teacher beliefs (N. Martin, Yin, & Baldwin, 1998a). A later study investigated whether personality type predicted efficacy and beliefs about classroom management in teachers in non-traditional teacher certification programs. Researchers found little significant correlation among the three variables, although an extroverted personality predicted a more non-interventionist approach on the people management subscale of the ABCC (Henson & Chambers, 2002). This study was also important because the researchers, using principal components factor analysis, found that the four items on the behavior management subscale of the ABCC measured the same construct as the people management subscale. The researchers recommended combining the two subscales, which was validated in further studies (N. Martin, Yin, & Mayall, 2006).

Academic Optimism Survey

Academic optimism was measured by a survey containing three subscales: collective teacher efficacy, faculty trust, and academic emphasis. In a study of 40 elementary schools (McGuigan, 2005), a factor analysis of school mean scores for collective teacher efficacy, faculty trust, and academic emphasis loaded on a single factor, with factor loadings over .95. In addition, 94.8% of the variance in academic optimism was explained by the three constructs, validating academic optimism as a latent construct.

Collective teacher efficacy was measured with Tschannen-Moran's 12-item Collective Teacher Belief Scale, with a Likert scale ranging from one to nine, that contains subscales of instructional strategies and student discipline (r = .97). In a factor analysis conducted in a study of the relationship between student achievement and collective teacher efficacy (Tschannen-

Moran & Barr, 2004), the reliability of the instructional strategies subscale ranged from .78-.67, and the reliability of the student discipline subscale ranged from .78-.64. Further, the instructional strategies subscale reliability equaled .96 and the student discipline subscale had a reliability of .94.

Trust was measured with a short version of the Omnibus T-scale developed by Tschannen-Moran and Hoy (Tschannen-Moran & Hoy, 1998). The following steps were taken to develop this instrument:

- 1. The authors wrote series of statements to measure the facets of trust (willingness to risk vulnerability, benevolence, reliability, competency, honesty, and openness) for each of the four referents of faculty trust (principal, colleague, parent, and student).
- For content validity, the researchers submitted the pool of items to a group of
  professors. They identified the facet of trust to which each statement referred. The
  researchers looked for consensus.
- 3. Six teachers completed the survey and offered recommendations.
- 4. Based on consensus and recommendations, the researchers reduced the survey to 48 items. Fifty teachers in fifty schools (equal numbers of high-conflict and low-conflict schools) were invited to complete the survey. The return rate was 91%. Researchers also included statements about self-estrangement, powerlessness, teacher efficacy, and perceptions of school conflict, included to ascertain validity.
- 5. The researchers completed a factor analysis that resulted in three factors: trust in principal, trust in colleagues, and trust in clients. Any items that loaded at .40 or more on more than one factor were removed, resulting in a 35-item survey.
- 6. Researchers conducted a content analysis that resulted in the addition of two items.

- 7. In fifty elementary schools, half of the teachers (898) completed the survey, a 99% return rate. The other half completed a survey measuring parental collaboration. Analysis of data showed Chronbach's alpha reliabilities of .98 for faculty trust in the principal, .98 for faculty trust in colleagues, and .97 for faculty trust in clients. Moderate correlations were found between factors with faculty trust in principal and faculty trust in colleagues (r = .37, p < .01) and faculty trust in clients (r = .42, p < .01). Faculty trust in colleagues correlated with faculty trust in clients (r = .35, p < .01).</p>
- 8. Researchers then completed descriptive statistics and a multiple regression on the surveys measuring trust and collaboration. They found a strong independent correlation between faculty trust in clients and parental collaboration ( $\beta$  = .72, p < .01). Two-thirds of the variance in parental collaboration was explained by faculty trust in clients.

Academic emphasis was measured with the academic emphasis subscale of the Organizational Health Inventory for Elementary Schools (OHI-E) that also measures institutional integrity, collegial leadership, resource influence, and teacher affiliation. Initially, a secondary version of the OHI was developed; it was modified for elementary schools (W. K. Hoy, Tarter, & Kottkamp, 1991). The secondary school version was assessed for reflection of the identified school factor, clarity, content validity, and ability to discriminate. To pilot the elementary version, 131 teachers from different schools took the survey; analysis of responses resulted in a combination of teachers' and students' academic orientation (r = .69). Additional items were added to the academic emphasis subtest to improve reliability. The revised version was piloted with 598 elementary teachers from 41 elementary schools with improved reliability (r = .90). In

a final pilot to shorten the form to 43 items, teachers from the original 41 schools plus 37 additional elementary schools, reliability decreased slightly (r = .87).

# Organizational Structure

Although results from the surveys measuring enabling bureaucracy and mindfulness were analyzed as separate constructs, respondents completed them as one survey. The reliability of each survey was highlighted, with most studies showing reliabilities .90 and higher. (Hoy & Sweetland, 2000 and 2001) The measure of enabling bureaucracy is a 12-item 5-point Likert scale ranging from Never to Always. Two professors and two doctoral students generated a series of statements describing school structures (W. K. Hoy & Sweetland, 2000). Sixty-one teachers in administration courses completed the twenty-four-item survey along with classic measures of centralization and formalization, developed by Aiken and Hage and used since 1968. A factor analysis of the enabling school structure survey showed all items loading on one factor, explaining 43% of the variance. Researchers found internal reliability strong (r = .94). Correlating results to the surveys measuring centralization (dependence on rules) and formalization (dependence on hierarchy), found strong correlations (r = .85, r = .77), respectively. Next, a second study involving 116 schools in five states was conducted, with more than 89% of the teachers returning the surveys. An 8-item scale, trust in colleagues (r = .94), and a 4-item scale, powerlessness (r = .75), were also completed. Predictive validity was demonstrated, with greater trust in colleagues correlating with enabling bureaucracy (r = .61, p < ..01) and greater powerlessness negatively correlating with enabling bureaucracy (r = -.74, p <.01). To reduce the enabling school structure survey to 12 items, Hoy and Sweetland (2001) conducted a study in 97 Ohio high schools and found that the 12-item survey had improved reliability ( $\alpha = .95$ ) and explained 64% of the variance.

The Mindfulness survey (M Scale) is a 14-item 6-point Likert survey that measures the degree to which respondents believe their school is a mindful organization (Gage, 2004). To develop the survey, researchers generated 111 statements to measure the five qualities of mindfulness (Weick & Sutcliffe, 2001). Three professors and a doctoral student checked the statements for content validity, and lack of consensus on some items reduced the total number to 67. Next, the 67 items were field tested with teachers, and all items were kept. For the first pilot study, 101 teachers from 90 schools completed surveys. A principal component analysis resulted in the removal of items that loaded on more than one factor or did not load significantly on any factor. Researchers found two factors: principal mindfulness ( $\alpha = .95$ ) and faculty mindfulness ( $\alpha = .84$ ). Forty items remained for the second pilot study with 193 teachers in 103 schools. Interpretation of a principal axis analysis reduced the number of items to 20; reliabilities for principal mindfulness and faculty mindfulness were strong (r = .92 and r = .85, respectively). Correlations with enabling school structures (r = .83, p < .01) and collective teacher efficacy (r = .83, p < .01) .62, p < .01) were found. These results confirmed construct validity since enabling bureaucracy was complementary to mindfulness, and collective teacher efficacy shared traits of resilience and persistence. This research study measured faculty mindfulness only, since the role of the principal is not included in the study.

### Data Analysis

The mixed methodology required two types of data analysis. Surveys, the quantitative methodology, were analyzed using SPSS software (Wagner, 2007). Qualitative data consisted of two types, observations and focus groups. The observation data were adapted by assigning numerical values for analysis using SPSS software. The focus groups were analyzed for themes using the constant comparative method. The next sections detail the type of analysis for each data set.

## Quantitative Data Analysis

Quantitative analysis of the data included descriptive statistics and correlations. Simple and multiple regressions were conducted to find the strength of relationships among the variables: teacher beliefs, collective teacher efficacy, faculty trust, academic emphasis, enabling bureaucracy, mindfulness, and the degree of implementation of professional development.

Exploratory factor analyses have been conducted to validate academic optimism as a latent trait by combining collective teacher efficacy, faculty trust in clients, and academic optimism (W. K. Hoy, Tarter, & Hoy, 2006a, 2006b; McGuigan, 2005; McGuigan & Hoy, 2006). Confirmatory factor analysis was conducted to test the theoretical latent construct, academic optimism (W. K. Hoy & Miskel, 2006). Researchers found academic optimism was a valid construct. Academic optimism was defined as the mean of the mean standard scores of the constructs of collective teacher efficacy, faculty trust, and academic emphasis in this study. In addition, simple and multiple regressions were conducted to find the strength of relationships among academic optimism, enabling bureaucracy, mindfulness, and the degree of implementation of professional development (Creighton, 2007; Pedhazur & Schmelkin, 1991; Wagner, 2007).

# Qualitative Data Analysis

The qualitative analysis of observations and focus groups assessed the degree of implementation of professional development. Observations contained two separate observation checklists that were analyzed with one-way ANOVA. The checklists identified classroom structures used in *Conscious Discipline* as present or absent. The hallway greeting walkthroughs conducted at the start of the day tallied teacher behaviors as students entered the classroom. The data analysis resulted in numerical data that defined the degree of implementation. This measure was used to find correlations with the other variables in the study. See Appendix D for the observation checklists used to collect data.

Focus groups were used to explain observations and identify teacher beliefs about the degree of implementation of professional development (Silverman, 2004). The researcher used a coding method to identify content themes from focus groups (Miles & Huberman, 1994; Silverman, 2004). The themes emerging from focus group discussions explained the reasons why schools implemented professional development to the extent shown by the data analysis. *Strengths and Limitations* 

The mixed methodology had strengths and limitations. Strengths included:

- 1. Teacher focus groups provided a deeper understanding of the complex individual and collective issues and effects of the implementation of professional development.
- 2. The surveys developed by Hoy et al. had been found to be highly reliable in multiple studies.

Limitations also existed. Pure quantitative studies are efficient. A mixed methodology study loses the efficiency of quantitative studies. Conducting the focus groups after all other data were collected and analyzed added another time constraint to the study. The facilitator in the focus groups guided the discussion but did limit the discussion to researcher-identified topics; focus group participants might have identified other topics in an open-ended format.

# Summary

In the proposed study, teachers in 17 elementary schools completed surveys designed to measure beliefs about control of students, collective teacher efficacy, faculty trust, academic emphasis, enabling bureaucracy, and mindfulness. Additional collected school data included student enrollment, SES, faculty participation in the book club, and teacher demographic data. Data were aggregated by school and compared to evidence of implementation of professional development in each school to test the hypothesis that a school's organizational climate affects the degree of implementation of meaningful professional development.

#### CHAPTER 4

## Data Analysis and Interpretation

#### Introduction

The purpose of this study was to investigate the roles of teacher beliefs about classroom management and organizational climate in the implementation of teacher professional development. With the degree of implementation of professional development as the dependent variable, the study examined the relationships among the degree of implementation and the following factors: teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling school structures, and faculty mindfulness. This study also investigated the relationship between the degree of implementation of professional development and academic optimism, which is the latent construct for the combined variables of collective teacher efficacy, faculty trust, and academic emphasis. The six research questions that were investigated in this study were:

- 1. Was there a significant relationship between faculty demographics such as gender, ethnicity, years of teaching experience, years of teaching experience in the school, and the constructs of teacher beliefs, academic optimism, enabling bureaucracy, and mindfulness?
- 2. Was there a significant relationship among the constructs of teacher beliefs, collective teacher efficacy, faculty trust, academic emphasis, enabling bureaucracy, mindfulness, and degree of implementation of professional development?
- 3. Did the constructs of collective teacher efficacy, faculty trust, and academic emphasis combine to form the latent construct of academic optimism?

- 4. Was there a significant relationship between the construct of academic optimism and degree of implementation of professional development?
- 5. Was there a significant relationship between faculty demographics such as gender, ethnicity, years of teaching experience, years of teaching experience in the school, and degree of implementation of professional development?
- 6. Did teacher beliefs, collective teacher efficacy, faculty trust, academic emphasis, enabling bureaucracy, and faculty mindfulness predict the degree of implementation of professional development?

# Methodology

The online survey measuring teacher beliefs and organizational climate variables was developed using existing surveys with permission from researchers credited with their development. Martin gave approval for use of the Attitudes and Beliefs about Classroom Control. Hoy gave permission to use the surveys measuring academic emphasis, faculty trust, enabling bureaucracy, and mindfulness on his website. Finally, Tschannen-Moran gave permission to use the survey on her website measuring collective teacher efficacy. See Appendix F for copies of the electronic messages. The 75-item survey was sent to 23 doctoral candidates to ascertain the length of time required to complete the survey. Eleven responded with a mean completion time of 11.6 minutes.

An additional three items were added to the survey, asking teachers to assess their faculty's understanding of *Conscious Discipline*, belief in *Conscious Discipline*, and implementation of *Conscious Discipline* in their respective schools. After receiving IRB approval from both the university and the large suburban school district in which the study was

conducted (see Appendix G), letters were sent to 21 elementary school principals along with copies of letters to distribute to their teachers. One school was deleted from the population because the school had discontinued the *Conscious Discipline* book study, leaving 20 schools. Of the remaining schools, four principals responded with electronic messages giving approval to conduct the study. Telephone contact was made with the remaining 16 principals. Three principals did not give permission because of extenuating circumstances in their buildings. The final study was conducted in 17 schools. Online surveys measuring teacher beliefs and organizational climate were sent to teachers in those schools in November and December. Three follow-up electronic reminders were sent to teachers in December and January. In all, 489 out of 738 teachers completed the online survey for a 66% return completion rate. This exceeded the sample sizes ranging from 248 to 254 recommended by Krejcie and Morgan (Allen, n.d.; Krejcie & Morgan, 1970) for samples of 700 and 750 respectively.

Next, a *Conscious Discipline* book club facilitator collaborated with the researcher for modification of the observation instruments and training in their use. The classroom structures walkthrough checklist, found in Appendix D, was used as developed. Using the checklist for greetings, found in Appendix D, proved formidable because the observer walked through the halls sometimes twice. It was difficult to remember the data that had been collected on each teacher to avoid duplication. As a result, a map of the school, obtained from the school system's support services, was used as the data collection instrument. The greeting walkthroughs were coded on the map as *CD* (*Conscious Discipline* Greeting), *G* (Greeting), or *O* (Other). Entering the classroom structures walkthrough and the two greeting walkthrough data into SPSS 13.0

software by classroom number resulted in data that could be analyzed by teacher as well as by school.

After all survey and observational data were collected and analyzed, two focus groups were conducted. In the original design of the study, the researcher would conduct four focus groups according to the following guidelines:

- A school in its first year of implementation of *Conscious Discipline* with a high percentage of faculty participation in book clubs and strong evidence of implementation as identified in the three observations.
- 2. A school in its second year of implementation of *Conscious Discipline* with a high percentage of faculty participation in book clubs and strong evidence of implementation as identified in the three observations.
- 3. A school in its first year of implementation of *Conscious Discipline* with a low percentage of faculty participation in book clubs and weak evidence of implementation as identified in the three observations.
- 4. A school in its second year of implementation of *Conscious Discipline* with a low percentage of faculty participation in book clubs and weak evidence of implementation as identified in the three observations.

When the data were analyzed using SPSS 13.0 software, it became clear that there was not a significant difference between schools with one year of implementation and schools with two or more years of implementation. As a result, the methodology was amended to reduce the number of focus groups to two focus groups. The first focus group was comprised of four teachers from each of two schools with high degrees of implementation of *Conscious Discipline* and high

percentages of teachers participating in the book club. The second focus group was comprised of four teachers from each of two schools with low degrees of implementation of *Conscious Discipline* and low percentages of teachers participating in the book club. Care was taken to ensure representation of teachers who had participated in the book club and teachers who had not participated. The researcher facilitated discussion in each group, and a recorder used word processing software on a laptop computer to record responses. Those responses were sent to each participant via e-mail, giving each participant an opportunity to clarify any responses. One participant did respond with clarifying remarks that were added to the recorded responses.

#### Results

Quantitative results are discussed first in this section, followed by qualitative results. The quantitative results were first analyzed by participant and school demographic variables. Then the independent variables of teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness were investigated by teacher, and then aggregated and analyzed by school. Next, the dependent variables of morning greetings, classroom structures, and self-reported degree of implementation were analyzed. For the final quantitative results section, results of simple and multiple regressions are reported. Following that, the qualitative results of the focus groups are discussed.

### *Quantitative Analysis*

Demographic characteristics of participants and schools.

Demographic characteristics of the 489 participants are itemized in Table 2. Of teachers completing the survey, 61.8% were 41 years of age or older. Female participants comprised 93.2% of the participants. Although almost 68.4% had less than 11 years of experience in their

Table 2  $\underline{\text{Demographic Characteristics of Participants (N = 489)}}$ 

Characteristic	<u>n</u>	%
Age at time of survey (years)		
21-30	76	15.8
31-40	108	22.5
41-50	146	30.4
Over 50	151	31.4
Gender		
Female	452	93.2
Male	33	6.8
Teaching experience (years)		
0-5	81	16.6
6-10	94	19.3
11-15	86	17.6
More than 15	227	46.5
Years at current school (years)		
0-5	227	46.5
6-10	107	21.9
11-15	60	12.3
More than 15	94	19.3

Characteristic	<u>n</u>	%
Teaching position		
Self-contained classroom teacher	187	38.4
Team teacher	106	21.8
Specialist	120	24.6
Special education teacher	74	15.2
Membership in Conscious Discipline book club		
Yes	187	38.3
No	301	61.7

current school, 64.1% had more than 11 years of teaching experience. The job descriptions of teachers varied, with 38.4% of teachers working in a self-contained classroom. The next largest category of teachers was the specialists, encompassing 24.6% of the participants. Of those teachers completing the survey, 21.8% worked with another teacher or teachers on an instructional team, and 15.2% were special educators. Only 38.3% participated in a *Conscious Discipline* book club. Survey completion rates varied by school, ranging from 51% to 100% of teachers completing the survey. Overall, 66% of teachers in 17 suburban elementary schools completed the online survey.

The schools, from one school division, were diverse: student membership from the September 30, 2005, student membership count, ranged from 290 to 691; percentage of students receiving free or reduced lunch ranged from 10.5% to 71.2%; percentage of students receiving special education services ranged from 1.8% to 22.1%; percentage of students identified as gifted

ranged from 2.8% to 100%; and percentage of PTA membership ranged from 53% to 168%. Table 3 compares sample statistics to the school division, state (VDOE, 2005), and national means when available from NCES (NCES, 2005). The school demographic data were most similar to state and national demographic data in the percent of economically disadvantaged (37.5% in the sample, 31.1% in the state, and 37.4% nationally). Although the sample contained a greater proportion of gifted (9.7%) than national statistics (6.3%), it was still less than the state (10.9%). The 12.2% of students in the sample receiving special education services was slightly lower than the state (14.5%) and the nation (13.7%).

Table 3

Demographic Characteristics of Schools (N = 17)

Characteristic	Sample	School Division	State	National
Mean student membership	560	NA	NA	504
% PTA Membership	86.8	NA	NA	NA
% Gifted	9.7	8.2	10.9	6.3
% SPED	12.2	11.9	14.5	13.7
% Economically Disadvantaged	37.5	30.7	31.1	37.4

NA = Not available

Survey results analyzed by teacher.

The first 26 statements on the survey measured teacher beliefs using the Attitudes and Beliefs about Classroom Control. They were coded with a Likert response set ranging from Describes me very well (4) to Describes me not at all (1). Teachers who were more interventionist scored higher on the measure. They were more likely to intervene to control student behavior rather than to focus on the student's development of self-control. The next 49

survey items measured the organizational climate constructs of collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness. Collective teacher efficacy responses, measured by Tschannen-Moran's Collective Teacher Efficacy Belief Scale, ranged from None at all (1) to A great deal (9). Higher scores on the measure indicated a faculty with a strong sense of collective teacher efficacy. The Omnibus Trust Scale measured faculty trust in clients. Responses ranged from Strongly Disagree (1) to Strongly Agree (6). Higher scores on the measure indicated that teachers have more trusting relationships with both parents and students. A subscale of the OHI-E measured academic emphasis and contained Likert responses ranging from Rarely occurs (1) to Very frequently occurs (4). Higher scores indicated a faculty with a stronger focus on academic achievement. The section of the survey measuring enabling bureaucracy contained 12 statements with Likert responses ranging from Never (1) to Always (5). Higher scores indicated a school bureaucracy that supports teachers. Finally, seven statements measured faculty mindfulness with responses ranging from Strongly disagree (1) to Strongly agree (6). Higher scores on the mindfulness index indicated a faculty that was both resilient and reflective.

Teacher beliefs.

The researcher used SPSS 13.0 to analyze the variance among demographic data and each of the six constructs under study. Table 4 shows the means and standard deviations of the Attitudes and Beliefs about Classroom Management by teacher age. Based on these measures, teachers over the age of 50 are more likely to be interventionist in teacher beliefs. Teachers from 21 to 30 years old are the least likely to be inverventionists, except in the subscale of People Management. On that subscale, teachers between the ages of 31 and 40 are least likely to be

Table 4

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher Age (N = 481)

Age in Years	21 -30	31 – 40	41 - 50	Over 50
	$(\underline{N} = 76)$	$(\underline{N} = 108)$	$(\underline{N} = 146)$	$(\underline{N} = 150)$
ABCC Total				
<u>M</u>	2.705	2.751	2.747	2.851
<u>SD</u>	.287	.319	.377	.366
ABCC Instructional Management				
<u>M</u>	2.750	2.892	2.835	2.951
<u>SD</u>	.405	.395	.493	.484
ABCC People Management				
<u>M</u>	2.628	2.585	2.643	2.732
SD	.371	.409	.409	.408

interventionist, followed by teachers from 21 to 30 years old. In the total measure of the Attitudes and Beliefs about Classroom Management, teachers between the age of 31 and 40 and teachers between the ages of 41 and 50 have mean scores that were .004 apart.

Table 5 contains the one-way analysis of variance in Attitudes and Beliefs about Classroom Control by the age of the teacher. The participants over 50 years old scored significantly higher on the Attitudes and Beliefs about Classroom Control (F = 3.946, p < .01) as well as both subscales, Instructional Management (F = 3.704, p < .05) and People Management (F = 3.078, p < .05). In Tukey HSD and Scheffe post hoc analyses, scores on the

Table 5

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by Teacher

Age

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
ABCC Total				
Between groups	3	1.424	.475	3.946**
Within groups	476	57.265	.120	
ABCC Instructional Management				
Between groups	3	2.313	.771	3.704*
Within groups	477	99.275	.208	
ABCC People Management				
Between groups	3	1.500	.500	3.078*
Within groups	476	77.316	.162	

<sup>\*\*</sup> *p* < .01; \**p* < .05

total measure of Attitudes and Beliefs about Classroom Management and the subscale measure of Instructional Management divided the ages into two homogeneous subsets, one with all but teachers over 50 and the other with all but teachers between the ages of 21 and 30. For the subscale of People Management, Scheffe post hoc analysis left all four age groups in one set; Tukey HSD divided them into two homogeneous subsets one with all but teachers over 50 and the other with all but teachers between the ages of 21 and 30.

An analysis of scores in Attitudes and Beliefs about Classroom Control by gender showed differences. Table 6 displays the means and standard deviations for the three

Table 6

Mean Scores in Attitudes and Beliefs about Classroom Control by Gender (N = 484)

	Male ( $\underline{N} = 33$ )		Female ( $\underline{N} = 451$ )	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
ABCC Total	2.936	.374	2.759	.343
ABCC Instructional Management	3.084	.440	2.854	.456
ABCC People Management	2.773	.492	2.642	.394

measures of Attitudes and Beliefs about Classroom Control and gender. Male teachers were more likely to intervene to control student behavior than female teachers in the total measure of Attitudes and Beliefs and Classroom Control and both subscales of Instructional Management and People Management.

An analysis of variance in Attitudes and Beliefs about Classroom Control by gender was conducted. As shown in Table 7, male participants scored significantly higher on the total measure of the Attitudes and Beliefs about Classroom Control (F = 8.138, p < .01) as well as the subscale measure of Instructional Management (F = 7.992, p < .01), which meant male teachers were significantly more likely to be interventionist, or controlling, in teacher beliefs about classroom management. Instructional Management consisted of selecting learning tasks, setting time limits for activities, and selecting materials for lessons. No significant difference was found between gender and the subscale of People Management (F = 3.255, p > .05). People Management consisted of organizing transitions, managing student behavior, and establishing rules and routines.

Table 7

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by Gender

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
ABCC Total				
Between groups	1	.967	.967	8.138**
Within groups	482	57.269	.119	
ABCC Instructional Management				
Between groups	1	1.640	1.640	7.992**
Within groups	483	99.973	.207	
ABCC People Management				
Between groups	1	.523	.523	3.255
Within groups	482	77.485	.161	

<sup>\*\*</sup> *p* < .01

Table 8 shows the means and standard deviations for the measures of Attitudes and Beliefs about Classroom Control and participation in a *Conscious Discipline* book club. Teachers participating in the book club were less likely to intervene to control student behavior in all measures of the Attitudes and Beliefs about Classroom Control than teachers who did not participate in the book club. They had lower mean scores on all measures of Attitudes and Beliefs about Classroom Control.

Table 8

<u>Mean Scores in Attitudes and Beliefs about Classroom Control by Book Club Participation (N = 487)</u>

	Participant ( $\underline{N} = 186$ )		Non-Participant ( $\underline{N} = 301$ )		
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	
ABCC Total	2.694	.342	2.823	.344	
ABCC Instructional Management	2.767	.446	2.936	.455	
ABCC People Management	2.607	.370	2.685	.422	

As shown in Table 9, teachers participating in the book club scored significantly lower in the total ABCC measure (F = 16.256, p < .01) and the subscale measures of Instructional Management (F = 16.240, p < .01) and Behavior Management (F = 4.369, p < .05). Based on these scores, teachers participating in the book club were more likely to be non-interventionist, or less controlling of student behavior. In *Conscious Discipline*, teachers provided students with strategies to control their own behavior, which can be interpreted as a teacher exerting less control over student behavior.

Table H1, displayed in the appendixes, shows the means for the measures of Attitudes and Beliefs about Classroom Control by years of teaching experience. The groups with the highest mean scores were the teachers with less than six years of teaching experience and the teachers with more than 15 years of teaching experience. These two groups were more likely to

Table 9

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by Book Club

Participation

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
ABCC Total				
Between groups	1	1.919	1.919	16.256**
Within groups	485	57.246	.118	
ABCC Instructional Management				
Between groups	1	3.310	3.310	16.240**
Within groups	486	99.059	.204	
ABCC People Management				
Between groups	1	.710	.710	4.369*
Within groups	485	78.816	.163	

<sup>\*\*</sup> *p* < .01; \**p* < .05

intervene to control student behavior. Teachers with 6 to 10 years of teaching experience were most likely to intervene to control student behavior.

Table H2, found in the appendixes, shows the results of the analysis of variance in teacher beliefs about classroom control by years of teaching experience. No significant differences were found between the years of teaching experience and the total measure of Attitudes and Beliefs about Classroom Control (F = 1.677, p > .05), the subscale measure of

Instructional Management ( $F = .721 \ p > .05$ ), and the subscale measure of People Management (F = 1.869, p > .05). Although not significant, the total Attitudes and Beliefs about Classroom Control mean and the subscale measure of People Management mean were greatest for teachers with less than six years of teaching experience, which suggested that the most inexperienced teachers tend to be more controlling. The ABCC subscale Instructional Management mean was greatest for teachers with more than 15 years experience, followed by those with less than six year of teaching experience.

Table H3, found in the appendixes, displays the means and standard deviations of the Attitudes and Beliefs about Classroom Control by years in the current school. The subscale of Instructional Management had the highest means, and the subscale of People Management had the lowest means.

As shown in Table H4, found in the appendixes, no significant variance in the means of the total Attitudes and Beliefs about Classroom Control (F = 2.302, p > .05), the subscale mean of Instructional Management (F = 2.276, p > .05), and the subscale mean of People Management (F = 1.372, p > .05) by years in the current school were found. Although not significant, in contrast to the years of teaching experience, teachers with less than six years in the current school scored lowest on all measures of the Attitudes and Beliefs about Classroom Control, suggesting that they are least likely to be interventionists to control student behavior.

Teachers completing the survey could select one of four job descriptors: self-contained classroom teacher, classroom teacher, specialist, or special education teacher. Table H5, found in the appendixes, shows the means and standard deviations for the Attitudes and Beliefs

about Classroom Control by teacher position. Classroom team teachers scored the highest on the subscale of People Management. The subscale of Instructional Management had the highest means, and the subscale of People Management had the lowest means. Special education teachers scored highest on total Attitudes and Beliefs about Classroom Control and the subscale of Instructional Management, which suggests that they are more likely to exert more control over classroom instruction by giving students fewer choices.

As shown in Table H6, found in the appendixes, no significant variances in the means of the total Attitudes and Beliefs about Classroom Control (F = .230, p > .05), the subscale mean of Instructional Management (F = .778, p > .05), and the subscale mean of People Management (F = .807, p > .05) by job descriptor were found. The total measure of Attitudes and Beliefs about Classroom Control showed very little variance.

Following teacher beliefs, the second construct, collective teacher efficacy, was analyzed for variance with the demographic data of teachers completing the survey. The Collective Teacher Belief Scale which contained subscales of Instructional Strategies and Student Discipline was used. The measure used a 9-point Likert scale. Table 10 shows the means and deviations for collective teacher efficacy by the age of the teacher. The subscale of Instructional Strategies had the highest means, and the subscale of Student Discipline had the lowest means. Generally, as the age of the teacher increased, the collective teacher efficacy scores increased. The only exception was on the subscale of Instructional Strategies, in which teachers from 41 to 50 years of age scored higher than teachers over 50 years of age.

Table 10

Mean Scores in Collective Teacher Efficacy by Teacher Age (N = 469)

Age in Years	21 -30	31 – 40	41 - 50	Over 50
	$(\underline{N} = 73)$	$(\underline{N} = 105)$	$(\underline{N} = 143)$	$(\underline{N} = 148)$
Collective Teacher Efficacy Total				
<u>M</u>	7.521	7.631	7.790	7.864
SD	1.200	1.082	.866	.815
CTE Instructional Strategies				
<u>M</u>	7.731	7.806	7.962	7.932
<u>SD</u>	1.187	1.094	.934	.890
CTE Student Discipline				
<u>M</u>	7.311	7.456	7.618	7.796
SD	1.357	1.238	.981	.906

Analyses of variance in collective teacher efficacy by the age of the teacher showed a significant difference between age and collective teacher efficacy, as shown in Table 11. The greatest variance was found in the subscale measure of Student Discipline. Older teachers scored higher on collective teacher efficacy in both the measure of total collective teacher efficacy (F = 2.670, p < .05) and the subscale measure of Student Discipline (F = 3.952, p < .01). No significant variance was found in the subscale measure of Instructional Strategies (F = 1.182, p > 05).

Table 11

One-Way Analyses of Variance in Collective Teacher Efficacy by Teacher Age

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Collective Teacher Efficacy Total				
Between groups	3	7.395	2.465	2.670*
Within groups	465	429.316	.923	
CTE Instructional Strategies				
Between groups	3	3.555	1.185	1.182
Within groups	465	466.182	1.003	
CTE Student Discipline				
Between groups	3	14.001	4.667	3.952**
Within groups	465	549.180	1.181	

<sup>\*\*</sup> *p* < .01; \**p* < .05

Table 12 displays the means and standard deviations of collective teacher efficacy by years of teaching experience. Scores on each measure of collective teacher efficacy increased with more teaching experience in all but one subscale. The only exception was the subscale of Instructional Strategies, in which the scores increased as years of experience increased until the peak of 11 to 15 years of experience. After that, the mean score in Instructional Strategies declined from 8.002 to 7.950. The highest mean scores for collective teacher efficacy, ranging from 7.726 to 8.002 on a 9-point Likert scale, were in the subscale of Instructional Strategies. The lowest mean scores, ranging from 7.327 to 7.746, were in the subscale measure of Student Discipline.

Table 12

Mean Scores in Collective Teacher Efficacy by Years of Teaching Experience (N = 476)

Years of Experience	0 - 5	6 - 10	11 - 15	> 15
	$(\underline{N} = 79)$	$(\underline{N} = 91)$	$(\underline{N} = 85)$	$(\underline{N} = 221)$
Collective Teacher Efficacy Total				
<u>M</u>	7.526	7.614	7.805	7.848
<u>SD</u>	1.264	1.033	.877	.824
CTE Instructional Strategies				
<u>M</u>	7.726	7.773	8.002	7.950
<u>SD</u>	1.212	1.066	.908	.917
CTE Student Discipline				
<u>M</u>	7.327	7.454	7.608	7.746
SD	1.445	1.147	1.062	.906

Table 13 shows the results of an analysis of variance in collective teacher efficacy by years of teaching experience. Teachers with more than 15 years of teaching experience scored significantly higher on the total collective teacher efficacy measure (F = 2.895, p < .05) and the subscale measure of Student Discipline (F = 3.540, p < .05) than teachers with fewer years of experience. No significant variances in means were found in the subscale measure of Instructional Strategies, although teachers with 11 to 15 years teaching experience scored higher than other groups.

Table 13

One-Way Analyses of Variance in Collective Teacher Efficacy by Years of Teaching Experience

Variable and Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Collective Teacher Efficacy Total				
Between groups	3	7.996	2.665	2.895*
Within groups	472	434.607	.921	
CTE Instructional Strategies				
Between groups	3	5.245	1.748	1.752
Within groups	472	470.955	.998	
CTE Student Discipline				
Between groups	3	12.520	4.173	3.540*
Within groups	472	556.432	1.179	

<sup>\*</sup>*p* < .05

Table H7, found in the appendixes, shows the means and standard deviations for all measures of collective teacher efficacy by gender. The greatest mean score for collective teacher efficacy, 7.896, was found for female teachers on the subscale of Instructional Strategies. The lowest mean score, 7.313, was found for male teachers on the subscale of Student Discipline. This mean score also had the largest standard deviation, 1.321, on a 9-point Likert scale. Male teachers and female teachers scored closer on the subscale of Instruction than on either the subscale of Student Discipline or the total mean score for Collective Teacher Efficacy.

Table H8, found in the appendixes, shows results of the analysis of variance investigating differences in mean scores in collective teacher efficacy by gender of the teacher. No significant differences were found in the measure of total collective teacher efficacy (F = 1.613, p > .05), the subscale measure of Instructional Strategies (F = .630, p > .05), or the subscale measure of Student Discipline (F = 2.295, p > .05) by gender of the teacher. An overwhelming majority of teachers completing the survey were female (93.2%); and, although not significantly, female teachers scored higher than male teachers in every measure of collective teacher efficacy.

Table H9, found in the appendixes, displays the means and standard deviations for collective teacher efficacy by years in the current school. Teachers with less than six years in the current school scored lower on total collective teacher efficacy and the subscale of Instructional Strategies than teachers with more years in the current school, although they scored higher than teachers in the current school for 6 to 15 years on the subscale of Student Discipline.

Mean scores on the measures of collective teacher efficacy were next analyzed by years in the current school. Table H10, found in the appendixes, displays results of the analyses of variance. No significant variances in means were found in the measure of total collective teacher efficacy (F = 1.024, p > .05), the subscale measure of Instructional Strategies (F = .815, p > .05), and the subscale measure of Student Discipline (F = 1.451, p > .05) by years in the current school. Once again, teachers with more than 15 years in the current school scored higher on all measures of collective teacher efficacy than teachers will fewer years in the current school.

As stated previously, teachers completing the survey could select one of four job descriptors: self-contained classroom teacher, classroom teacher, specialist, or special education teacher. Table H11, found in the appendixes, displays the means and standard

deviations for collective efficacy by job description. Special education teachers scored lower on each measure of collective teacher efficacy as compared to teachers with other job descriptors. Classroom team teachers scored higher on total collective teacher efficacy and the subscale of Instruction than teachers with other job descriptors. Specialists scored higher on the subscale of Student Discipline than teachers with other job descriptors.

Table H12, found in the appendixes, shows the results of the analysis of variance in collective teacher efficacy by job descriptors. No significant variances were found in total collective teacher efficacy ( $F = .983 \ p > .05$ ), the subscale measure of Instructional Strategies (F = 1.594, p > .05), and the subscale measure of Student Discipline (F = .391, p > .05) by job description.

Members of the *Conscious Discipline* book club had lower means in total collective teacher efficacy and the subscale measures of Instructional Strategies and Student Discipline than teachers who did not participate in the book clubs. The means and standard deviations are displayed in Table H13, found in the appendixes.

Results of the analysis of variance are displayed in Table H14, found in the appendixes. There was no significant variance in collective teacher efficacy (F = 1.544, p > .05), the subscale measure of Instructional Strategies (F = 1.795, p > .05), or the subscale measure of Student Discipline (F = .933, p > .05) when disaggregated by book club membership.

The third construct, faculty trust in clients, was investigated next. Table 14 displays the means and standard deviations for the teacher demographic data of age, years of teaching experience, years in the current school, and job description. For age, years of teaching experience

Table 14

Mean Scores in Faculty Trust in Clients by Teacher Demographic Data (N = 474)

Demographic Variable	Grouping			
Age in Years	21 -30	31 -40	41 50	Over 50
	$(\underline{N} = 73)$	$(\underline{N} = 104)$	$(\underline{N} = 143)$	$(\underline{N} = 147)$
<u>M</u>	4.193	4.232	4.394	4.514
<u>SD</u>	.902	.862	.835	.811
Years Experience	0 - 5	6 – 10	11 – 15	More than 15
	$(\underline{N} = 79)$	$(\underline{\mathbf{N}} = 91)$	$(\underline{N} = 84)$	$(\underline{N} = 220)$
<u>M</u>	4.105	4.319	4.312	4.495
<u>SD</u>	.098	.089	.100	.053
Years in current school	0 - 5	6 – 10	11 – 15	More than 15
	$(\underline{N} = 219)$	$(\underline{N} = 102)$	$(\underline{N} = 59)$	$(\underline{N} = 94)$
<u>M</u>	4.262	4.436	4.393	4.503
<u>SD</u>	.857	.849	.839	.816
Job description	SC CR Tchr	Team Tchr	Specialist	SPED Tchr
	$(\underline{N} = 183)$	$(\underline{N} = 103)$	(N = 116)	$(\underline{N} = 71)$
<u>M</u>	4.344	4.428	4.349	.4.335
<u>SD</u>	.889	.835	.871	.729

and years in current school, scores for faculty trust in clients increased as age increased.

Classroom team teachers scored higher on faculty trust in clients than teachers in other positions.

Special education teachers scored lower on faculty trust in clients than teachers in other positions.

Table 15 displays the means and standard deviations for gender and participation in the *Conscious Discipline* book club. Female teachers had higher scores in faculty trust in clients than male teachers. Book club members scored slightly lower on faculty trust in clients than teachers who did not participate in the book club.

Table 15

Mean Scores in Faculty Trust in Clients by Gender and Book Club Membership

Demographic Variable	Grouping			
Gender	Male $(\underline{N} = 32)$	Female ( $\underline{N} = 440$ )		
<u>M</u>	4.344	4.361		
<u>SD</u>	.794	.853		
Book Club Member	Participant ( $\underline{N} = 182$ )	Non-Participant ( $\underline{N} = 192$ )		
<u>M</u>	4.357	4.368		
<u>SD</u>	.883	.828		

An analysis of variance was then conducted on the construct of faculty trust in clients and demographic data. Table 16 shows the results of the one-way analysis of variance in faculty trust in clients by demographic data. The analysis showed significant differences in faculty trust in clients by the demographic data of teacher age and years of teaching experience. Teachers over the age of 50 are more likely to trust parents and students (F = 3.444, p < .05) as compared to younger teachers. Teachers with more than 15 years teaching experience were also more likely to trust students and parents (F = 4.48, p < .01) as compared to teachers with less

Table 16

One-Way Analyses of Variance in Faculty Trust in Clients by Teacher Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	<u>MS</u>	F
Age				
Between groups	3	7.367	2.456	3.444*
Within groups	463	330.149	.713	
Gender				
Between groups	1	.009	.009	.013
Within groups	470	338.724	.721	
Years of teaching experience				
Between groups	3	9.461	3.154	4.480**
Within groups	470	330.858	.704	
Years in current school				
Between groups	3	4.699	1.566	2.193
Within groups	470	335.62	.714	
Job description				
Between groups	3	.582	.194	.268
Within groups	469	339.331	.724	
Participation in book club				
Between groups	1	.012	.012	.017
Within groups	472	340.307	.721	

<sup>\*\*</sup> *p* < .01; \**p* < .05

experience. No significant differences were found in faculty trust in clients by the demographic characteristics of gender (F = .013, p > .05), years of experience in current school (F = 2.193, p > .05), job description (F = .268, p > .05) and participation in the *Conscious Discipline* book club (F = .017, p > .05).

Following faculty trust in clients, academic emphasis was analyzed. Academic emphasis has a 4-point Likert scale and is a component of the Organizational Health Inventory for Elementary Schools. Table 17 displays the means and standard deviations for academic emphasis on age, years of teaching experience, years in current school and job descriptor. Teachers over 50 years old scored higher on the measure of academic emphasis than teachers who were younger. Teachers with more than 15 years of teaching experience scored higher on the measure of academic emphasis than teachers with less experience. Teachers with more than 15 years in the current school scored higher on the measure of academic emphasis than teachers with less time in the current school. Special education teachers and self-contained classroom teachers scored lower on the measure of academic emphasis than either specialists or team teachers. Team teachers had higher scores on the measure of academic emphasis than teachers with other job descriptions.

Table 17

Mean Scores in Academic Emphasis by Teacher Demographic Data (N = 474)

Demographic Variable		Group	oing	
Age	21 -30	31 -40	41 50	Over 50
	$(\underline{N} = 73)$	$(\underline{N} = 104)$	$(\underline{N} = 143)$	$(\underline{N} = 147)$
<u>M</u>	2.682	2.744	2.864	2.898
<u>SD</u>	.571	.542	.490	.482
Years Experience	0 - 5	6 – 10	11 – 15	More than 15
	$(\underline{N} = 79)$	$(\underline{N} = 91)$	$(\underline{N} = 84)$	$(\underline{N} = 220)$
<u>M</u>	2.651	2.778	2.769	2.924
<u>SD</u>	.542	.551	.535	.463
Years in current school	0 - 5	6 – 10	11 – 15	More than 15
	$(\underline{N} = 219)$	$(\underline{N} = 102)$	$(\underline{N} = 59)$	$(\underline{N} = 94)$
<u>M</u>	2.760	2.847	2.817	2.947
<u>SD</u>	.544	.514	.445	.473
Job description	SC CR Tchr	Team Tchr	Specialist	SPED Tchr
	(N = 183)	$(\underline{N} = 103)$	(N = 116)	$(\underline{\mathbf{N}} = 71)$
<u>M</u>	2.787	2.884	2.857	2.763
<u>SD</u>	.526	.516	.555	.409

Table 18 displays the means and standard deviations for academic emphasis on gender and book club membership. The means for participation in the book club and non-participation in a book club are almost equal, differing by .001. Female teachers score slightly higher than male teachers on the measure of academic emphasis.

Table 18

Mean Scores in Academic Emphasis by Gender and Book Club Membership

Demographic Variable	Grou	Grouping			
Gender	Male $(\underline{N} = 32)$	Female ( <u>N</u> = 440)			
<u>M</u>	2.763	2.825			
<u>SD</u>	.472	.519			
Book Club Member	Participant ( $\underline{N} = 182$ )	Non-Participant ( $\underline{N} = 292$ )			
<u>M</u>	2.822	2.823			
<u>SD</u>	.539	.502			

The variances in academic emphasis by demographic data of the participants were analyzed next. Table 19 shows the results of the one-way analysis of variance in academic emphasis by the age of the teacher, gender, years of teaching experience, years in the current school, job description, and participation in the *Conscious Discipline* book club. Significant differences were found in scores on academic emphasis by the demographic characteristics of age, years of teaching experience and years in current school. Participants over the age of 50 (F = 4.002, p < .01) as well as participants with more than 15 years of teaching experience (F = 6.479, p < .01) scored significantly higher in academic emphasis. In addition, participants with more than 15 years of experience in their current school scored significantly higher on academic emphasis (F = 3.012, p < .05). Years of teaching experience and years in the current school may be collinear since they are so closely related. No significant differences in means were found in academic emphasis by the demographic characteristics of gender (F = .431, p > .05), job

Table 19

One-Way Analyses of Variance in Academic Emphasis by Teacher Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Age				
Between groups	3	3.158	1.053	4.002**
Within groups	463	121.781	.263	
Gender				
Between groups	1	.115	.115	.431
Within groups	470	125.21	.266	
Years of teaching experience				
Between groups	3	5.004	1.668	6.479**
Within groups	470	120.99	.257	
Years in current school				
Between groups	3	2.376	.792	3.012*
Within groups	470	123.618	.263	
Job description				
Between groups	3	1.000	.333	1.254
Within groups	469	124.66	.266	
Participation in book club				
Between groups	1	.000	.000	.001
Within groups	472	125.994	.267	

<sup>\*\*</sup> *p* < .01; \**p* < .05

description (F = 1.254, p > .05), and participation in the *Conscious Discipline* book club (F = .001, p > .05).

After examining academic emphasis, an analysis of variance in the construct of enabling bureaucracy by the demographic characteristics of participants was conducted. Enabling bureaucracy is a construct that measures the organizational structure of a school. Schools with enabling structures help teachers, rather than hinder them. Examples of the survey items include: "The administrators in this school use their authority to enable teachers to do their job" and "Administrative rules in this school enable authentic communications between teachers and administrators." The measure of enabling bureaucracy uses a 5-point Likert scale ranging from Never (1) to Always (5). Table H15, found in the appendixes, displays the means and standard deviations for enabling bureaucracy by age, years of teaching experience, years in the current school, and job descriptor. The scores on the measure of enabling bureaucracy increased as the age of the teacher increased. Scores also increased as the years of teaching experience increased. Scores on the measure of enabling bureaucracy were the highest for teachers with more than 15 years in the current school, followed by teachers with five or less years in the current school. Teachers with 11 to 15 years in the current school scored lower on enabling bureaucracy than teachers with either more years or fewer years in the current school. Specialists scored higher on the measure of enabling bureaucracy than teachers with other job descriptors. Self-contained classroom teachers scored lower on the measure of enabling bureaucracy than teachers with other job descriptors.

Table H16, found in the appendixes, displays the means and standard deviations for enabling bureaucracy by gender and book club membership. Male teachers scored higher on the

measure of enabling bureaucracy than female teachers. Participants in the book club scored higher on the measure of enabling bureaucracy than non-participants in the book club.

Table H17, found in the appendixes, shows the results of the one-way analysis of variance in enabling bureaucracy by teacher demographic data. No significant differences in enabling bureaucracy by demographic characteristics of teacher age (F = 1.873, p > .05), gender (F = .181, p > .05), years of teaching experience (F = 1.758, p > .05), years in the current school (F = 1.887, p > .05), job description (F = 2.244, p > .05), and participation in the *Conscious Discipline* book club (F = .165, p > .05), were found. Mean scores for enabling bureaucracy aggregated by gender (F = .181, p > .05) were almost identical. Mean scores for participants in the *Conscious Discipline* book club (F = .165, p > .05) were almost identical to the mean scores for non-participants on the measure of enabling bureaucracy.

Finally, an analysis of variance in the construct of faculty mindfulness by the demographic data of participants was conducted. Table 20 summarizes the means and standard deviations of faculty mindfulness by teacher age, years of teaching experience, years in the current school, and job descriptor. The score on the measure of faculty mindfulness increased as teachers' age increased. That pattern is identical to years in the current school, in which the score on the measure of faculty mindfulness increased as the number of years in the current school increased. Teachers with more experience scored higher on the measure of mindfulness than teachers with less years of teaching experience. However, teachers with 6 to 10 years of experience scored higher on the measure of faculty mindfulness than teachers with 11 to 15 years of teaching experience. Self-contained classroom teachers scored higher on the measure of

Table 20

Mean Scores in Faculty Mindfulness by Teacher Demographic Data (N = 474)

Demographic Variable	Grouping			
Age in Years	21 -30	31 -40	41 50	Over 50
	$(\underline{N} = 68)$	$(\underline{N} = 98)$	$(\underline{N} = 138)$	$(\underline{N} = 145)$
<u>M</u>	4.059	4.149	4.530	4.685
<u>SD</u>	.876	1.058	.908	.821
Years Experience	0 - 5	6 - 10	11 – 15	More than 15
	$(\underline{N} = 74)$	$(\underline{N} = 86)$	$(\underline{N} = 80)$	$(\underline{N} = 215)$
<u>M</u>	4.023	4.435	4.245	4.637
<u>SD</u>	1.093	.898	1.003	.829
Years in current school	0 - 5	6 – 10	11 – 15	More than 15
	$(\underline{N} = 209)$	$(\underline{N} = 100)$	$(\underline{\mathbf{N}} = 57)$	$(\underline{N} = 90)$
<u>M</u>	4.249	4.491	4.419	4.787
<u>SD</u>	1.021	.830	.954	.771
Job description	SC CR Tchr	Team Tchr	Specialist	SPED Tchr
	(N = 174)	$(\underline{N} = 102)$	$(\underline{N} = 111)$	$(\underline{N} = 68)$
<u>M</u>	4.481	4.437	4.396	4.334
SD	.886	1.029	1.002	.884

mindfulness than teachers with other job descriptors. Special education teachers scored lower on the measure of faculty mindfulness than teachers with other job descriptors.

Table 21 displays the means and standard deviations for faculty mindfulness on gender and book club membership. Male teachers scored higher on the measure of faculty mindfulness than female teachers. Book club members scored higher on the measure of faculty mindfulness than non-participants in the book club.

Table 21

Mean Scores in Faculty Mindfulness by Gender and Book Club Membership

Demographic Variable	Grouping			
Gender	Male $(\underline{N} = 32)$	Female ( $\underline{N} = 421$ )		
<u>M</u>	4.527	4.419		
<u>SD</u>	1.081	.936		
Book Club Member	Participant ( $\underline{N} = 178$ )	Non-Participant ( $\underline{N} = 277$ )		
<u>M</u>	4.447	4.419		
<u>SD</u>	1.022	.896		

Table 22 displays the results of the one-way analyses of variance in faculty mindfulness by teacher demographic data. Specifically, significant differences were found in faculty mindfulness by the demographic characteristics of age (F = 11.184, p < .01), years of total teaching experience (F = 9.506, p < .01), and years experience in the current school (F = 7.25, p < .01). Participants who were older than 50, with more than 15 years of total teaching experience, and more than 15 years of service in the current school building scored significantly higher in faculty mindfulness. No significant differences were found in faculty mindfulness by gender (F = .382, p > .05) job description (F = .444, p > .05), and participation in the *Conscious Discipline* book club (F = .096, p > .05).

Table 22

One-Way Analyses of Variance in Faculty Mindfulness by Teacher Demographic Data

Variable and Source	<u>df</u>	SS	MS	<u>F</u>
Age in Years				
Between groups	3	27.902	9.301	11.184**
Within groups	445	370.049	.832	
Gender				
Between groups	1	.343	.343	.382
Within groups	451	404.407	.897	
Years of teaching experience				
Between groups	3	24.170	8.057	9.506**
Within groups	451	382.234	.848	
Years in current school				
Between groups	3	18.717	6.239	7.258**
Within groups	451	387.687	.860	
Job description				
Between groups	3	1.198	.399	.444
Within groups	450	404.7	.899	
Participation in book club				
Between groups	1	.086	.086	.096
Within groups	453	406.317	.897	

<sup>\*\*</sup> p < .01

In conclusion, this section examined the relationship between the constructs and the demographic data of teachers. Significant variances in mean scores by teacher demographic characteristics were found in Attitudes and Beliefs about Classroom Control, collective teacher efficacy, faculty trust in clients, academic emphasis, and faculty mindfulness. The mean scores in enabling bureaucracy did not vary significantly by teacher. Because the unit of analysis in this study is the school, the next section investigated the relationships of those constructs to characteristics of the school in which the teachers worked.

Survey results analyzed by school characteristics.

First, the researcher examined school size and scores on Attitudes and Beliefs about Classroom Control. Table 23 reports the means and standard deviations for the three measures of Attitudes and Beliefs about Classroom Control by size of school. Schools were grouped into four categories: student enrollment less than 450 students, student enrollment between 450 students and 550 students, student enrollment between 550 students and 650 students, and student enrollment over 650 students. Schools with between 450 and 550 students scored higher on all measure of Attitudes and Beliefs about Classroom Control than the other three groups of schools, although the means for People Management were identical to schools with 550 to 650 students. The lowest scores on Attitudes and Beliefs about Classroom Control were from teachers in schools with less than 450 students.

Table 23

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher by Size of School (N = 487)

Number of Students	< 450	450 - 550	550 - 650	> 650
	$(\underline{N} = 53)$	$(\underline{N} = 150)$	$(\underline{N} = 229)$	$(\underline{N} = 55)$
ABCC Total				
<u>M</u>	2.591	2.817	2.788	2.776
<u>SD</u>	.338	.398	.318	.290
ABCC Instructional Management				
<u>M</u>	2.607	2.940	2.877	2.916
SD	.412	.460	.458	.417
ABCC People Management				
<u>M</u>	2.568	2.673	2.673	2.615
SD	.393	.457	.373	.384

One-way analyses of variance were conducted for teacher beliefs on school characteristics of the sample. Table 24 lists the results of the analyses of variance for the three measures of Attitudes and Beliefs about Classroom Control and the size of the school. The three analyses of variance showed significant variances in Total Attitudes and Beliefs about Classroom Control (F = 5.913, p < .01) and the subscale measure of Instructional Management (F = 7.509 p < .01). People Management (F = 1.262 p > .05) showed no significant variance.

Table 24

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by Size of

School

Variable and Source	<u>df</u>	SS	MS	<u>F</u>
ABCC Total				
Between groups	3	2.096	.699	5.913**
Within groups	483	57.069	.118	
ABCC Instructional Management				
Between groups	3	4.553	1.518	7.509**
Within groups	484	97.816	.202	
ABCC People Management				
Between groups	3	.618	.206	1.262
Within groups	483	78.908	.163	

<sup>\*\*</sup> *p* < .01

Both Tukey HSD and Scheffe post hoc analyses divided the schools into two groups. Teachers in schools with fewer than 450 students scored significantly lower on the total ABCC and the subscale of Instructional Management than teachers in schools with more than 450 students, meaning that teachers in those schools were less likely to intervene to control student behavior.

Next, teacher beliefs were disaggregated by the percentage of students receiving free or reduced lunch. Schools were divided into four groups by percent of students receiving free or reduced lunch: less than 20%, between 20% and 35%, between 35% and 50%, and greater than 50%. Table 25 shows the means and standard deviations for the three measures of teacher

Table 25

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher by SES (N = 487)

% Low SES	< 20	20-35	35-50	> 50
	$(\underline{N} = 61)$	$(\underline{N} = 227)$	$(\underline{N} = 134)$	$(\underline{N} = 65)$
ABCC Total				
<u>M</u>	2.736	2.727	2.815	2.888
<u>SD</u>	.285	.349	.387	.283
ABCC Instructional Management				
<u>M</u>	2.844	2.833	2.910	2.952
<u>SD</u>	.402	.460	.499	.404
ABCC People Management				
<u>M</u>	2.608	2.600	2.699	2.801
<u>SD</u>	.357	.389	.444	.376

beliefs. Teachers in schools with more than 50% students receiving free or reduced lunch scored the highest on the total measure of Attitudes and Beliefs about Classroom Control and the subscales of Instructional Management and People Management.

Table 26 shows the results of the analyses of variance in teacher beliefs by the percentage of students receiving free and reduced lunch. Generally, teachers in schools with greater percentages of students receiving free or reduced lunch scored significantly higher on the total measure of Attitudes and Beliefs about Classroom Control (F = 4.630, p < .01) and the subscale

Table 26

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by SES

Variable and Source	<u>df</u>	SS	MS	<u>F</u>
ABCC Total				
Between groups	3	1.654	.551	4.630**
Within groups	483	57.511	.119	
ABCC Instructional Management				
Between groups	3	1.004	.335	1.597
Within groups	484	101.365	.209	
ABCC People Management				
Between groups	16	7.582	.474	5.154**
Within groups	470	71.945	.153	

<sup>\*\*</sup> *p* < .01

measure of People Management (F = 5.154, p < .01) than teachers in schools with lower percentages of students receiving free or reduced lunch. Higher scores on Attitudes and Beliefs about Classroom Management suggested a more controlling approach to classroom management. The subscale measure of Instructional Management showed no significant variance (F = 1.597, p > .05).

Scores on the Attitudes and Beliefs about Classroom Control were analyzed by percentage of students identified as gifted. Again the schools were divided into four groups: less than 3.5% students identified as gifted, between 3.5% and 5.5% students identified as gifted,

between 5.5% and 7.5% students identified as gifted, and over 7.5% students identified as gifted. Table 27 displays the Attitudes and Beliefs about Classroom Control means and standard deviations for each category of school. Teachers in schools with less than 3.5% of students identified as gifted scored higher than teachers in other schools on each measure of Attitudes and Beliefs about Classroom Control, followed by schools with between 5.5% and 7.5% of students identified as gifted. Schools with more than 7.5% of students identified as gifted scored lower on each measure of Attitudes and Beliefs about Classroom Control, followed by schools with between 3.5% and 5.5% of students identified as gifted.

Table 27

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher by % Gifted (N = 487)

% Gifted	< 3.5	3.5 - 5.5	5.5 – 7.5	> 7.5
	$(\underline{N} = 147)$	$(\underline{N} = 160)$	$(\underline{N} = 99)$	$(\underline{N} = 81)$
ABCC Total				
<u>M</u>	2.877	2.707	2.819	2.663
SD	.325	.357	.339	.331
ABCC Instructional Management				
<u>M</u>	2.956	2.797	2.948	2.772
SD	.449	.449	.494	.411
ABCC People Management				
<u>M</u>	2.774	2.598	2.664	2.541
SD	.400	.412	.367	.394

Table 28 shows results of the analyses of variance for teacher beliefs on the percentage of students in the school identified as gifted. Generally, teachers in schools with greater percentages of students identified as gifted scored significantly lower on the total measure of Attitudes and Beliefs about Classroom Control (F = 9.994, p < .01), the subscale measure of Instructional Management (F = 5.428, p < .01), and the subscale measure of People Management (F = 7.799, p < .01). Lower scores on Attitudes and Beliefs about Classroom Control indicate a less Table 28

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by % Gifted

Variable and Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
ABCC Total				
Between groups	3	3.458	1.153	9.994**
Within groups	483	55.706	.115	
ABCC Instructional Management				
Between groups	3	3.332	1.111	5.428**
Within groups	484	99.037	.205	
ABCC People Management				
Between groups	3	3.674	1.225	7.799**
Within groups	483	75.852	.157	

<sup>\*\*</sup> *p* < .01

controlling approach to classroom management. Scheffe and Tukey HSD post hoc analyses divided the schools into two subsets. The subset with higher scores on Attitudes and Beliefs about Classroom Control contained schools with less than 3.5 % of students identified as gifted and schools with between 5.5% of students identified as gifted. The subset with lower scores on Attitudes and Beliefs about Classroom Control contained schools with more than 7.5% of students identified as gifted and between 3.5% and 5.5% of students identified as gifted.

Table 29 displays the means and standard deviations for Attitudes and Beliefs about

Classroom Control disaggregated by the percentage of students receiving special education

Table 29

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher by % SPED (N =

<u>487)</u>

% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 80)$	$(\underline{N} = 223)$	$(\underline{N} = 81)$	$(\underline{N} = 103)$
ABCC Total				
<u>M</u>	2.615	2.829	2.839	2.727
<u>SD</u>	.301	.332	.341	.383
ABCC Instructional Management				
<u>M</u>	2.692	2.963	2.923	2.775
<u>SD</u>	.377	.469	.454	.444
ABCC People Management				
<u>M</u>	2.523	2.668	2.734	2.669
<u>SD</u>	.354	.393	.428	.428

services. Schools are divided into four groups: schools with less than 9% students receiving special education services, schools with between 9% and 12% of students receiving special education services, schools with between 12% and 15% of students receiving special education services, and schools in which over 15% of students receive special education services. Schools with less than 9% of students receiving special education services had lower means on all measures of Attitudes and Beliefs about Classroom Control.

Table 30 shows the results of an analysis of variance in teacher beliefs by the percentage of students in the school receiving special education services. Teachers in schools with a lower Table 30

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by % SPED

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
ABCC Total				
Between groups	3	3.255	1.085	9.373**
Within groups	483	55.909	.116	
ABCC Instructional Management				
Between groups	3	5.634	1.878	9.397**
Within groups	484	96.735	.200	
ABCC People Management				
Between groups	3	1.952	.651	4.052**
Within groups	483	77.574	.161	

<sup>\*\*</sup> *p* < .01

Attitudes and Beliefs about Classroom Control (F = 9.373, p < .01), the subscale of Instructional Management (F = 9.397, p < .01), and the subscale of People Management (F = 4.052, p < .01) than teachers in schools with a higher percentage of students receiving special education services.

Next, means scores on Attitude and Beliefs about Classroom Control were disaggregated by percentage of parents with PTA membership. Schools were divided into four groups by percentage of PTA memberships: schools with less than 60%, schools with between 60% and 80%, schools with between 80% and 100%, and schools with greater than 100%. Table 31 shows Table 31

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher by % PTA

Membership (N = 487)

% PTA Membership	< 60	60 - 80	80 - 100	> 100
	$(\underline{N} = 86)$	$(\underline{N} = 73)$	$(\underline{N} = 118)$	$(\underline{N} = 210)$
ABCC Total				
<u>M</u>	2.820	2.793	2.817	2.724
<u>SD</u>	.357	.352	.308	.362
ABCC Instructional Management				
<u>M</u>	2.929	2.837	2.906	2.841
<u>SD</u>	.500	.455	.399	.472
ABCC People Management				
<u>M</u>	2.686	2.736	2.703	2.587
SD	.458	.395	.378	.391

the means and standard deviations for all measures of Attitudes and Beliefs about Classroom Control. Except for the subscale measure of Instructional Management (2.841), teachers in schools with over 100% PTA membership scored lower on Attitudes and Beliefs about Classroom Control than teachers in schools with less than 100% PTA membership. Teachers in schools with between 60% and 80% PTA membership scored lower on the subscale measure of Instructional Management (2.837) than teachers in schools with either less than 60% or greater than 80% PTA membership.

An analysis of variance was completed for scores in Teacher Beliefs about Classroom Control by the percentage of parents in the school who joined the PTA. Results are displayed in Table 32. Significant variances in means were found in the measure of Total Attitudes and Beliefs about Classroom Control (F = 2.651, p < .05) and the subscale measure of People Management (F = 3.737, p < .05). The subscale measure of Instructional Management (F = 1.110, p > .05) showed no significant variance in mean scores. The Tukey HSD post hoc analysis divided the schools into two subsets on just the subscale measure of People Management. Teachers in schools with over 100% PTA membership scored lower on the subscale measure of People Management than teachers in schools with less than 100% PTA membership. Teachers in schools with 60% to 80% PTA membership scored higher on the subscale measure of People Management than teachers in schools with either less than 60% or greater than 80% PTA membership.

Table 32

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by % PTA

Membership

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
ABCC Total				
Between groups	3	.959	.320	2.651*
Within groups	483	58.206	.121	
ABCC Instructional Management				
Between groups	3	.699	.233	1.110
Within groups	484	101.670	.210	
ABCC People Management				
Between groups	3	1.804	.601	3.737*
Within groups	483	77.722	.161	

<sup>\*</sup> *p* < .05

Finally, means scores on Attitudes and Beliefs about Classroom Control were compared by number of years schools had held a *Conscious Discipline* book club. Table 33 displays the means and standard deviations. Teachers in schools with two years of book club had higher means on the total Attitudes and Beliefs about Classroom Control and the subscale measures of Instructional Management and People Management than teachers in schools with just one year of book club. This means they were more likely to be controlling in classroom management than teachers in schools with just one year of the book club.

Table 33

Mean Scores in Attitudes and Beliefs about Classroom Control by Teacher by Years of Book

Club (N = 487)

	One Year ( $\underline{N} = 240$ )		Two Years ( $\underline{N} = 247$ )	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
ABCC Total	2.732	.351	2.815	.343
ABCC Instructional Management	2.800	.446	2.941	.476
ABCC People Management	2.650	.409	2.660	.400

Table 34 shows the results of an analysis of variance in Teacher Beliefs about Classroom Control based on years the school has held a *Conscious Discipline* book club. Teachers in schools with one year of book club scored significantly lower in both the total measure of Attitudes and Beliefs about Classroom Control (F = 6.914, p < .01) and the subscale measure of Instructional Management (F = 11.753, p < .01) as compared to teachers in schools with two years of book club. This meant that teachers in schools with just one year of book club were less likely to be interventionist, or controlling, than teachers in schools with more than one year of book club. No significant variance was found in the subscale of People Management (F = .078, p > .05).

Table 34

One-Way Analyses of Variance in Attitudes and Beliefs about Classroom Control by Years of

Book Club

Variable and Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
ABCC Total				
Between groups	1	.832	.832	6.914**
Within groups	485	58.333	.120	
ABCC Instructional Management				
Between groups	1	2.417	2.417	11.753**
Within groups	485	99.952	.206	
ABCC People Management				
Between groups	1	.013	.013	.078
Within groups	485	79.513	.164	

<sup>\*\*</sup> *p* < .01

Following teacher beliefs, the researcher analyzed mean scores on collective teacher efficacy disaggregated by size of school. The Collective Teacher Belief Scale is a 9-point Likert scale containing subscales of Instructional Strategies and Student Discipline. Schools were grouped into four categories by number of students: less than 450 students, 450 students to 550 students, 550 students to 650 students, and over 650 students. Table H18, found in the appendixes, displays the means and standard deviations for collective teacher efficacy disaggregated by school size. Teachers in schools with fewer than 450 students had higher means on the total collective teacher efficacy measure (7.990) and the subscale of Student

Discipline (7.940). Teachers in schools with more than 650 students had higher means on the subscale measure of Instructional Strategies (8.042). The lowest means for collective teacher efficacy were: 7.686 in schools with 450 to 550 students in the total measure, 7.844 in schools with 550 to 650 students in the subscale of Instructional Strategies, and 7.524 in schools with 450 to 550 students on the subscale measure of Student Discipline.

Table H19, found in the appendixes, displays the results of the one-way analyses of variance in collective teacher efficacy by size of school. Results of the analyses of variance showed no significant variances in the mean scores of total collective teacher efficacy (F = 1.450, p > .05), the subscale measure of Instructional Strategies (F = 1.021, p > .05), and the subscale measure of Student Discipline (F = 2.100, p > .05) by size of school.

Next, collective teacher efficacy scores were disaggregated by the percentage of SES. Schools were divided into four groups based on percentage of students receiving free or reduced lunch: less than 20% of students receiving free or reduced lunch, between 20% and 35%, between 35% and 50%, and greater than 50% of students receiving free or reduced lunch. Table 35 displays the means and standard deviations for collective teacher efficacy based on SES. Teachers in schools with more than 50% of students receiving free or reduced lunch had lower means on the total measure of collective teacher efficacy (7.319), the subscale measure of Instructional Strategies (7.481), and the subscale measure of Student Discipline (7.156). Teachers in schools with the highest means included: a total collective teacher efficacy mean of 7.865 for teachers in schools in which between 20% and 35% of students receive free or reduced lunch, the subscale of Instructional Strategies mean of 8.101 for teachers in schools in which

Table 35

Mean Scores in Collective Teacher Efficacy by Teacher by % SES (N = 476)

% SES	< 20%	20% - 35%	35% - 50%	> 50%
	$(\underline{N} = 61)$	$(\underline{N} = 225)$	$(\underline{N} = 128)$	$(\underline{N} = 62)$
Collective Teacher Efficacy Total				
<u>M</u>	7.756	7.865	7.725	7.319
SD	.854	.823	1.059	1.216
CTE Instructional Strategies				
<u>M</u>	8.101	7.984	7.816	7.481
SD	.813	.858	1.125	1.249
CTE Student Discipline				
<u>M</u>	7.410	7.747	7.633	7.156
SD	1.045	.984	1.136	1.302

fewer than 20% of students received free or reduced lunch, and the subscale mean of 7.747 for teachers in schools in which 20% to 30% of students received free or reduced lunch.

Significant differences in collective teacher efficacy means were also found by the percentage of students in the school receiving free or reduced lunch. As shown in Table 36, significant variances in means were found in total collective teacher efficacy (F = 5.360, p < .01, the subscale measure of Instructional Strategies (F = 5.381, p < .01), and the subscale measure of Student Discipline (F = 5.555, p < .01) by the percentage of students receiving free or reduced lunch. Both Tukey HSD and Scheffe post hoc analyses resulted in two subsets. Teachers in

Table 36

One-Way Analyses of Variance in Collective Teacher Efficacy by SES

Variable and Source	<u>df</u>	SS	MS	<u>F</u>
Collective Teacher Efficacy Total				
Between groups	3	14.581	4.860	5.360**
Within groups	472	428.021	.907	
CTE Instructional Strategies				
Between groups	3	15.748	5.249	5.381**
Within groups	472	460.453	.976	
CTE Student Discipline				
Between groups	3	19.403	6.468	5.555**
Within groups	472	549.952	1.164	

<sup>\*\*</sup> *p* < .01

schools with more than 50% of students receiving free or reduced lunch scored significantly lower on all measures of collective teacher efficacy than teachers in schools with less than 50% of students receiving free or reduced lunch.

Table 37 displays the means and standard deviations for collective teacher efficacy disaggregated by the percentage of students identified as gifted. Schools are divided into four groups: less than 3.5% of students identified as gifted, between 3.5% and 5.5% of students identified as gifted, between 5.5% and 7.5% of students identified as gifted, and over 7.5% of students identified as gifted. The lowest mean scores for each measure were for teachers in

Table 37

Mean Scores in Collective Teacher Efficacy by Teacher by % Gifted (N = 476)

% Gifted	< 3.5	3.5 - 5.5	5.5 - 7.5	> 7.5
	$(\underline{N} = 140)$	$(\underline{N} = 156)$	$(\underline{N} = 98)$	$(\underline{N} = 82)$
Collective Teacher Efficacy Total				
<u>M</u>	7.471	7.912	7.733	7.891
<u>SD</u>	1.164	.816	.882	.853
CTE Instructional Strategies				
<u>M</u>	7.577	7.993	7.881	8.230
<u>SD</u>	1.210	.880	.901	.779
CTE Student Discipline				
<u>M</u>	7.366	7.831	7.587	7.553
<u>SD</u>	1.246	.911	1.098	1.062

schools with less than 3.5% of students identified as gifted: 7.471 for total collective teacher efficacy, 7.577 for the subscale of Instructional Strategies, and 7.336 for the subscale of Student Discipline. The highest mean scores were 7.912 for total collective teacher efficacy in schools with 3.5% to 5.5% of identified gifted, 8.230 for the subscale of Instructional Strategies in schools with greater than 7.5% of students identified as gifted, and 7.831 for the subscale of Student Discipline for teachers in schools with between 3.5% and 5.5% of students identified as gifted.

Table 38 shows results of the analysis of variance conducted for variances in the means of collective teacher efficacy by the percentage of students in a school identified as gifted.

Table 38

One-Way Analyses of Variance in Collective Teacher Efficacy by % Gifted

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Collective Teacher Efficacy Total				
Between groups	3	16.584	5.528	6.124**
Within groups	472	426.019	.903	
CTE Instructional Strategies				
Between groups	3	24.790	8.263	8.640**
Within groups	472	451.411	.956	
CTE Student Discipline				
Between groups	3	16.230	5.410	4.620**
Within groups	472	552.722	1.171	

<sup>\*\*</sup> *p* < .01

Significant variances among teachers in schools were found in the total measure of collective teacher efficacy (F = 6.124, p < .01) and the subscale measures of Instructional Strategies ( $F = 8.640 \ p < .01$ ) and Student Discipline ( $F = 4.620 \ p < .01$ ). Scheffe and Tukey HSD post hoc analyses divided total collective teacher efficacy into two subsets: teachers in schools with less than 3.5% of identified gifted and between 5.5% and 7.5% of identified gifted had significantly lower mean scores on total collective teacher efficacy; teachers in schools with greater than 7.5% of identified gifted and between 3.5% and 5.5% of identified gifted had significantly higher mean scores on total collective teacher efficacy. Scheffe post hoc analysis divided the subscale

measure of Instructional Strategies into two subsets: teachers in schools with less than 3.5% of identified gifted and between 5.5% and 7.5% of identified gifted had significantly lower mean scores on total collective teacher efficacy; teachers in schools with greater than 7.5% identified gifted and between 3.5% and 5.5% of identified gifted had significantly higher mean scores on total collective teacher efficacy. Tukey HSD post hoc analysis divided the schools into three subsets for Instructional Strategies: the lowest mean scores were for teachers in schools with less than 3.5% of identified gifted, the highest mean scores were for teachers in schools with more than 7.5% of students identified as gifted, and the middle mean scores were for teachers in schools with between 3.5% and 7.5% of students identified as gifted. Scheffe and Tukey HSD post hoc analyses divided the subscale measure of Student Discipline into two subsets: teachers in schools with less than 3.5% identified gifted and more than 7.5% of identified gifted had significantly lower mean scores on Student Discipline; teachers in schools with between 3.5% and 7.5% of identified gifted had significantly greater mean scores on Student Discipline.

Next, Table 39 contains the mean scores on collective teacher efficacy disaggregated by the percentage of students receiving special education services. Schools are divided into four groups: schools with less than 9% students receiving special education services, schools with between 9% and 12% of students receiving special education services, schools with between 12% and 15% of students receiving special education services, and schools in which over 15% of students receive special education services. Teachers in schools with less than 9% of students receiving special education services had the greatest mean scores in total collective teacher efficacy (8.013), the subscale of Instructional Strategies (8.214), and the subscale of Student

Table 39

Mean Scores in Collective Teacher Efficacy by Teacher by % SPED (N = 476)

% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 81)$	$(\underline{N} = 221)$	$(\underline{N} = 76)$	$(\underline{N} = 98)$
Collective Teacher Efficacy Total				
<u>M</u>	8.013	7.616	7.673	7.855
<u>SD</u>	.773	1.015	1.044	.880
CTE Instructional Strategies				
<u>M</u>	8.214	7.786	7.785	7.930
<u>SD</u>	.788	1.051	1.104	.910
CTE Student Discipline				
<u>M</u>	7.813	7.447	7.561	7.781
SD	.885	1.187	1.112	.965

Discipline (7.813). Teachers in schools with between 9% and 12% of students receiving special education services had the lowest mean scores in total collective teacher efficacy (7.616) and the subscale measure of Student Discipline (7.447). Teachers in schools with between 12% and 15% of students receiving special education services had the lowest mean score on the subscale of Instructional Strategies (7.785).

Table 40 shows results of the analysis of variance conducted in the mean scores of collective teacher efficacy by the percentage of students in a school receiving special education services. Mean scores of total collective teacher efficacy (F = 4.402, p < .01), the subscale

Table 40

One-Way Analyses of Variance in Collective Teacher Efficacy by % SPED

Variable and Source	<u>df</u>	SS	MS	<u>F</u>
Collective Teacher Efficacy Total				
Between groups	3	11.086	3.695	4.042**
Within groups	472	431.516	.914	
CTE Instructional Strategies				
Between groups	3	11.895	3.965	4.031**
Within groups	472	464.305	.984	
CTE Student Discipline				
Between groups	3	12.179	4.060	3.442*
Within groups	472	556.773	1.180	

<sup>\*\*</sup>*p* < .01; \**p* < .05

measure of Instructional Strategies (F = 4.031, p < .01), and the subscale measure of Student Discipline (F = 3.442, p < .05) showed significant variances. Scheffe and Tukey HSD post hoc analyses found two subsets for total collective teacher efficacy and the subscale of Instructional Strategies. Teachers in schools with greater than 15% and in schools with less than 9% of students receiving special education services had greater mean scores. Teachers in schools with between 9% and 15% of students receiving special education services had lower mean scores on total collective teacher efficacy and the subscale of Instructional Strategies. However, Scheffe

and Tukey HSD post hoc analyses placed the schools in only one group for the subscale measure of Student Discipline.

Mean scores for collective teacher efficacy were disaggregated by percentage of parent membership in the PTA. The schools were divided into four groups: schools with less than 60% PTA membership, schools with between 60% and 80% PTA membership, schools with between 80% and 100% PTA membership, and schools with greater than 100% PTA membership. As shown in Table 41, teachers in schools with over 100% membership in the PTA had the highest mean scores in all measures of collective teacher efficacy: 7.928 for total collective teacher efficacy, 8.061 for the subscale of Instructional Strategies, and 7.795 for the subscale of Student Table 41

Mean Scores in Collective Teacher Efficacy by Teacher by % PTA Membership (N = 476)

% PTA Membership	< 60	60 - 80	80 – 100	> 100
Measure	$(\underline{N} = 82)$	$(\underline{N} = 71)$	$(\underline{N} = 117)$	$(\underline{N} = 206)$
Collective Teacher Efficacy Total				
<u>M</u>	7.723	7.606	7.512	7.928
<u>SD</u>	1.103	.871	1.031	.864
CTE Instructional Strategies				
<u>M</u>	7.856	7.732	7.702	8.061
<u>SD</u>	1.192	.913	1.032	.903
CTE Student Discipline				
<u>M</u>	7.589	7.479	7.322	7.795
<u>SD</u>	1.134	1.022	1.197	1.006

Discipline. The lowest mean scores for collective teacher efficacy were for teachers in schools with 80% to 100% PTA membership: 7.512 for total collective teacher efficacy, 7.702 for the subscale of Instructional Strategies, and 7.322 for the subscale of Student Discipline.

Next, Table 42 shows results of the analysis of variance conducted in means of collective teacher efficacy by the percentage of parent PTA membership. Teachers in schools with over 100% of parents with PTA membership scored significantly higher on the measures of total collective teacher efficacy (F = 5.378, p < .01), the subscale measure of Instructional Strategies (F = 4.061 p < .01), and the subscale measure of Student Discipline (F = 5.105 p < .01) than teachers in schools with lower percentages of parents with PTA membership. Tukey HSD and Scheffe post hoc analyses resulted in two groups for total collective teacher efficacy and the Table 42

One-Way Analyses of Variance in Collective Teacher Efficacy by % PTA Membership

Variable and Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
CTE Total				
Between groups	3	14.630	4.877	5.378**
Within groups	472	427.972	.907	
CTE Instructional Strategies				
Between groups	3	11.983	3.994	4.061**
Within groups	472	464.218	.984	
CTE Student Discipline				
Between groups	3	17.882	5.961	5.105**
Within groups	472	551.070	1.168	

<sup>\*\*</sup>*p* < .01

subscale of Student Discipline, more than 100% PTA membership and less than 100% PTA membership. The subscale of Instructional Strategies contained one group with all 17 schools.

Schools in the study had completed one year or two years of *Conscious Discipline* book clubs. Table 43 displays the means and standard deviations of teachers in schools with one year of book club and in schools with two years of book club. Teachers in schools with one year of book club scored higher in all measures of collective teacher efficacy than teachers in schools with two years of book club: 7.825 for total collective teacher efficacy (7.663 for schools with two years of book club); 7.991 for the subscale of Instructional Strategies (7.791 for schools with two years of book club); and 7.660 for the subscale of Student Discipline (7.536 for schools with two years of book club).

Table 43

Mean Scores in Collective Teacher Efficacy by Book Club Participation (N = 476)

	One Year $(\underline{N} = 183)$		Two Years ( $\underline{N} = 293$ )	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
CTE Total	7.825	.913	7.663	1.008
CTE Instructional Strategies	7.991	.930	7.791	1.057
CTE Student Discipline	7.660	1.034	7.536	1.148

Table 44 shows the results of the analysis of variance in collective teacher efficacy by years of participation in book clubs. A significant variance in means was found for the subscale measure of Instructional Strategies (F = 4.767, p < .05); schools with two years of book club

Table 44

One-Way Analyses of Variance in Collective Teacher Efficacy by Years of Book Club

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
CTE Total				
Between groups	1	3.114	3.114	3.359
Within groups	474	439.488	.927	
CTE Instructional Strategies				
Between groups	1	4.742	4.742	4.767*
Within groups	474	471.459	.995	
CTE Student Discipline				
Between groups	1	1.828	1.828	1.527
Within groups	474	567.125	1.196	

<sup>\*</sup>*p* < .05

scored significantly lower in Instructional Strategies. No significant variances in means were found in either the total collective teacher efficacy measure ( $F = 3.359 \, p > .05$ ) or the subscale measure of Student Discipline (F = 1.529, p > .05).

The next construct, faculty trust in clients, was analyzed for its relationships to school demographic variables. Table 45 contains means and standard deviations for size of school, percentage of students receiving free or reduced lunch, percentage of students identified as gifted, percentage of students receiving special education services, and years of participation in the book club. Teachers in schools with under 450 students and over 650 students had greater mean scores on faculty trust (4.733 and 4.775, respectively). When faculty trust in clients was

Table 45

Mean Scores in Faculty Trust in Clients by School Demographic Data (N = 476)

Demographic Variable	Grouping			
Size of School	< 450	450 - 550	550 -650	> 650
	$(\underline{N} = 52)$	$(\underline{N} = 143)$	$(\underline{N} = 224)$	$(\underline{N} = 55)$
<u>M</u>	4.733	4.237	4.258	4.775
<u>SD</u>	.500	.912	.853	.692
% SES	< .2	.2 35	.355	> .5
	$(\underline{N} = 61)$	$(\underline{N} = 224)$	$(\underline{N} = 128)$	$(\underline{N} = 61)$
<u>M</u>	4.820	4.597	4.191	3.412
<u>SD</u>	.674	.708	.832	.697
% Gifted	< 3.5	3.5 - 5.5	5.5 - 7.5	> 7.5
	$(\underline{N} = 139)$	$(\underline{N} = 156)$	$(\underline{N} = 97)$	$(\underline{N} = 82)$
<u>M</u>	3.793	4.491	4.475	4.956
<u>SD</u>	.885	.699	.676	.655
% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 81)$	$(\underline{N} = 219)$	$(\underline{N} = 76)$	$(\underline{N} = 98)$
<u>M</u>	4.817	4.286	3.879	4.537
<u>SD</u>	.707	.901	.695	.706
% PTA Membership	< 60	60 - 80	80 - 100	> 100
	$(\underline{N} = 82)$	$(\underline{N} = 70)$	(N = 116)	$(\underline{N} = 206)$
<u>M</u>	4.001	4.399	4.170	4.605
<u>SD</u>	.780	.734	.916	.848

disaggregated by percentage of students receiving free or reduced lunch, as SES increased, the mean scores decreased from 4.820 for teachers in schools with less than 20% of students receiving free or reduced lunch to 3.412 for teachers in schools with more than 50% of students receiving free or reduced lunch. When faculty trust in clients mean scores were disaggregated by the percentage of students identified as gifted, teachers in schools with more than 7.5% of students identified as gifted had the greatest mean scores (4.956); teachers in schools with less than 3.5% of students identified as gifted had the lowest mean scores (3.793). When faculty trust in clients mean scores were disaggregated by the percentage of students receiving special education services, teachers in schools with less than 9% of students receiving special education services had the greatest mean scores (4.817) followed by teachers in schools with more than 15% of students receiving special education services (4.537). Teachers in schools with between 12% and 15% of students receiving special education services had the lowest mean scores (3.879). When faculty trust in clients mean scores were disaggregated by the percentage of membership in the PTA, the greatest mean scores were found in schools with more than 100% PTA membership (4.605) followed by schools with 60% to 80% PTA membership (4.399). The lowest mean scores were found in schools with less than 60% PTA membership. When faculty trust in clients mean scores were disaggregated by number of years for the book club, teachers in schools with one year of book club have a mean score of 4.533 with a standard deviation of .802. Teachers in schools with two years of book club have a lower mean score on faculty trust in clients: 4.201 with a standard deviation of .861.

As shown in Table 46, the analyses of variance in faculty trust in clients showed

Table 46

One-Way Analyses of Variance in Faculty Trust in Clients by School Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Size of school				
Between groups	3	21.179	7.060	10.397**
Within groups	470	319.139	.679	
% SES				
Between groups	3	84.053	28.018	51.385**
Within groups	470	256.266	.545	
% gifted				
Between groups	3	77.816	25.939	46.442**
Within groups	470	262.503	.559	
% SPED				
Between groups	3	38.770	12.923	20.142**
Within groups	470	301.549	.642	
% PTA membership				
Between groups	3	27.199	9.066	13.609**
Within groups	470	313.119	.666	
Years of book club				
Between groups	1	13.018	13.018	18.773**
Within groups	472	327.301	.693	

<sup>\*\*</sup>*p* < .01

significant variances by school characteristics. Teachers in large schools (greater than 650 students) and teachers in small schools (less than 450 students) scored significantly higher in faculty trust in clients (F = 10.397, p < .01). Teachers in schools with greater percentages of students receiving free or reduced lunch scored significantly lower on the measure of faculty trust in clients (F = 51.385, p < .01) than teachers in schools with lower percentages of students receiving free or reduced lunch. Teachers in schools with greater percentage of students identified as gifted scored significantly higher on the measure of faculty trust in clients (F = 46.442, p < .01) than teachers in schools with lower percentages of students identified as gifted. Teachers in schools with a greater percentage of parents with membership in the PTA scored higher on faculty trust in clients than teachers in schools with one of year of book club scored significantly higher in faculty trust in clients than teachers in schools with two years of book club (F = 18.773, p < .01).

Table 47 shows the means and standard deviations for mean scores in academic emphasis analyzed by school demographic data. Teachers in schools with more than 650 students and less than 450 students had greater mean scores on academic emphasis (3.066 and 3.039, respectively) than teachers in schools with 450 to 550 students (2.768) and teachers in schools with 550 to 650 students (2.748). Mean scores on academic emphasis ranged from a low of 2.292 for teachers in schools with more than 50% of students receiving free or reduced lunch to a high of 3.138 for teachers in schools with less than 20% of students receiving free or reduced lunch. Mean scores on academic emphasis ranged from a low of 2.507 for teachers in schools with less than 3.5% students identified as gifted to a high of 3.205 for teachers in schools with more than 7.5%

Table 47

Mean Scores in Academic Emphasis by School Demographic Data (N = 474)

Demographic Variable	Grouping			
Size of School	< 450	450 - 550	550 -650	> 650
	$(\underline{N} = 52)$	$(\underline{N} = 143)$	$(\underline{N} = 224)$	$(\underline{N} = 55)$
<u>M</u>	3.039	2.768	2.748	3.066
<u>SD</u>	.374	.508	.538	.436
% SES	< 20	20 - 35	35 - 50	> 50
	$(\underline{N} = 61)$	$(\underline{N} = 224)$	$(\underline{N} = 128)$	$(\underline{N} = 61)$
<u>M</u>	3.138	2.925	2.747	2.292
<u>SD</u>	.428	.463	.466	.470
% Gifted	< 3.5	3.5 - 5.5	5.5 - 7.5	> 7.5
	$(\underline{N} = 139)$	$(\underline{N} = 156)$	$(\underline{N} = 97)$	$(\underline{N} = 82)$
<u>M</u>	2.507	2.899	2.831	3.205
<u>SD</u>	.520	.425	.461	.407
% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 81)$	$(\underline{N} = 219)$	$(\underline{N} = 76)$	$(\underline{N} = 98)$
<u>M</u>	3.111	2.765	2.571	2.908
<u>SD</u>	.444	.539	.449	.441
% PTA Membership	< 60	60 - 80	80 - 100	> 100
	$(\underline{N} = 82)$	$(\underline{N} = 70)$	$(\underline{N} = 116)$	$(\underline{N} = 206)$
<u>M</u>	2.615	2.817	2.759	2.944
<u>SD</u>	.462	.473	.592	.473

students identified as gifted. Mean scores on academic emphasis ranged from a low of 2.571 for teachers in schools where 12% to 15% of students receive special education services to a high of 3.111 for teachers in schools where less than 9% of students receive special education services. Mean scores on academic emphasis ranged from a low of 2.615 for teachers in schools with less than 60% PTA membership to a high of 2.944 for teachers in schools with more than 100% PTA membership. Teachers in schools with one year of book club had mean scores of 2.928 on academic emphasis; teachers in schools with two years of book club had mean scores of 2.722 on academic emphasis.

Table 48 shows the results of the analyses of variance in the measure of academic emphasis by school characteristics. Significant variances were found in scores on the measure of academic emphasis by the school characteristic of school size (F = 9.685, p < .01). Teachers in schools with student populations over 650 and under 450 scored significantly higher on the measure of academic emphasis than schools with between 450 and 650 students. Academic emphasis varied significantly among teachers in schools based on SES (F = 41.381, p < .01). As the school increased in the percentage of students receiving free or reduced lunch, the mean scores of teachers on academic emphasis decreased. Academic emphasis varied significantly among teachers in schools based on percentage of students identified as gifted (F = 42.297, p < .01). Teachers in schools with more than 7.5% of students identified as gifted scored significantly higher on academic emphasis than teachers in schools with fewer percentage of students identified as gifted. Mean scores in academic emphasis varied significantly by the percentage of students receiving special education services. Teachers in schools with less than 9% of students receiving special education services had significantly higher mean scores than

Table 48

One-Way Analyses of Variance in Academic Emphasis by School Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
Size of School				
Between groups	3	7.335	2.445	9.685**
Within groups	470	118.659	.252	
% SES				
Between groups	3	26.326	8.775	41.381**
Within groups	470	99.668	.212	
% Gifted				
Between groups	3	26.785	8.928	42.297**
Within groups	470	99.209	.211	
% SPED				
Between groups	3	12.988	4.329	18.006**
Within groups	470	113.006	.240	
% PTA Membership				
Between groups	3	7.044	2.348	9.277**
Within groups	470	118.950	.253	
Years of Book Club				
Between groups	1	4.991	4.991	19.468**
Within groups	472	121.003	.256	

<sup>\*\*</sup>*p* < .01

teachers in schools with greater percentage of students receiving special education services. Tukey HSD and Scheffe post hoc analyses placed schools in three groups: (a) schools with between 12% and 15% SPED scored the lowest; (b) schools between 9% and 12% and schools over 15% comprised the middle group; and (c) schools with less than 9% SPED scored the highest. Significant variances were found between scores on the measure of academic emphasis and percentage of parents with membership in the PTA (F = 9.277, p < .01). Schools with more than 100% PTA membership scored significantly higher than schools with smaller percentage of parents with PTA membership. Academic emphasis also varied between schools with one year of book club and schools with two years of book club (F = 19.468, p < .01). Teachers in schools with one year of book club scored significantly higher on academic emphasis as compared to teachers in schools with two years of book club.

Table 49 displays the means and standard deviations for enabling bureaucracy by school demographic variables. Teachers in schools with less than 450 students had the highest mean scores on enabling bureaucracy (4.192); teachers in schools with between 550 and 650 students had the lowest mean scores on enabling bureaucracy (4.096). Mean scores for enabling bureaucracy ranged from a low of 3.809 for teachers in schools with more than 50% of students receiving free or reduced lunch to a high of 4.269 for teachers in schools with between 20% and 35% of students receiving free or reduced lunch. Mean scores for enabling bureaucracy ranged from a low of 4.003 in schools with less than 3.5% of students identified as gifted to a high of 4.303 for teachers in schools with between 3.5% and 5.5% of students identified as gifted. Mean scores for enabling bureaucracy ranged from a low of 3.789 in schools with between 12% and

Table 49

Mean Scores in Enabling Bureaucracy by School Demographic Data (N = 456)

Demographic Variable	Grouping			
Size of School	< 450	450 - 550	550 -650	Over 650
	$(\underline{N} = 52)$	$(\underline{N} = 136)$	$(\underline{N} = 217)$	$(\underline{N} = 51)$
<u>M</u>	4.192	4.158	4.096	4.113
<u>SD</u>	.675	.668	.675	.645
% SES	< 20	20 - 35	35 - 50	> 50
	$(\underline{N} = 58)$	$(\underline{N} = 215)$	$(\underline{N} = 125)$	$(\underline{N} = 58)$
<u>M</u>	3.924	4.269	4.127	3.809
<u>SD</u>	.635	.640	.656	.686
% Gifted	< 3.5	3.5 - 5.5	5.5 - 7.5	> 7.5
	$(\underline{N} = 133)$	$(\underline{N} = 152)$	$(\underline{N} = 92)$	$(\underline{N} = 79)$
<u>M</u>	4.003	4.304	4.054	4.083
<u>SD</u>	.684	.586	.741	.642
% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 81)$	$(\underline{N} = 209)$	$(\underline{N} = 71)$	$(\underline{N} = 95)$
<u>M</u>	4.312	4.100	3.789	4.285
<u>SD</u>	.562	.658	.738	.624
% PTA Membership	< 60	60 - 80	80 - 100	> 100
	$(\underline{N} = 79)$	$(\underline{N} = 68)$	$(\underline{N} = 109)$	$(\underline{N} = 200)$
<u>M</u>	3.976	4.110	3.982	4.273
<u>SD</u>	.668	.726	.733	.580

15% of students receiving special education services to a high of 4.312 in schools with less than 9% of students receiving special education services. Mean scores for enabling bureaucracy ranged from a low of 3.976 for teachers in schools with less than 60% PTA membership to a high of 4.273 for teachers in schools with more than 100% PTA membership. Teachers in schools with one year of book club had mean scores of 4.070 with a standard deviation of .696 on enabling bureaucracy; teachers in schools with two years of book club had mean scores of 4.182 with a standard deviation of .639 on enabling bureaucracy.

Table 50 shows results of the analyses of variance in enabling bureaucracy by school characteristics. No significant variances in mean scores on enabling bureaucracy were found for school size (F = .421, p > .05). Significant variances in mean scores of enabling bureaucracy were found based on percentage of students in the school receiving free or reduced lunch (F = 9.930, p < .01). Tukey HSD and Scheffe post hoc analyses divided the schools into three groups: (a) The lowest mean scores on enabling bureaucracy were found in schools with more than 50% and less than 20% of students receiving free or reduced lunch; (b) the middle group was comprised of schools in which less than 20% and between 35% and 50% of students received free or reduced lunch; and (c) the highest mean scores were in schools in which between 20% and 35% of students received free or reduced lunch. Teachers in schools with between 3.5% and 5.5% of students identified as gifted scored significantly higher on the measure of enabling bureaucracy (F = 5.749, p < .01) than schools with either less or greater percentages of students identified as gifted. Teachers in schools with between 12% and 15% of students receiving special education services had significantly lower mean scores on enabling bureaucracy (F = 10.645, p < .01) the schools with between 12% and 15% of students receiving special education services had significantly lower mean scores on enabling bureaucracy (F = 10.645, p < .01) the schools with between 12% and 15% of students receiving special education services had significantly lower mean scores on enabling bureaucracy (F = 10.645, p < .01).

Table 50

One-Way Analyses of Variance in Enabling Bureaucracy by School Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Size of School				
Between groups	3	.567	.189	.421
Within groups	452	202.777	.449	
% SES				
Between groups	3	12.573	4.191	9.930**
Within groups	452	190.771	.422	
% Gifted				
Between groups	3	7.474	2.491	5.749**
Within groups	452	195.870	.433	
% SPED				
Between groups	3	13.418	4.473	10.645**
Within groups	452	189.926	.420	
% PTA Membership				
Between groups	3	8.339	2.780	6.443**
Within groups	452	195.005	.431	
Years of Book Club				
Between groups	1	1.414	1.414	3.179
Within groups	454	201.930	.445	

<sup>\*\*</sup>*p* < .01

.01) than teachers in schools with less than 12% or greater than 15% of students receiving special education services. Teachers in schools with over 100% PTA membership and teachers in schools with between 60% and 80% PTA membership scored significantly higher on enabling bureaucracy (F = 6.443, p < .01). No significant variances in enabling bureaucracy among teachers in schools with one year of book club and schools with two years of book club were found (F = 3.179, p > .05).

The final organizational climate variable, faculty mindfulness, contained seven items on a 5-point Likert scale. Table 51 displays the means and standard deviations for faculty mindfulness on school demographic variables. Means for faculty mindfulness ranged from a low of 4.274 in schools with between 550 and 650 students to a high of 4.808 in schools with less than 450 students. When mean scores on faculty mindfulness were disaggregated by SES, mean scores ranged from 4.086 for teachers in schools with more than 50% of students receiving free or reduced lunch to 4.624 for teachers in schools with between 20% and 35% of students receiving free or reduced lunch. When mean scores on faculty mindfulness were disaggregated by the percentage of students identified as gifted, mean scores ranged from a low of 4.147 for teachers in schools in which 3.5% of students were identified as gifted to a high of 4.646 for teachers in schools in which between 3.5% and 5.5% of students were identified as gifted. When mean scores on faculty mindfulness were disaggregated by the percentage of students receiving special education services, mean scores for teachers ranged from a low of 4.213 in schools in which 12% to 15% of students received special education services to a high of 4.750 in schools in which more than 15% of students received special education services. When mean scores on faculty mindfulness were disaggregated by the percentage of PTA membership, mean scores ranged

Table 51

Mean Scores in Faculty Mindfulness by School Demographic Data (N = 456)

Demographic Variable	Grouping			
Size of School	< 450	450 - 550	550 -650	> 650
	$(\underline{N} = 52)$	$(\underline{N} = 135)$	$(\underline{N} = 217)$	$(\underline{N} = 51)$
<u>M</u>	4.808	4.498	4.274	4.527
<u>SD</u>	.741	1.011	.929	.910
% SES	< 20	20 - 35	35 - 50	> 50
	$(\underline{N} = 58)$	$(\underline{N} = 214)$	$(\underline{N} = 125)$	$(\underline{N} = 58)$
<u>M</u>	4.145	4.624	4.389	4.086
<u>SD</u>	.907	.856	1.035	.943
% Gifted	< 3.5	3.5 - 5.5	5.5 - 7.5	> 7.5
	$(\underline{N} = 133)$	$(\underline{N} = 152)$	$(\underline{N} = 91)$	$(\underline{N} = 79)$
<u>M</u>	4.147	4.646	4.529	4.376
<u>SD</u>	1.056	.858	.836	.923
% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 81)$	$(\underline{N} = 208)$	$(\underline{N} = 71)$	$(\underline{N} = 95)$
<u>M</u>	4.425	4.359	4.213	4.750
<u>SD</u>	.966	.996	.891	.775
% PTA Membership	< 60	60 - 80	80 - 100	> 100
	$(\underline{N} = 79)$	$(\underline{N} = 67)$	$(\underline{N} = 109)$	$(\underline{N} = 200)$
<u>M</u>	4.259	4.780	4.315	4.443
<u>SD</u>	.909	.781	1.001	.955

from a low of 4.259 for teachers in schools with less than 60% PTA membership to a high of 4.780 for teachers in schools with between 60% and 80% PTA membership. Teachers in schools with one year of book club had mean scores for faculty mindfulness of 4.474 with a standard deviation of .889. Teachers in schools with two years of book club had mean scores for mindfulness of 4.388 with a standard deviation of .997.

Table 52 shows results of one-way analyses of variance in faculty mindfulness by school characteristics. Mean scores on faculty mindfulness varied significantly based on the size of the school (F = 5.290, p < .01). Tukey HSD and Scheffe post hoc analyses showed two subsets of schools: teachers in schools with between 450 and 650 students scored significantly lower on faculty mindfulness than teachers in schools with more than 650 students and less than 450 students. Mean scores on faculty mindfulness varied significantly based on SES (F = 7.714, p <.01). Tukey HSD and Scheffe post hoc analyses showed two subsets of schools: schools in which more than 50% of students received free or reduced lunch and less than 20% of students received free or reduced lunch scored significantly lower on faculty mindfulness than schools in which between 20% and 50% of students received free or reduced lunch. Mean scores on faculty mindfulness varied significantly based on percentage of gifted students (F = 7.305, p < .01). Tukey HSD and Scheffe post hoc analyses showed two subsets of schools: teachers in schools with less than 3.5% of students identified as gifted and with more than 7.5% of students identified as gifted had significantly lower scores on faculty mindfulness than teachers in schools with between 3.5% and 7.5% of students identified as gifted. Mean scores on faculty mindfulness varied significantly based on percentage of students receiving special education

Table 52

One-Way Analyses of Variance in Faculty Mindfulness by School Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Size of School				
Between groups	3	13.815	4.605	5.290**
Within groups	451	392.588	.870	
% SES				
Between groups	3	19.837	6.612	7.714**
Within groups	451	386.566	.857	
% Gifted				
Between groups	3	18.833	6.278	7.305**
Within groups	451	387.570	.859	
% SPED				
Between groups	3	14.130	4.710	5.415**
Within groups	451	392.273	.870	
% PTA Membership				
Between groups	3	12.033	4.011	4.587**
Within groups	451	394.371	.874	
Years of Book Club				
Between groups	1	.831	.831	.929
Within groups	453	405.572	.895	

<sup>\*\*</sup>*p* < .01

services (F = 5.415, p < .01). Tukey HSD and Scheffe post hoc analyses showed two subsets of schools: teachers in schools with more than 15% of students received special education services scored significantly higher on faculty mindfulness than teachers in schools with a lower percentage of students receiving special education services. Mean scores on faculty mindfulness varied significantly based on percentage of parent membership in the PTA (F = 4.587, p < .01). Tukey HSD and Scheffe post hoc analyses showed two subsets of schools: teachers in schools between 60% and 80% PTA membership scored significantly higher on mindfulness than teachers in schools with over 80% PTA membership and less than 60% PTA membership. No significant variance in mindfulness between teachers in schools with one year of book club and schools with two years of book club was found (F = .929, p > .05).

In summary, the six constructs were analyzed by school characteristics. Although significant variances in means were found among all constructs, establishing clear patterns for constructs were difficult. The next section of this chapter examines the six constructs and their relationships to each other.

Attitudes and beliefs about classroom control.

The Attitudes and Beliefs about Classroom Control developed by Martin et al. (N. Martin, Yin, & Baldwin, 1998c) was based on the three levels of teacher control as outlined by Glickman and Wolfgang: non-interventionist, interactionalist, and interventionist (Wolfgang, 1999). Higher scores on the measure indicate teachers who are more likely to intervene and control student behavior. Lower scores on the measure suggest that a teacher is less likely to intervene. The measure contained two subscale measures of Instructional Management and People Management. The subscale of Instructional Management measures the degree to which

students have a voice in decisions about instruction. It includes items such as, "I believe the teacher should decide what topics the students study and the tasks used to study them." The subscale of People Management measures the level of control the teacher exerts to control the activities of students and includes the recoded item, "When moving from one learning activity to another, I will allow students to progress at their own rates." The subscale also measures the teacher's willingness to use rewards with items such as, "When students behave appropriately, I will provide a reward of some kind such as points toward a party or free time." Initially the instrument measured an additional construct, Behavior Management. However, recent factor analyses demonstrated that Behavior Management and People Management were one factor (Henson & Chambers, 2002).

Using SPSS 13.0, descriptive statistics, correlations and reliabilities were completed for the measure of Attitudes and Beliefs about Classroom Control. Table I, found in the appendixes, displays the intercorrelations for each item on the Attitudes and Beliefs about Classroom Control. Intercorrelations ranged from .001 to .420. Table 53 lists the intercorrelations and reliabilities for the total measure and the two subscales of Instructional Management and People Management. Instructional Management correlated significantly with People Management (r = .284, p < .01). The internal reliability of the overall measure was strong: the alpha coefficient of the total ABCC was .795. The subscales had alpha coefficients of .804 for Instruction and .663 for People Management. The overall measure of Attitudes and Beliefs about Classroom Control ( $\alpha = .795$ ) correlated strongly and significantly with both Instructional Management (r = .854, p < .01) and People Management (r = .735, p < .01).

Table 53

Intercorrelations and Coefficients for Attitudes and Beliefs about Classroom Control

Measure	1	2	3
1. ABCC Total	.795		
2. ABCC Instructional Management	.854**	.804	
3. ABCC People Management	.735**	.284**	.663

Note: Coefficient alphas are presented in boldface along the diagonal.

The analyses of variance completed on teacher beliefs examined the responses of all teachers who completed the survey aggregated by school. Results are found in Table 54. Significant variances in means among schools were found on the overall measure (F = 4.312, p < .01) and the subscales of Instructional Management (F = 4.423, p < .01) and People Management (F = 3.096, p < .01).

Table 54

One-Way Analysis of Variance in Attitudes and Beliefs about Classroom Control by Teacher by

School

			ANC	OVA
Variable	<u>M</u>	<u>SD</u>	<u>F</u>	<u>p</u>
			(16, 471)	
ABCC Total	2.774	.349	4.312	.000
ABCC Instructional Management	2.871	.458	3.423	.000
ABCC People Management	2.655	.405	3.096	.000

<sup>\*\*</sup> p < .01

## Collective teacher efficacy.

The Collective Teacher Efficacy Belief Scale, Tschannen-Moran's adaptation of the Teacher Sense of Efficacy Scale (Tschannen-Moran & Barr, 2004) is divided into two subscales, Instructional Strategies and Student Discipline. This measure was developed because of Tschannen-Moran's concerns that Teacher Sense of Efficacy Scale diminishes scores in schools with challenging environments (Tschannen-Moran, January 26, 2006). Table 55 shoes the means, standard deviations, and ranges for each of the 12 items on the collective teacher

Table 55

Means, Standard Deviations, and Range for Items on Measure of Collective Teacher Efficacy.

Variable	<u>M</u>	SD	Range
CTE1	8.24	1.095	3 - 9
CTE2	8.11	1.153	3 - 9
CTE3	8.28	1.077	4 - 9
CTE4	8.07	1.278	2 - 9
CTE5	7.88	1.193	2 - 9
CTE6	7.78	1.264	3 - 9
CTE7	6.84	1.671	2 - 9
CTE8	6.92	1.724	1 - 9
CTE9	7.70	1.281	3 - 9
CTE10	7.23	1.401	1 - 9
CTE11	7.63	1.350	3 - 9
CTE12	8.24	1.165	3 - 9

efficacy scale. Means range from 6.92 to 8.28, and standard deviations range from 1.077 to 1.724 on this 9-point Likert measure.

Table 56 shows the intercorrelations for each item on the collective teacher efficacy scale. Correlations ranged from lows of .310 for item #1 and item #8 to highs of .854 for item #5 and item #6. All intercorrelations are statistically significant (p < .01).

Table 56

Intercorrelations for Items on Collective Teacher Efficacy Scale (N = 474)

						Item					
Item	CTE1	CTE2	CTE3	CTE4	CTE5	CTE6	CTE7	CTE8	CTE9	CTE10	CTE11
CTE1											
CTE2	.610**										
CTE3	.474**	.443**									
CTE4	.508**	.534**	.609**								
CTE5	.516**	.500**	.418**	.474**							
CTE6	.530**	.529**	.413**	.464**	.854**						
CTE7	.312**	.379**	.409**	.441**	.458**	.464**					
CTE8	.310**	.407**	.371**	.545**	.403**	.395**	.782**				
CTE9	.521**	.533**	.467**	.457**	.718**	.749**	.480**	.445**			
CTE10	.331**	.407**	.423**	.494**	.521**	.522**	.638**	.690**	.566**		
CTE11	.488**	.503**	.373**	.421**	.609**	.626**	.451**	.411**	.713**	.489**	
CTE12	.463**	.556**	.497**	.531**	.535**	.533**	.481**	.517**	.557**	.551**	.504**

<sup>\*\*</sup>*p* < .01

Table 57 shows strong significant correlations between the overall measure of collective teacher efficacy and the subscale measures of Instructional Strategies (r = .914, p < .01) and Student Discipline (r = .928, p < .01). The subscale measures are also strongly and significantly correlated (r = .697, p < .01). Internal reliabilities are strong, ranging from .870 for Student Discipline to .921 for total collective teacher efficacy.

Table 57

Intercorrelations for Collective Teacher Efficacy Scale

Measure	1	2	3
Total Collective Teacher Efficacy	.921		
2. CTE Instructional Strategies	.914**	.900	
3. CTE Student Discipline	.928**	.697**	.870

Note: Coefficient alphas are presented in boldface along the diagonal.

The school means for total collective teacher efficacy ranged from 7.015 to 8.285. School means for the subscale of Instructional Strategies ranged from 7.221 to 8.602; school means for the subscale of Student Discipline ranged from 6.809 to 8.077. As displayed in Table 58, an analysis of variance shows significant variances in total collective teacher efficacy, and the subscale measures of Instructional Strategies and Student Discipline by school among teachers. Tukey HSD and Scheffe post hoc analyses grouped schools into 17 separate subsets for all measures of collective teacher efficacy.

<sup>\*\*</sup> *p* < .01

Table 58

One-Way Analysis of Variance in Collective Teacher Efficacy by School

			ANOVA	
Variable	<u>M</u>	<u>SD</u>	<u>F</u> (16, 459)	р
Total Collective Teacher Efficacy	7.742	.965	3.011	.000
CTE Instructional Strategies	7.890	1.000	2.983	.000
CTE Student Discipline	7.596	1.094	2.914	.000

Faculty trust in clients.

The next construct, faculty trust in clients, a subscale of the Omnibus Trust Scale, measured the trust of teachers in parents and students. Table 59 shows the means, standard Table 59

Means, Standard Deviations, and Range for Items in Faculty Trust in Clients

Item	<u>M</u>	SD	Range
FT1	4.70	1.014	1 - 6
FT2	4.28	1.072	1 - 6
FT3	4.68	.973	2 - 6
FT4	4.05	1.186	1 - 6
FT5	4.26	.970	1 - 6
FT6	3.93	1.213	1 - 6
FT7	4.97	.974	1 - 6
FT8	4.22	1.177	1 - 6
FT9	3.98	1.087	1 - 6
FT10	4.57	1.204	1 - 6

deviations, and ranges for the ten items that measure faculty trust in clients. Means for each item ranged from 3.93 to 4.97 on a scale of one to six. Standard deviations ranged from .970 to 1.213.

Table 60 shows the intercorrelations for each of the ten items on the measure of faculty trust in clients. Intercorrelations range from a low of .216 for item #7 and item #10 to a high of .769 for item #8 and item #9. All correlations are statistically significant (p < .01). An analysis of variance showed an overall mean of 4.364, a standard deviation of .848, and significant variances among in school means (F = 17.858, p < .01). Post hoc analysis showed a considerable variation in faculty trust among the 17 schools. Tukey HSD analysis divided the schools into seven groups; Scheffe analysis divided schools into four groups. A simple regression found the 23.2% Table 60

Intercorrelations for Items in Faculty Trust in Clients (N = 474)

Variable	FT1	FT2	FT3	FT4	FT5	FT6	FT7	FT8	FT9	FT10
FT1										
FT2	.739**									
FT3	.642**	.608**								
FT4	.591**	.667**	.599**							
FT5	.604**	.579**	.620**	.725**						
FT6	.568**	.678**	.601**	.850**	.746**					
FT7	.609**	.537**	.538**	.446**	.515**	.469**				
FT8	.609**	.677**	.610**	.715**	.667**	.781**	.595**			
FT9	.561**	.683**	.545**	.740**	.633**	.760**	.471**	.769**		
FT10	.310**	.297**	.306**	.296**	.322**	.320**	.216**	.356**	.296**	

<sup>\*\*</sup>*p* < .01

of the variance in faculty trust in clients was predicted by the socio-economic status of students  $(\beta = -.481, p < .01)$ .

Academic emphasis.

Academic emphasis is a subscale of the Organizational Health Inventory. Table 61 shows the means, standard deviations and intercorrelations for the five items on the measure of academic emphasis. Item means ranged from 2.18 to 3.22 on the 4-point Likert scale. Intercorrelations ranged from a low of .207 to a high of .579. All five items correlate significantly (p < .01).

Table 61

Means, Standard Deviations, and Intercorrelations for Items in Academic Emphasis (N = 474)

					Item		
Item	<u>M</u>	<u>SD</u>	AE1	AE2	AE3	AE4	AE5
AE1	3.19	.733					
AE2	2.18	.824	.438**				
AE3	2.68	.765	.491**	.579**			
AE4	2.84	.699	.207**	.207**	.286**		
AE5	3.22	.618	.415**	.349**	.450**	.308**	

<sup>\*\*</sup>*p* < .01

Academic emphasis, the measure of high academic expectations, showed considerable variation among the 17 schools (F = 13.138, p < .01). Conducting a post hoc analysis with Tukey HSD resulted in seven groups; the Scheffe post hoc analysis resulted in five groups. Standard scores ranged from 279 to 647 with a mean of 460 and standard deviation of 91.2. A simple

regression found that 60.4% of the variance in academic emphasis among schools could be predicted by the socioeconomic status of students.

## Enabling bureaucracy.

Enabling bureaucracy, the extent to which the school's organizational structure supports, rather than hinders teachers, also showed significant variance in means. Table 62 shows the means, standard deviations, and ranges for the 12-item survey. Item means ranged from 3.67 to 4.54 on a 5-point Likert scale. Standard deviations ranged from .816 to 1.040. Standard scores ranged from 444.3 to 701.7 with a mean of 601.3 and a standard deviation of 175.4.

Table 62

Means, Standard Deviations, and Range for Items in Enabling Bureaucracy

Variable	<u>M</u>	SD	Range
EB1	3.98	.955	1 - 5
EB2	3.67	1.036	1 - 5
EB3	4.16	.869	1 - 5
EB4	4.44	.839	1 – 5
EB5	3.77	1.037	1 – 5
EB6	4.23	.859	1 – 5
EB7	4.51	.825	1 - 5
EB8	4.29	.971	1 – 5
EB9	4.23	.961	1 - 5
EB10	3.70	1.040	1 - 5
EB11	4.54	.816	1 - 5
EB12	4.00	1.077	1 - 5

Intercorrelations between items, shown in Table 63, ranged from a low of .323 for item #5 and item #11 to a high of .651 for item #1 and item #3. All intercorrelations were statistically significant (p < .01). A one-way analysis of variance showed significant variance among the 17 schools (F = 7.757, p < .01). Only 2.2% of the variance in enabling bureaucracy could be predicted by the socioeconomic status of students.

Table 63

Intercorrelations for Items in Enabling Bureaucracy (N = 456)

	Variable										
Variable	EB1	EB2	EB3	EB4	EB5	EB6	EB7	EB8	EB9	EB10	EB11
EB1											
EB2	.521**										
EB3	.651**	.423**									
EB4	.502**	.390**	.444**								
EB5	.482**	.370**	.468**	.373**							
EB6	.645**	.388**	.536**	.435**	.491**						
EB7	.573**	.474**	.455**	.472**	.346**	.481**					
EB8	.507**	.439**	.408**	.414**	.356**	.410**	.531**				
EB9	.574**	.497**	.477**	.468**	.362**	.466**	.531**	.569**			
EB10	.551**	.436**	.470**	.363**	.454**	.522**	.375**	.436**	.498**		
EB11	.580**	.462**	.436**	.430**	.323**	.452**	.676**	.493**	.626**	.395**	
EB12	.536**	.364**	.561**	.367**	.366**	.454**	.376**	.317**	.365**	.471**	.395**

<sup>\*\*</sup>*p* < .01

## Faculty mindfulness.

Faculty mindfulness, the ability of the faculty to reflect on and learn from events, showed significant variance in means. Table 64 shows the item means, standard deviations and intercorrelations for the seven items measuring faculty mindfulness. Mean scores ranged from 3.56 - 5, with a maximum mean of 6. The overall mean was 4.42 with a standard deviation of 3.67. Intercorrelations ranged from .308 to .565. A one-way analysis of variance showed significant variance in faculty mindfulness among the 17 schools (F = 4.651, p < .01). Only 7.7% of the variance among schools in faculty mindfulness could be predicted by the socio-economic status of students.

Table 64

Means, Standard Deviations, and Intercorrelations for Items in Faculty Mindfulness (N = 455)

Variable	<u>M</u>	SD	M1	M2	M3	M4	M5	M6	M7
M1	4.58	1.242							
M2	3.98	1.335	.431**						
M3	4.76	1.276	.308**	.525**					
M4	4.48	1.168	.554**	.481**	.378**				
M5	4.78	1.298	.441**	.550**	.450**	.498**			
M6	4.25	1.246	.492**	.467**	.328**	.522**	.565**		
M7	4.19	1.429	.411**	.485**	.442**	.460**	.544**	.438**	

<sup>\*\*</sup> *p* < .01

Academic optimism.

Academic optimism has been identified as an important latent construct. To find whether the three constructs form the latent construct, academic optimism, researchers have completed a series of similar statistical analyses (W. K. Hoy, Tarter, & Hoy, 2006a, 2006b; McGuigan, 2005; McGuigan & Hoy, 2006). For example, a principal factor analysis was completed in one study (McGuigan & Hoy, 2006) along with a second-order factor analysis. In another study, the researchers used Lisrel 8.5 to conduct a confirmatory factor analysis (W. K. Hoy, Tarter, & Hoy, 2006b). An earlier study used a second order factor analysis to identify the latent construct. To create the new variable, academic optimism, the researcher (McGuigan, 2005) computed the mean of the scores of collective teacher efficacy, faculty trust in clients, and academic emphasis, weighted by factor loadings, for each case in that study.

A table, found in the Appendix J, displays the intercorrelations for the 12-item measure for collective teacher efficacy, the 10-item measure for faculty trust in clients, and the 5-item measure for academic emphasis. Of the 27 items, three did not correlate significantly. The academic emphasis recoded item, "Students neglect to complete their homework" did not correlate significantly with two items on the collective teacher efficacy scale: "To what extent can teachers in your school make expectations clear about appropriate student behavior?" and "To what extent can school personnel in your school establish rules and procedures that facilitate learning?" The faculty trust in clients recoded item "Students here are secretive" did not correlate significantly with the collective teacher efficacy item "To what extent can school personnel in your school establish rules and procedures that facilitate learning?" All other intercorrelations were significant. Internal reliabilities were high for the three constructs:  $\alpha = .921$  for collective

teacher efficacy,  $\alpha$  = .927 for faculty trust in clients, and  $\alpha$  = .749 for academic emphasis. Combining the three constructs into one latent construct, academic optimism, resulted in a Cronbach's alpha reliability of .939. Based on reliabilities in this study and validation of the construct by researchers (W. K. Hoy, Tarter, & Hoy, 2006a, 2006b; McGuigan, 2005; McGuigan & Hoy, 2006), the researcher combined the three measures into one latent construct, academic optimism.

For the purposes of this study, the researcher computed the mean standard scores for collective teacher efficacy (Tschannen-Moran, 2007), faculty trust in clients and academic emphasis (A. W. Hoy). Those scores were aggregated at the school level, and the mean of the three scores was used to calculate academic optimism. The mean score was not weighted by the number of items in each measure or the strength of the measures of collective teacher efficacy, faculty trust in clients, or academic emphasis. In this study, the mean for academic optimism was 580.14, the standard deviation was 141.77, with a minimum score of 56.97 and a maximum score of 871.48. Statistical analyses completed for academic optimism included one-way analyses of variance for teacher and school demographics. Those analyses are discussed in depth in the next section.

Table 65 displays the means and standard deviations for academic optimism by teacher characteristics. Means ranged from 539.89 for teachers between the ages of 21 and 30 to 605.29 for teachers over the age of 50. Means ranged from 532.27 for teachers with less than 5 years of experience to 605.55 for teachers with more than 15 years of teaching experience. Means ranged from 564.49 for teachers with less than five years of in the current building to 611.36 for

Table 65

Mean Scores in Academic Optimism by Teacher Demographic Data (N = 467)

Demographic Variable		Group	oing	
Age in Years	21 -30	31 -40	41 50	> 50
	$(\underline{N} = 73)$	$(\underline{N} = 104)$	$(\underline{N} = 143)$	$(\underline{N} = 147)$
<u>M</u>	539.89	556.96	589.24	605.29
<u>SD</u>	168.56	153.49	133.57	120.32
Years Experience	0 - 5	6 – 10	11 – 15	> 15
	$(\underline{N} = 79)$	$(\underline{N} = 91)$	$(\underline{N} = 84)$	$(\underline{N} = 220)$
<u>M</u>	532.27	563.41	576.74	605.55
<u>SD</u>	166.48	149.25	141.27	123.39
Years in current school	0 - 5	6 – 10	11 – 15	> 15
	$(\underline{N} = 219)$	$(\underline{N} = 102)$	$(\underline{N} = 59)$	$(\underline{N} = 94)$
<u>M</u>	564.49	583.41	582.81	611.32
<u>SD</u>	150.22	137.55	121.97	133.86
Job description	SC CR Tchr	Team Tchr	Specialist	SPED Tchr
	$(\underline{N} = 183)$	$(\underline{N} = 103)$	$(\underline{N} = 116)$	$(\underline{N} = 71)$
<u>M</u>	577.28	592.75	585.80	559.04
SD	144.67	148.69	142.12	123.18

teachers with more than 15 years in the current building. Mean scores on academic optimism ranged from 123.19 for special education teachers to 148.69 for team teachers.

Table 66 shows the means and standard deviations for academic optimism by gender and by participation in the *Conscious Discipline* book club. Male teachers had a mean score of

Table 66

Mean Scores in Academic Optimism by Gender and Book Club Membership

Demographic Variable	Grouping						
Gender	Male $(\underline{N} = 32)$	Female ( $\underline{N} = 440$ )					
<u>M</u>	558.67	580.95					
SD	133.19	142.24					
Book Club Member	Participant ( $\underline{N} = 182$ )	Non-Participant ( $\underline{N} = 292$ )					
<u>M</u>	574.82	583.45					
SD	149.13	137.14					

558.67 in academic optimism. Female teachers had a higher mean score, 580.95, on the measure of academic optimism. The mean score, 574.82, for participants in the book club was lower than the mean score for non-participants in the book club, 583.45.

Table 67 displays the one-way analyses of variance in academic optimism by teacher characteristics. The measure of academic optimism varied significantly among teachers by age (F = 4.717, p < .01). As teachers increased in age, the mean scores on academic optimism increased. The measure of academic optimism varied significantly among teachers by years of teaching experience (F = 5.979, p < .01). As teachers increased in years of teaching experience, the mean scores on academic optimism increased. No significant variance in the mean score of academic optimism by years in the current building was found (F = 2.457, p > .05). No significant variance in the mean score of academic optimism by job description was found (F = .880, p > .05). No significant variance in the mean score of academic optimism by gender was

Table 67

One-Way Analyses of Variance in Academic Optimism by Teacher Demographic Data

Variable and Source	<u>df</u>	<u>SS</u>	MS	<u>F</u>
Age				
Between groups	3	278716	92905	4.717**
Within groups	463	9118462	19694	
Gender				
Between groups	1	14798	14798	.737
Within groups	470	9431959	20068	
Years of teaching experience				
Between groups	3	349489	116496	5.979**
Within groups	470	9156932	19483	
Years in current school				
Between groups	3	146769	48923	2.457
Within groups	470	9359652	19914	
Job description				
Between groups	3	53186	17729	.880
Within groups	469	9449036	20147	
Participation in book club				
Between groups	1	8342	8343	.415
Within groups	472	9498078	20123	

<sup>\*\*</sup> *p* < .01

found ( $F = .737 \ p > .05$ ). Finally, no significant variance in the mean score of academic optimism by participation in the book club was found ( $F = .737 \ p > .05$ ).

Table 68 displays the means and standard deviations in academic optimism by school demographic data. Mean scores for teachers on academic optimism by size of school range from 563.79 for schools with a student population of between 450 and 550 students to 640.24 for schools with fewer than 450 students. When disaggregated by SES, the mean score of teachers on academic optimism ranged from 442.85 in schools with more than 50% of students receiving free or reduced lunch to 638.29 for schools in which less than 20% of students received free or reduced lunch. Mean scores for teachers on academic optimism range from 522.44 for schools with between 12% and 15% of students receiving special education services to 654.06 for teachers in schools with less than 9% of students receiving special education services. When disaggregated by the percentage of students identified as gifted, mean scores in academic optimism ranged from 496.71 for teachers in schools with less than 3.5% of students identified as gifted to 662.49 for teachers in schools with more than 7.5% of students identified as gifted. Mean scores for teachers by percentage of PTA membership ranged from 537.14 for schools with less than 60% PTA membership to 618.89 for schools with more than 100% PTA membership. The mean score in academic optimism for teachers in schools with one year of book club was 605.904 with a standard deviation of 133.55; the mean score for teachers in schools with two years of book club was 555.44 with a standard deviation of 145.77.

Table 68

Mean Scores in Academic Optimism by School Demographic Data (N = 467)

Demographic Variable		Group	oing	
Size of School	< 450	450 - 550	550 -650	> 650
	$(\underline{N} = 52)$	$(\underline{N} = 143)$	$(\underline{N} = 224)$	$(\underline{N} = 55)$
<u>M</u>	640.24	563.79	564.17	630.86
<u>SD</u>	102.13	147.91	147.85	102.63
% SES	< 20	20 - 35	35 - 50	> 50
	$(\underline{N} = 61)$	$(\underline{N} = 224)$	$(\underline{N} = 128)$	$(\underline{N} = 61)$
<u>M</u>	638.29	612.45	561.32	442.85
<u>SD</u>	111.31	124.76	139.55	140.46
% Gifted	< 3.5	3.5 - 5.5	5.5 - 7.5	> 7.5
	$(\underline{N} = 139)$	$(\underline{N} = 156)$	$(\underline{N} = 97)$	$(\underline{N} = 82)$
<u>M</u>	496.71	606.93	587.00	662.49
<u>SD</u>	150.75	118.20	126.55	112.61
% SPED	< 9	9 - 12	12 - 15	> 15
	$(\underline{N} = 81)$	$(\underline{N} = 219)$	$(\underline{N} = 76)$	$(\underline{N} = 98)$
<u>M</u>	654.06	561.12	522.44	606.28
<u>SD</u>	118.08	148.37	126.50	126.42
% PTA Membership	< 60	60 - 80	80 - 100	> 100
	$(\underline{N} = 82)$	$(\underline{N} = 70)$	(N = 116)	$(\underline{N} = 206)$
<u>M</u>	537.140	572.367	546.405	618.890
<u>SD</u>	133.224	127.974	154.454	132.484

Table 69 displays the one-way analyses of variance in academic optimism by school demographic information. A significant variance was found in academic optimism by size of school (F = 7.325 p < .01). Teachers in schools with student populations under 450 and over 650 had significantly higher means on academic optimism than teachers in schools with student populations ranging from 450 to 650. A significant variance was found in academic optimism by the percentage of students receiving free or reduced lunch (F = 32.547, p < .01). Mean scores for teachers in academic optimism decreased as schools increased in the percentage of students receiving free or reduced lunch. A significant variance was found in academic optimism by the percentage of students receiving special education services (F = 15.221, p < .01). Tukey HSD post hoc analysis divided schools into three groups. The lowest mean scores for academic optimism were for teachers in schools with between 9% and 15% of students receiving special education services, followed by teachers in schools with more than 15% of students receiving special education services. The highest mean scores for teachers were found in schools with less than 9% of students receiving special education services. A significant variance in mean scores in academic optimism by the percentage of students identified as gifted was found (F = 32.666, p < .01). Both Tukey HSD and Scheffe post hoc analyses placed schools in three subsets. Teachers with lowest mean scores were found in schools with less than 3.5% of students identified as gifted, followed by schools in which between 3.5% and 7.5% of students were identified as gifted. The highest mean scores for teachers in academic optimism were found in schools with more than 7.5% of students identified as gifted. A significant variance in mean

Table 69

One-Way Analyses of Variance in Academic Optimism by School Demographic Data

Variable and Source	<u>df</u>	SS	MS	<u>F</u>
Size of school				
Between groups	3	424639	141546	7.325**
Within groups	470	9081781	19323	
% SES				
Between groups	3	1635212	545071	32.547**
Within groups	470	7871208	16747	
% gifted				
Between groups	3	1640171	546724	32.666**
Within groups	470	7866250	16737	
% SPED				
Between groups	3	841820	280607	15.221**
Within groups	470	8664601	18435	
% PTA membership				
Between groups	3	597190	199063	10.501**
Within groups	470	8909231	18956	
Years of Book Club				
Between groups	1	301665	301665	15.469**
Within groups	472	9204756	19502	_

<sup>\*\*</sup> *p* < .01

scores in academic optimism by the percentage of PTA membership was found (F = 10.501, p < .01). Both Tukey HSD and Scheffe post hoc analyses placed schools in two subsets: the first group of lower mean scores for academic optimism contained schools with schools up to 100% PTA membership; the second subset of higher mean scores contained schools with more than 100% PTA membership. Finally, a significant variance in mean scores for academic optimism number of years of a school *Conscious Discipline* book club was found (F = 15.469, p < .01). Teachers in schools with one year of book club had significantly higher mean scores on academic optimism than teachers in schools with two years of book club.

Reviewing this section, the six constructs were analyzed by teachers in schools. To recapitulate, one-way analyses of variances were completed for each of the six independent variables to ascertain whether the variances among the schools were significant. All six independent variables were found to have significant variances among the 17 schools. Listed in order from greatest variance to least, faculty trust in clients (F = 17.858, p < .01) led, followed by academic emphasis (F = 13.138, p < .01), enabling bureaucracy (F = 7.757, p < .01), faculty mindfulness (F = 4.651, p < .01), Attitudes and Beliefs about Classroom Control (F = 4.206, p < .01), and collective teacher efficacy (F = 3.011, p < .01). Combing three constructs, collective teacher efficacy, faculty trust in clients, and academic emphasis, created a latent construct, academic optimism. Academic optimism also showed significant variance (F = 11.675, p < .01) among schools.

To segue into the next section, the mean scores and the number of teachers completing the survey for each construct, aggregated at the school level, are displayed in Table 70. The analyses following Table 70 are based on the mean scores for each measure by school.

Table 70

Mean Scores in Organizational Climate Constructs by School

School	Teac Belie		Collect Teach Effica	ner	Facul Trus	-	Academ Emphas		Enabli Bureauc	_	Facu Mindfu	•
	<u>M</u>	<u>n</u>	<u>M</u>	<u>n</u>	<u>M</u>	<u>n</u>	<u>M</u>	<u>n</u>	<u>M</u>	<u>n</u>	<u>M</u>	<u>n</u>
A	2.76	49	7.94	49	4.76	49	2.98	49	4.50	49	4.55	49
В	2.85	25	7.64	24	4.20	24	2.72	24	3.53	21	4.22	21
C	2.84	25	7.69	24	3.93	24	2.67	24	4.13	24	4.48	24
D	2.83	31	7.69	28	3.57	28	2.36	28	3.68	26	3.97	26
E	2.91	25	7.42	25	4.18	21	2.65	21	3.56	21	4.80	21
F	2.76	25	8.04	25	4.68	25	2.90	24	4.40	24	4.72	24
G	2.79	30	7.59	30	4.85	30	3.20	30	3.85	27	4.35	27
Н	2.55	26	7.83	26	4.73	26	3.04	26	4.33	26	4.75	26
I	2.94	34	7.01	34	3.28	33	2.23	33	3.91	32	4.18	32
J	2.44	20	8.29	21	5.35	21	3.40	21	4.52	21	5.01	21
K	2.95	22	7.54	20	4.23	20	2.73	20	4.42	20	4.81	20
L	2.81	28	7.83	26	4.38	26	2.78	26	4.37	23	4.57	23
M	2.63	27	8.15	26	4.73	26	3.04	26	4.05	26	4.87	26
N	2.68	31	7.92	31	4.79	31	3.08	31	3.98	31	3.96	31
O	2.80	30	7.78	30	4.47	30	2.81	30	4.11	29	4.34	29
P	2.88	30	7.43	28	3.60	28	2.49	28	3.99	26	3.56	26
Q	2.66	29	7.92	29	4.46	29	2.94	29	4.51	29	4.49	29
Total	2.77	487	7.74	476	4.36	474	2.82	474	4.13	455	4.43	455

Using SPSS 13.0 software, analyses of means, standard deviations, ranges, and intercorrelations for the six constructs were completed. Table 71 lists the means, standard deviations and ranges for each construct. Attitudes and Beliefs about Classroom Control and academic emphasis were measured with 4-point Likert scales. The constructs of faculty trust in clients and faculty mindfulness were measured with 6-point Likert scales. Collective teacher efficacy was measured with a 9-point Likert scale, and enabling bureaucracy was measured with a 5-point Likert scale.

Table 71

Means, Standard Deviations and Range for Measures of Organizational Climate

Measure	<u>M</u>	SD	Range
1. ABCC $(N = 487)$	2.774	.349	1.58 – 3.77
2. CTE $(N = 476)$	7.742	.965	3.75 - 9.00
3. FT (N = 474)	4.364	.848	1.30 - 6.00
4. AE (N = 474)	2.823	.516	1.40 - 4.00
5. EB (N = 456)	4.128	.669	2.00 - 5.00
6. M (N = 455)	4.430	.946	1.29 - 6.00
7. AO $(N = 474)$	580.183	141.768	56.97 – 871.48

Note: ABCC = Attitudes and Beliefs about Classroom Control; CTE = Collective Teacher

Efficacy; FT = Faculty Trust in Clients; AE = Academic Emphasis; EB = Enabling Bureaucracy;

M = Mindfulness; AO = latent construct, Academic Optimism.

Table 72 lists the intercorrelations and reliabilities for each construct. The measure of Attitudes and Beliefs about Classroom Control correlated significantly but weakly with three

Table 72

Intercorrelations between Measures of Organizational Climate

	Intercorrelations									
Measure	1	2	3	4	5	6	7			
1. ABCC (N = 487)	.795									
2. CTE (N = 476)	031	.921								
3. FT $(N = 474)$	186**	.504**	.927							
4. AE $(N = 474)$	208**	.439**	.747**	.749						
5. EB $(N = 456)$	057	.382**	.385**	.325**	.909					
6. $M(N = 455)$	.037	.352**	.488**	.422**	.364**	.858				
7. AO (N = 474)	154**	.823**	.855**	.838**	.436**	.491**	.939			

Note: Coefficient alphas are presented in boldface along the diagonal. ABCC = Attitudes and Beliefs about Classroom Control; CTE = Collective Teacher Efficacy; FT = Faculty Trust in Clients; AE = Academic Emphasis; EB = Enabling Bureaucracy; M = Mindfulness; AO = latent construct, Academic Optimism

constructs: faculty trust in clients #3 (r = -.186, p < .01), academic emphasis #4 (r = -.206, p < .01), and the latent construct, academic optimism #7 (r = -.154, p < .01). Collective teacher efficacy #2 did not significantly correlate with Attitudes and Beliefs about Classroom Control. It did correlate moderately with faculty trust in clients #3 (r = .504, p < .01), academic emphasis #4 (r = .439 p < .01), enabling bureaucracy #5 (r = .382, p < .01), and faculty mindfulness #6 (r = .352, p < .01). Collective teacher efficacy correlated strongly with its latent construct, academic

optimism #7 (r = .823, p < .01). Faculty trust in clients #3 correlated strongly with academic emphasis #4 (r = .747, p < .01) and significantly but moderately with collective teacher efficacy #2 (r = .504, p < .01), enabling bureaucracy #5 (r = .382, p < .01), and faculty mindfulness #6 (r = .488, p < .01); and it correlated significantly but weakly with Attitudes and Beliefs about Classroom Control (r = -.186, p < .01). Faculty trust in clients #3 correlated strongly with its latent construct, academic optimism #7 (r = .855, p < .01). Academic emphasis #4 showed significant and moderate correlations with enabling bureaucracy #5 (r = .325, p < .01) and faculty mindfulness #6 (r = .422, p < .01). Collective teacher efficacy correlated strongly with its latent construct, academic optimism #7 (r = .838, p < .01). Finally, enabling bureaucracy #5 and faculty mindfulness #6 correlated significantly and moderately (r = .364, p < .01). Alpha coefficients were strong, ranging from .749 for academic emphasis #4 to .939 for academic optimism #7.

## Dependent Variables

Two separate morning greeting observations were conducted at each site as students entered the building. The observer, using a map of the building, coded each regular education classroom as (O) No greeting, (G) Greeting, or (CD) *Conscious Discipline* greeting. In a *Conscious Discipline* greeting, students are offered a choice in how they are greeted. In all, 34 observations lasting from 15 to 30 minutes were conducted. To enter data into SPSS 13.0, the researcher weighted the greetings as (1) No greeting, (2) Greeting, and (3) *Conscious Discipline* greeting. The *Conscious Discipline* greeting was weighted because it embodied the implementation of the specific professional development studied. The mean greetings among the 17 schools ranged from 1.192 to 2.194 with a combined mean of 1.502 and standard deviation of

.506 (n = 460). To analyze variance, a paired sample t-test was conducted, showing a correlation of .311 (p < .01).

In addition to the greetings observations, researchers also conducted walkthroughs in each classroom, coding evidence of *Conscious Discipline* structures. In all, 513 classrooms were observed in 17 schools. A check indicated that the structure was present in the classroom. The structures included:

- Stress Reduction a poster demonstrating methods to reduce stress such as the
  pretzel, ballooning, the faucet, and S.T.A.R. (Stop, take a deep breath, and relax). It
  is frequently found in the Safe Place.
- 2. Friends and Family Board a bulletin board containing pictures of family members friends, pets, etc. of students in the class.
- 3. Time Machine a floor mat that invites students to replay a situation that ended poorly with more appropriate responses.
- 4. Classroom Rules a set of posted expectations for students.
- 5. We Care Center a poster or bulletin board in which students who are absent are remembered.
- 6. Job Board a bulletin board on which every student has a classroom responsibility.
- Safe Place an area of the classroom where a student can take time to regain control, containing stuffed animals, soft music, stress reducers, etc. These key objects differentiate it from a Time-Out Place.
- 8. Other Celebration Station, a place in which reasons to celebrate are noted, posters defining the seven *Conscious Discipline* skills, etc.

To enter data into SPSS, the absence of a structure was coded as (1). The presence of a structure was coded as (3). All structures were weighted as (3) because those structures exemplify the implementation unique to this professional development, except for classroom rules, which were coded and (2). Although classroom rules are a *Conscious Discipline* structure, most classrooms have posted rules, including classrooms of teachers who have high degrees of control. Table 73 contains descriptive statistics for the classroom structures observations. Means ranged from 1.01 for the time machine to 2.01 for job boards. Standard deviations ranged from .153 for the time machine to 1.001 for the job board.

Table 73

Means, Standard Deviations, and Range for *Conscious Discipline* Structures (N = 514)

Characteristic	<u>M</u>	SD	Range
Stress Reduction	1.14	.511	1 - 3
Friends and Family Board	1.39	.792	1 - 3
Time Machine	1.01	.153	1 - 3
Classroom Rules	1.57	.496	1 - 3
We Care Center	1.07	.378	1 - 3
Job Board	2.01	1.001	1 - 3
Safe Place	1.11	.447	1 - 3
Other (Conscious Discipline posters, celebration centers, etc.)	1.26	.678	1 - 3
Total Structures	1.32	.269	1 - 3

The total observation score for *Conscious Discipline* was found by summing the means for greetings and for structures. The total scores, aggregated by school, had an overall mean of 4.342. In addition to these three observation measures, the mean of three survey items, identified as Self-Reported degree of implementation, was also used as a dependent variable. Intercorrelations among the two observation subscales and the total observations scores, found in Table 74, were significant. As a point of interest, the greetings mean and total observation mean correlated so strongly, they could be considered one measure (r = .971, p < .01). However, there were no significant correlations between the Self-Reported degree of implementation and the Observation degree of implementation.

Table 74

Intercorrelations between Measures of Degree of Implementation

Measure	1	2	3	4
1. Total Observation Mean				
2. Greetings Mean	.971**			
3. Structures Mean	.414**	.183**		
4. Self-Reported Implementation Mean	023	034	031	

<sup>\*\*</sup>*p* < .01

To investigate the four measures of degree of implementation, statistical analyses were completed to find means, standard deviations, and intercorrelations for each dependent variable and the following: teacher demographic data, school demographic data, the six constructs plus academic optimism.

Table 75 displays the results of an analysis comparing the four measures of degree of implementation and six teacher demographic variables. Participation in the book club correlated Table 75

Means, Standard Deviations, and Intercorrelations for Degree of Implementation Dependent

Variables and Teacher Demographics Predictor Variables

Dependent Variables	<u>M</u>	<u>SD</u>	1	2	3	4	5	6
Total Observation (N = 454)	4.342	1.097	068	058	323**	.140*	026	082
Greetings ( $N = 460$ )	1.502	.506	054	045	283**	.113	.004	082
Structures ( $N = 513$ )	1.318	.269	080	067	277**	.125*	120*	142
Self-Reported Implementation (N = 454)	3.093	.819	.114*	.071	.104*	.101*	.043	.013
Predictor Variables								
1. Yrs. exp (N = 488)	2.94	1.15						
2. Yrs. current schl (N = 488)	2.04	1.166	.561**					
3. Bk clb mmbrshp (N = 488)	1.62	.488	022	018				
4. Gender (N = 485)	1.93	.252	.120**	.052	027			
5. Age $(N = 481)$	2.77	1.06	.687**	.510**	103*	051		
6. Job $(N = 487)$	2.17	1.01	.107*	049	.034	019	.070	
$** n < 01 \cdot *n < 05$								

<sup>\*\*</sup> *p* < .01; \**p* < .05

significantly but negatively with the total Observation mean (r = -.323, p < .01), the Greetings observation mean (r = -.283, p < .01), and the Structures observation mean (r = -.277, p < .01). Because book club participation was coded in SPSS as (1) and non-participation was coded as (2), a negative correlation meant that teachers who participate in the book club had a greater degree of implementation of Conscious Discipline. Participation in the book club also correlated weakly but significantly with Self-Reported Degree of Implementation (r = .104, p < .05), which meant that participants in the book club reported a lower implementation of Conscious Discipline than teachers who were not members of a book club. The Self-Reported degree of implementation correlated positively but weakly with years of teaching experience (r = .114, p <.05) and gender (r = .101, p < .05). This meant that teachers with more years of experience reported a greater degree of implementation. Gender also correlated weakly and positively with the total Observation mean (r = .140, p < .05) and the Structures observation mean (r = .125, p < .05).05). This meant that female teachers reported a greater degree of implementation and had more Conscious Discipline structures present in the classroom. The final significant correlation was a weak negative correlation between Structures observation mean and teacher age (r = -.120 p < ...).05), which meant that younger teachers had more *Conscious Discipline* structures present in the classroom than older teachers.

After examining teacher demographic variables, correlations were completed for school demographic variables and the four measures of degree of implementation. Table 76 contains the means, standard deviations, and correlations for school demographic variables and degree of implementation measures. First, the size of the school correlated weakly and negatively with the

Table 76

Means, Standard Deviations, and Intercorrelations in Degree of Implementation Dependent

Variables and School Demographic Predictor Variables

Dependent Variables	<u>M</u>	SD	1	2	3	4	5	6
Total Observation $(N = 454)$	4.342	1.097	127*	208*	.109	081	.051	020
Grtngs ( $N = 460$ )	1.502	.506	141*	198**	.131*	082	.084	050
Strctrs $(N = 513)$	1.318	.269	.006	082	032	050	093	.125**
Self-Reported Imp. $(N = 454)$	3.093	.819	044	072	.081	060	.095*	.021
Predictor Variables								
1. School Size (N = 492)	560	92						
2. % Low SES $(N = 492)$	37.5	15.5	123**					
3. % Gifted $(N = 492)$	10.8	8.2	082	182**				
4. % SPED (N = 485)	12.24	4.4	443**	.278**	600**			
5. % PTA (N = 481)	88.25	29	.159**	436**	.687**	595**		
6. Yrs BkClb (N = 672)	1.52	.5	.388**	.244**	245**	304**	197**	

<sup>\*\*</sup> *p* < .01; \**p* < .05

total Observation measure (r = -.127, p < .05) and the Greetings observation measure (r = -.141, p < .05)p < .05). This meant that smaller schools had significantly higher scores on measures of both total Observation and Greetings observation. SES correlated weakly but significantly with the measure of total Observation (r = -.208, p < .05) and the measure of Greetings observation (r =-.198, p < .01). These results can be interpreted to mean that schools with greater percentages of students receiving free or reduced lunch had significantly lower scores on the measures of both total Observation and Greetings observation. The percentage of students identified as gifted correlated weakly but positively with the Greetings observation (r = .131, p < .01), meaning that schools with a greater percentage of students identified as gifted had a higher score on the Greetings observation. The percentage of parents with PTA membership correlated significantly, weakly, and positively with Self-Reported degree of implementation (r = .095, p < .095, p.01), meaning that schools with a greater proportion of parents as members of the PTA reported greater degrees of implementation than schools with a lower proportion of parents as members of the PTA. Finally, the Structures observation correlated weakly, but significantly and positively with years in the book club, meaning that schools with two years of book club had significantly greater evidence of *Conscious Discipline* structures in their classrooms.

After investigating all demographic variables, descriptive statistics were found for the four measures of degree of implementation and the six constructs under study. Table 77 shows the means, standard deviations, and intercorrelations for the constructs and the measures of degree of implementation. Attitudes and Beliefs about Classroom Control correlated negatively but significantly with both the total Observation measure (r = -.277, p < .01) and the

Table 77

Means, Standard Deviations, and Intercorrelations for Total Observation Degree of

Implementation and Constructs Predictor Variables

Dependent Variables	<u>M</u>	<u>SD</u>	1	2	3	4	5	6	7
T Obs (N = 454)	4.342	1.097	277**	.077	.158**	.130*	.153*	.103	.137*
Grtng ( $N = 460$ )	1.502	.506	297**	.069	.156**	.137*	.162*	.101	.134*
Stretr ( $N = 513$ )	1.318	.269	034	.011	.049	010	.019	.044	.019
S-R Imp $(N = 454)$	3.093	.819	.016	.292**	.350**	.350**	.238**	.417**	.390**
Predictor Variables									
1. ABCC	2.774	.349							
2. CTE	7.742	.965	031						
3. FT	4.364	.848	186**	.504**					
4. AE	2.823	.516	208**	.439**	.747**				
5. EB	4.128	.669	057	.382**	.385**	.325**			
6. M	4.430	.946	.037	.352**	.488**	.422**	.364**		
7. AO	580	142	154**	.823**	.855**	.838**	.436**	.491**	

Note: ABCC = Attitudes and Beliefs about Classroom Control; CTE = Collective Teacher

Efficacy; FT = Faculty Trust in Clients; AE = Academic Emphasis; EB = Enabling Bureaucracy;

M = Mindfulness; AO = Academic Optimism

<sup>\*\*</sup> *p* < .01; \**p* < .05

Greetings observation measure (r = -.297, p < .01). This meant that teachers who were more controlling in the classroom had lower scores on the total Observation measure and were less likely to be greeting students in the morning. The total Observation measure also correlated significantly, but positively and weakly with faculty trust in clients (r = .158 p < .01), academic emphasis (r = .130, p < .05), and enabling bureaucracy (r = .153, p < .05). This meant that teachers with greater scores on the total Observation degree of implementation also have greater trust in parents and students, a greater emphasis on high academic achievement, and teach in schools with a supportive, rather than hindering, organizational structure. The Greetings observation degree of implementation measure scored weakly, but positively and significantly with the same three measures: faculty trust in clients (r = .156 p < .01), academic emphasis (r =.137, p < .05), and enabling bureaucracy (r = .162, p < .05). This also meant that teachers with greater scores on the Greetings observation degree of implementation also have greater trust in parents and students, a greater emphasis on high academic achievement, and work in schools with a supportive, rather than hindering, organizational structure. Finally, the Self-Reported degree of implementation correlated significantly, positively, and moderately with the following constructs: collective teacher efficacy (r = .292 p < .01), faculty trust in clients (r = .350, p < .01) .01), academic emphasis (r = .350, p < .01), enabling bureaucracy (r = .238 p < .01), and faculty mindfulness (r = .417, p < .01). This meant that teachers who reported a greater degree of implementation in their schools also reported a greater collective teacher efficacy, stronger faculty trust in parents and students, a greater emphasis on high academic achievement, greater mindfulness, and bureaucracy in schools that support, rather than hinder, teachers' efforts.

To further investigate the four dependent variables, a series of analyses of variance were conducted to compare implementation means by school. Table 78 shows the results of those analyses. Specifically, variances in total Observation means among schools were significant (F = 7.496, p < .01), variances in Greetings observation means were significant (F = 5.994, p < .01), and variances in Structures observation means were significant (F = 10.639, p < .01). No significant variances in the Self-Reported degree of implementation means were found (F = .002, p > .05).

Table 78

One-Way Analysis of Variance in Degree of Implementation of Professional Development by

School

			ANOVA	
Variable	<u>M</u>	<u>SD</u>	<u>df</u>	<u>F</u>
Total Observation	4.342	1.097	16, 437	7.496**
Greetings Observation	1.502	.506	16, 443	5.994**
Structures Observation	1.318	.269	16, 496	10.639**
Self-Reported Degree of Implementation	3.093	.819	16, 437	.002

<sup>\*\*</sup>*p* < .01

Variables Predicting Degree of Implementation

The final portion of quantitative data analysis involved using regressions to predict the degree of implementation of professional development. Although the Greetings observation measure and the total Observation measure correlate so strongly (r = .971, p < .01) that they

could be considered one measure, they were both analyzed. Thus, the dependent variables of Greetings degree of implementation, Structures degree of implementation, total Observation degree of implementation and Self-Reported degree of implementation were regressed by the significant predictor variables of school demographic data, teacher demographic data, and six constructs plus the latent construct of academic optimism.

Simple regressions were completed to determine whether single variables or constructs predicted the degree of implementation. First, simple regressions to find whether variables predicted the total Observation degree of implementation were conducted. Participation in a Conscious Discipline book club, the most significant predictor, explained 37.6% of the variance in total Observation degree of implementation ( $\beta = -.506$ , p < .01). Because book participation was coded as (1) and non-participation was coded as (2), beta is negative. To translate, if participation in the book club increased by one, the total Observation degree of implementation would increase by 1.695. Another significant predictor was the Attitudes and Beliefs about Classroom Control. Scores on the Attitudes and Beliefs about Classroom Control predicted 28.6% of the variance in Total Observation degree of implementation ( $\beta = -.534$ , p < .05). Higher scores on Attitudes and Beliefs about Classroom Control indicated a greater degree of teacher control. To interpret, a decrease of one on the mean Attitudes and Beliefs about Classroom Control would result in an increase of 2.208 on the total Observation degree of implementation. The Attitudes and Beliefs about Classroom Control subscale of Instructional Management was also a significant predictor, explaining 24.9% of the variance in total Observation degree of implementation ( $\beta = -.499, p < .05$ ). A decrease of one on Instructional Management would mean an increase of 1.781 on the total Observation degree of

implementation. The remaining significant predictor was SES, explaining 24.1% of the variance in total Observation degree of implementation ( $\beta$  = -.491, p < .05). A decrease of one in SES would mean an increase of .018 in the total Observation degree of implementation. Gender ( $\beta$  = .482, p > .05), size of school ( $\beta$  = -.317, p > .05), ABCC People Management ( $\beta$  = -.481, p > .05), faculty trust in clients ( $\beta$  = .4876, p > .05), academic emphasis ( $\beta$  = .466, p > .05), and enabling bureaucracy ( $\beta$  = .190, p > .05) were not significant predictors of the total Observation degree of implementation.

To complete the analysis, a multiple regression was completed for significant predictor variables. Since there were 17 schools in the study, no more than three predictor variables were included. When the total Attitudes and Beliefs about Classroom Control variable was included instead of the subscale measure of Instructional Management, SES was not significant predictor, so the total ABCC was excluded from the multiple regression. Table 79 displays the means,

Table 79

Means, Standard Deviations, and Intercorrelations for Total Observation Degree of

Implementation and Predictor Variables

Variable	<u>M</u>	SD	1	2	3
Total Observation Measure	4.395	.572	613**	499*	491*
Predictor Variables					
1. Book Club	1.612	.207		076	.053
2. ABCC Instruction	2.865	.160			.292
3. % SES	36.54	15.496			

<sup>\*\*</sup>*p* < .01; \* *p* < .05

standard deviations and intercorrelations for the variables. The total Observation correlates strongly with the predictor variables, but the predictor variables do not correlate significantly with each other. Table 80 displays the summary for the multiple regression. The combination of participation in the book club, the school mean score on Attitudes and Beliefs about Classroom Control Instructional Management subscale, and the school percentage of students receiving free or reduced lunch predicted 77.1% of the variance in total Observation degree of implementation. Table 80

Regression Analysis Summary for Variables Predicting Total Observation Degree of Implementation

Variables	<u>B</u>	<u>SEB</u>	β
Book Club	-1.741	.369	630**
ABCC Instruction	-1.611	.497	451**
% SES	012	.005	326*

<u>Note:</u>  $\underline{R}^2 = .771 \ (\underline{N} = 17)$ 

Next, simple regressions to find whether variables predict the Greetings Observation Degree of Implementation were conducted. The eight variables that significantly correlated with the Greetings Observation degree of implementation were included: participation in the book club (r = -.283, p < .01), size of school (r = -.141, p < .05), SES (r = -.198, p < .05), percentage of students identified as gifted (r = .131, p < .05), Attitudes and Beliefs about Classroom Control (r = -.297, p < .01), faculty trust in clients (r = .156 p < .01), academic emphasis (r = .137, p < .05), and enabling bureaucracy (r = .162 p < .05).

<sup>\*\*</sup>*p* < .01; \* *p* < .05

Seven constructs or variables were significant predictors of the Greetings observation degree of implementation. All measures of the Attitudes and Beliefs about Classroom Control were significant predictors of the greetings mean: Total Attitudes and Beliefs about Classroom Control ( $\beta$  = -.631, p < .01) explained 39.8% of the variance; the subscale of Instructional Management ( $\beta$  = -.605, p < .05) explained 36.6%; the subscale of People Management ( $\beta$  = -.544 p < .05) explained 29.5%; academic emphasis ( $\beta$  = .540, p < .05) explained 29.2%; faculty trust in clients ( $\beta$  = .530, p < .05) explained 28%; participation in the book club ( $\beta$  = -.514, p < .05) explained 26.5%; and SES ( $\beta$  = -.506, p < .05) explained 25.6% of the variance.

To complete the analysis, a multiple regression was completed for significant predictor variables. Table 81 displays the means, standard deviations, and correlations for the greetings

Table 81

Means, Standard Deviations, and Intercorrelations for Greetings Observation Degree of

Implementation and Predictor Variables

Variable	<u>M</u>	SD	1	2	3
Greetings Observation Measure	1.526	.243	514*	605**	506*
Predictor Variables					
1. Book Club	1.612	.207		076	.053
2. ABCC Instruction	2.865	.160			.292
3. % SES	36.54	15.496			

<sup>\*\*</sup>*p* < .01; \* *p* < .05

observation measure and the significant predictor variables. Since there were 17 schools in the

study, no more than three predictor variables were included. The model explaining the most variance in greetings observations included participation in the book club, ABCC Instructional Management, and SES. All three predictor variables show strong significant correlations with the Greetings observation measure.

Table 82 displays the summary for the multiple regression. The combination of participation in the book club, the school mean score on Attitudes and Beliefs about Classroom Control Instructional Management subscale, and the school percentage of students receiving free or reduced lunch predicted 77.2% of the variance in Greetings observation degree of implementation. The strongest predictors were the measure of ABCC Instructional Management ( $\beta = -.553$ , p < .01) and participation in the book club ( $\beta = -.540$ , p < .01), followed by SES ( $\beta = -.316$ , p < .05).

Table 82

Regression Analysis Summary for Variables Predicting Greetings Observation Degree of Implementation

Variables	<u>B</u>	SEB	β
Book Club	633	.156	540**
ABCC Instruction	839	.211	553**
% SES	005	.002	316*

<u>Note:</u>  $\underline{R}^2 = .772 (\underline{N} = 17)$ 

\*\**p* < .01; \* *p* < .05

Then simple regressions to find whether variables predicted the Structures observation degree of implementation were conducted. The four included variables were participation in the

book club (r = -.277, p < .01), gender (r = .125, p < .05), age of teacher (r = -.120, p < .05), and years of book club in the school (r = .125, p < .01). No organizational climate constructs correlated with this measure, so they were eliminated from the regression analysis. Only one variable was a significant predictor. Participation in the book club explained 53.6% of the variance in the Structures observation degree of implementation ( $\beta = -.732$ , p < .01). Since only one variable was a significant predictor of Structures observation degree of implementation, a multiple regression was not completed.

Finally, simple regressions to find whether variables predicted the Self-Reported degree of implementation were conducted. The included variables were years of teaching experience (r = .114, p < .05), participation in the book club (r = .104, p < .05), gender (r = .101, p < .05), percentage of parents with PTA membership (r = .095, p < .05), collective teacher efficacy (r = .292, p < .01), faculty trust in clients ( $r = .350 \ p < .01$ ), academic emphasis (r = .350, p < .01), enabling bureaucracy ( $r = .238 \ p < .01$ ), and faculty mindfulness ( $r = .417 \ p < .01$ ). The measure of Attitudes and Beliefs about Classroom Control was also included because the subscale measures of Instructional Management (r = .124, p < .01) and People Management (r = .136, p < .01), correlated significantly but in different directions.

Self-Reported degree of implementation was explained, not by school characteristics or by teacher characteristics, but by constructs. Faculty mindfulness was the strongest predictor, explaining 45.1% of the variance in Self- Reported degree of implementation ( $\beta$  = .671, p < .01). The total Attitudes and Beliefs about Classroom Control explained 39.6% of the variance ( $\beta$  = -.629, p < .01); the subscale Instructional Management explained 25.7% of the variance ( $\beta$  = -.507, p < .05); and the subscale of People Management explained 41.8% of the variance in Self-

Reported degree of implementation ( $\beta$  = -.646, p < .01). Faculty trust in clients was also a significant predictor, explaining 38.3% of the variance in Self-Reported degree of implementation ( $\beta$  = .619, p < .01). Academic emphasis explained 31.7% of the variance ( $\beta$  = .563, p < .05). Collective teacher efficacy also predicted 24.3% of the variance in Self-Reported degree of implementation ( $\beta$  = .493, p < .05), although the subscale of Instructional Strategies was stronger, explaining 27.8% of the variance in Self-Reported degree of implementation ( $\beta$  = .527, p < .05).

To develop a model explaining the variance in degree of implementation, a multiple regression model was built, starting with the strongest predictor. Because collective teacher efficacy, faculty trust in clients, and academic emphasis all significantly predicted the Self-Reported degree of implementation, the latent construct of academic optimism was included in the regression. A simple regression showed that academic optimism predicted 36.2% of the variance in Self-Reported degree of implementation ( $\beta$  = .601, p < .05). Means, standard deviations, and intercorrelations for the model explaining the most variance are displayed in Table 83. All constructs show strong significant correlations with Self-Reported degree of implementation. Faculty trust in clients correlates strongly with faculty mindfulness (r = .598, p < .01) and the Attitudes and Beliefs about Classroom Control subscale measure of People Management (r = -.730, p < .01). Because of the strong correlations, collinearity was a concern.

Table 83

Means, Standard Deviations, and Intercorrelations for Self-Reported Degree of Implementation and Predictor Variables

Variable	<u>M</u>	SD	1	2	3
Self-Reported Measure	3.079	.239	.671**	646**	.619**
Predictor Variables					
1. Faculty Mindfulness	4.449	.382		322	.598**
2. ABCC People Management	2.656	.139			730**
3. Faculty Trust in Clients	634.140	88.610			

<sup>\*\*</sup>*p* < .01; \* *p* < .05

Table 84 summarizes the multiple regression. The combination of faculty mindfulness, ABCC People Management, and faculty trust in clients explained 66.2% of the variance in Self-Reported Degree of Implementation, although faculty trust in clients was not a significant predictor. Removing faculty trust in clients from the multiple regression results in 65.7% of the variance in Self-Reported degree of implementation explained by a combination of faculty mindfulness ( $\beta$  = .517, p < .01) and ABCC People Management ( $\beta$  = -.480, p < .05).

Table 84

Regression Analysis Summary for Variables Predicting Self-Reported Degree of Implementation

Variables	<u>B</u>	<u>SEB</u>	<u>β</u>
Faculty Mindfulness	.355	.129	.568*
ABCC People Management	957	.415	555*
Faculty Trust in Clients	.000	.001	126

Note:  $\underline{\mathbf{R}}^2 = .662 \ (\underline{\mathbf{N}} = 17); \ *p < .05$ 

To summarize, multiple regressions found that the measure of Attitudes and Beliefs about Classroom Control, participation in the *Conscious Discipline* book club, and school SES were significant predictors of the Observation degree of implementation measures. For the Self-Reported degree of implementation, the constructs of faculty mindfulness, Attitudes and Beliefs about Classroom Control, and faculty trust in clients were significant predictors. Academic optimism, the latent construct for collective teacher efficacy, faculty trust in clients, and academic emphasis, was also a significant predictor. In the next section, focus group participants will attempt to explain results of the quantitative analyses.

### **Oualitative Data**

# Selection of Focus Groups

In the study design, four focus groups were included. Table 85 displays the results of an independent sample t-test comparing the means of degrees of implementation of professional development and years of participation in *Conscious Discipline* book clubs. No significant differences between schools with one year and schools with two years of participation were found in either the subscale observation measure of morning greetings (t = 1.031, p > .05), total degree of implementation (t = .184, p > .05), or self-reported degree of implementation (t = .204, p > .05). However, schools with two years of participation showed significantly more *Conscious Discipline* structures in the classroom (t = 8.062, p < .05). Because of the lack of significance between total observations degree of implementation and self-reported degree of implementation and years of participation in book club, only two focus groups were conducted.

Table 85

Degree of Implementation Variances in Schools by Number of Years of Book Club

	One year bo	One year book club		Two years book club		
Degree of Implementation	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>df</u>	<u>t</u>
Total Observation	4.364	.786	4.320	1.062	1, 452	.184
Greeting	1.527	.533	1.479	.479	1, 458	1.031
Structure	1.285	.236	1.352	.295	1, 511	8.062**
Self-Reported	3.075	.786	3.110	.851	1, 452	.204

<sup>\*\*</sup> *p* < .01

Results from Focus Group with High Level of Implementation

The first focus group was comprised of teachers from two schools, both with a high degree of implementation, one with one year of book club and the other with two years of book club. The second focus group was comprised of teachers from two schools with a low degree of implementation, one with one year of book club and the other with two years of book club. Participants in each focus group responded to 12 questions. The first focus group was comprised of eight teachers, four each from two schools with high levels of implementation. Teachers in the two schools reported that 78.6% participated in the *Conscious Discipline* book club as compared to 38.4% in the sample. On the Self-Reported degree of implementation, the two schools had a mean of 3.255 on a 5-point Likert scale. Their mean observation degree of implementation was 5.477. A summary of responses for the 12 questions follows:

1. For those structures that you have used in your classroom: Why did you choose to implement that structure/those structures?

Respondents listed the various structures used in their classrooms. Most regular classroom teachers reported using the greetings, the friends and family board, the job board, and the safe place. Those teachers who did not have their own classrooms reported using whatever the teachers used in the classrooms in which they taught lessons. They reported "liking" those structures, students liking them and expecting them to be used, and finding the terminology "powerful." One teacher said, "I do use the morning greetings and the students will let me know if I don't."

2. For those structures that you don't have in your classroom: Why did you choose not to implement that structure/those structures?

Respondents specifically mentioned the celebration station, the safe place, the time machine, and the wishing well board. Reasons for not using them included lack of time, finding space, and "a lot to start at one time". One teacher said, "I think part of it is that it's so overwhelming. It's not really about the students but about us, and it's a lot to start at one time." Respondents also reported discussing problems with implementing the time machine with other teachers on their grade level, thinking that the same students used it to gain attention, not solve problems. They also discussed the faculty wishing well board as not appropriate for adults in the building.

3. Was your decision on whether to use *Conscious Discipline* in your classroom completely your own? If not, who else had influence?

Most respondents reported that it was a school-wide initiative. One had read the book over the summer prior to implementation. Others reported considering going or being

invited to participate. One added that their administrator expected them all to do the greetings.

4. What do you see as the benefits of a monthly book club?

Respondents mentioned working with other teachers, hearing other ideas, making items for immediate use in a "make and take," reinforcing the structures, and watching the DVDs as helpful. One teacher responded, "I enjoy hearing about what's going on in the other classrooms."

5. Did you apply anything to the classroom?

Most respondents mentioned the phrases and terminology used in *Conscious Discipline*. Several respondents reported that they liked the posters as reminders of the terminology. As one teacher said, "I use a lot of the terminology. 'Did you tell \_\_\_\_ how that made you feel?' I really liked what we got in Chapter 4, Choices. 'Is he the boss of you?' It has really been helpful to have the students have those hard conversations."

6. Complete this sentence: I would do more with Conscious Discipline if...

The discussion revolved around the following topics: posters to remind them of the terminology, wishing that it were easier to change, getting a better understanding, and feeling more secure with the structures. As one teacher reported, "I find it's hard to remember the terminology. If I had the phrases on the wall it would be more helpful."

7. Can you envision a classroom without rewards and consequences to control student behavior?

Three respondents said they could not envision a classroom without rewards and consequences. The others answered with a qualified affirmative: rewards and consequences

first and then phasing them out; other classrooms, but not mine; rewards that were intangible as better than tangible rewards, and the presence of rewards and consequences in the real world. As one teacher thought, "Listening to Becky Bailey talking, I wish I could. I think kids would do better and more for themselves."

8. Have your beliefs about children's behavior changed as a result of your school's participation in the *Conscious Discipline* book club? If so, how?

All respondents indicated some change in their beliefs. Some noticed that children solving their own problems reinforced the ability of students to solve their own problems.

Another responded that she liked it when the principal modeled the language. One responded that her responses to children have changed. As one teacher summarized, "Positive begets positive begets positive."

9. Do you think your school's collective beliefs about children's behavior changed as a result of your school's participation in the *Conscious Discipline* book club? If so, how?

Every respondent reported that their school's collective beliefs had changed because they were all using the same terminology, and the students were responding positively to the changes. One teacher even noticed, "We 'catch' each other not using the best terminology."

10. The survey results showed that trust in parents and students increased the use of *Conscious Discipline*. Why do you think this is so?

This question resulted in fewer responses. One respondent thought that trusting someone to do what is right had positive results. Another reported that their mission statement said that faculty and parents worked as a team. One commented that parents could

check the DVDs out of the library for viewing, and they have done so. Finally, one respondent said that sometimes parents in at-risk schools do not talk nicely to their children.

One teacher said, "Good things come out of trusting someone to do what's right."

11. The survey results also showed that an emphasis on high academic expectations decreased the use of *Conscious Discipline*. Why do you think this is so?

This question was more puzzling for the respondents because they thought academic achievement was emphasized in schools. They theorized that, in schools with a high academic focus, there may not be as much interaction between faculty and students, and that teachers may not take the time to develop relationships. As one teacher thought, "I've been in schools where the teachers don't really develop relationships, just the grades are important."

12. In what ways do you think professional development is transferred into classroom practice?

Participants shared ideas, and most met with head nodding from the other members of the focus group. One participant mentioned practical "make and take" sessions as meaningful, and a discussion about a recent "make and take" session consumed a few minutes. Another said that personal choice was important. A third participant thought that observing another teacher who was comfortable and skilled in the use of *Conscious Discipline* in the classroom would be a worthwhile professional development opportunity. As she said, "I want to see it – not you showing it to me – but you doing it in the real world in a real classroom."

Results from Focus Group with Low Level of Implementation

Participants in the second focus group responded to the same 12 questions. The second focus group was comprised of four teachers from two schools with a low level of implementation, for a total of eight teachers. Only a mean of 11.3% of the teachers in the two schools reported participating in the *Conscious Discipline* book club. Their total observation mean was 3.799 and the self-reported degree of implementation mean was 2.835 on a 5-point Likert scale. A summary of responses for the 12 questions follows:

1. For those structures that you have used in your classroom: Why did you choose to implement that structure/those structures?

Respondents listed the various structures used in their classrooms. The regular classroom teachers reported using the stress reduction, the friends and family board, the job board, and the safe place. Two teachers reported using the morning greetings. Those teachers who did not have their own classrooms reported using whatever the teachers used in the classrooms in which they taught lessons. One teacher reported using one structure, finding it working, and then adding another structure. As she said, "I needed something, and this was the first thing that came to me that was really useful. As I saw one structure working I added another." Others mentioned using the structures because they helped students become aware of what they were doing and helped students solve their own problems.

2. For those structures that you don't have in your classroom: Why did you choose not to implement that structure/those structures?

Participants did not use the time machine because of lack of time. Other reasons for not using them included lack of time, the job board being discontinued because it resulted

in fighting, and not knowing how to implement the structures. Specifically, one teacher reported, "I tried the job for everyone but the group got to fighting with each other. I tried giving responsibility; they fight." Another teacher said, "I can't do the things that require some movement that my students aren't developmentally ready for."

3. Was your decision on whether to use *Conscious Discipline* in your classroom completely your own? If not, who else had influence?

All respondents reported that the decision was completely their own. One added that she would not have done it if it had not been completely her own decision. A final participant thought that the administrators encouraged it, and that response met with disagreement from other participants in her school.

4. What do you see as the benefits of a monthly book club?

Participants mentioned sharing information, the support, the communication, and talking with other teachers. Those that did not attend the book clubs said that they would have liked to attend the book clubs, but lacked the time. As one teacher summarized, "I can learn new things to try. I can find out if the things that I'm trying are working for others...I appreciate the support."

5. Did you apply anything to the classroom?

For those teachers that attended the book club, they mentioned the vocabulary of *Conscious Discipline* and also using the vocabulary at home with their own children. As one teacher reported, "Using the vocabulary has been great. It makes me conscious of the vocabulary I'm using. The language is the key."

6. Complete this sentence: I would do more with Conscious Discipline if...

The ideas generated during the discussion included attending the book club, having more time, refreshing themselves on the techniques, observing it being modeled, and having her own classroom.

7. Can you envision a classroom without rewards and consequences to control student behavior?

Two participants responded in the negative because our society is based on rewards and consequences. The remaining responses were either a qualified affirmative or negative. The qualified affirmative responses included reasoning that discipline is teaching, in this case self control; use with older students, not younger ones; use with some populations, but not all; and use of intangible rewards as opposed to stickers, candy, or toys. The qualified negative responses included the possibility of another way. As one teacher put it, "If you look into the definition of discipline, it's teaching. In this case, it's teaching self-control."

8. Have your beliefs about children's behavior changed as a result of your school's participation in the *Conscious Discipline* book club? If so, how?

Four participants did not find that their beliefs had changed. Two were unsure and could not answer the question. Two participants said that their beliefs had changed: one had changed with her own children at home but not in school; the other now "saw the possibility of hope."

9. Do you think your school's collective beliefs about children's behavior changed as a result of your school's participation in the *Conscious Discipline* book club? If so, how?

Every respondent reported that their school's collective beliefs had not changed. Some thought that individual teachers might have changed, but not the school as a whole. As one teacher said, "So few teachers participate, and there's a lack of support from the administrators."

10. The survey results showed that trust in parents and students increased the use of *Conscious Discipline*. Why do you think this is so?

This question resulted in fewer responses. One participant thought that cultural awareness of the home lives of students and parents made her more trusting. Another mentioned teaching parents about *Conscious Discipline* and having more positive relationships with parents as a result of its use in the classroom. Finally, a participant said that an awareness of how to speak to students helped promote trust.

11. The survey results also showed that an emphasis on high academic expectations decreased the use of *Conscious Discipline*. Why do you think this is so?

This question generated responses from participants that included a lack of time because of pacing, the stress of testing, and too many changes to make in instruction because of new initiatives. As one teacher responded, "I have to get through the pacing and other academics. I just don't have the time."

12. In what ways do you think professional development is transferred into classroom practice?

The suggestions included administrator support and follow-up; smaller chunks of information at a time; an interest in the topic; and a willingness on the part of the teacher to take risks. One teacher observed, "People have to be willing to take a risk and realize that

they need to try something different if what they are doing isn't working. Some are overwhelmed. Some are just 'doing their time.' We need to learn to apply new skills."

Data Analysis from Focus Groups

Data were analyzed by coding themes. Fifteen themes emerged from the data. They included the following:

- Teacher Beliefs (TB) The teacher believes in it. Examples of comments from this coded theme include: "I could have written the *Conscious Discipline* book it's truth" and "I believe in many of them."
- Consistency (CONS) Consistency within the school. An example of a comment from this coded theme includes "As a resource person I use the same ideas the teachers are using in their classrooms."
- Student reactions or needs (ST) Examples of comments from this coded theme are: "I do use the greeting and the students will let me know if I don't" and "They are little and ask me to do things for them. I want them to take care of themselves."
- Change (CH) The time for the change process. Examples of statements from this coded theme are: "The second year is easier" and "...the teachers are still learning to be practitioners the learning curve. They are more consciously aware of what's going on but aren't sure how to do it yet."
- Unsuccessful (DW) Tried it, but it didn't work. Examples of this coded theme are: "The time machine, we found that the same child is using it over and over again are we drawing attention to his behavior?" and "I tried the jobs for everyone but the group got to fighting with each other. I tried giving responsibility; they fight."

- Focus (FCS) Keep the focus on the initiative. An example of this coded theme is: "Keeps us all on track."
- Collaboration (TC) Teacher collaboration. Examples of this coded them are: "I enjoy hearing what's going on in the other rooms" and "If something is frustrating, it gives us a chance to talk it out."
- Application (APP) Practical application in the classroom. Examples of this coded theme
   are: "...if I could observe it being modeled" and "I use a lot of the terminology."
- Choice (CHOICE) Initiative offered but not mandated. An example of this coded theme is: "having some personal choice; treat us like professionals."
- Time (TM) Lack of time. Examples of this coded theme include: "It's just finding the time to implement them" and "I have to get through the pacing and other academic stuff.
   I just don't have the time."
- Space (SP) Space constraints. "Just finding the space to use it" is an example of this coded theme.
- Knowledge (KN) Knowledge and information. Sample responses from this coded theme are: "I'd like to use it; I just don't know how" and "I can learn new things to try."
- Support (AS) Administrator support. A sample response from this coded theme is: "If we had positive support we'd use more."
- Interest (INT) Teacher interest in topic. A sample response from this coded theme is:

  "You have to be interested in what's coming."
- Not applicable (NA) Not relevant or applicable to job. A sample response from this coded theme is: "It doesn't apply to me. I spend 90% of my time in other classrooms."

Since the school was the level of analysis, themes from schools with high levels of implementation were then compared and contrasted with themes from the two schools with low levels of implementation. Table 86 compares the number of coded responses by schools with high levels of implementation and schools with low levels of implementation. The top eight categories of coded responses were Teacher Beliefs, Application, Students, the Change process, Time, Knowledge, Choice, and Teacher Collaboration. The largest categories of responses in schools with high levels of implementation were 24 responses coded as Teacher Beliefs and 24 responses coded as Application of Conscious Discipline, 50% of the total coded responses in that focus group. Teacher Beliefs also led the coded responses in schools with low levels of implementation, with 15 coded responses, followed by Time with 14 coded responses and Application with 12 coded responses. Equal numbers of responses coded as Student were found in each focus group. The change process was found in 12 comments from participants in schools with high levels of implementation and in seven comments from schools with low levels of implementation. Knowledge, Choice, and Teacher Collaboration totaled 12 coded responses from schools with high levels of implementation and 14 coded responses from schools with low levels of implementation. Together, the top eight themes comprised 90.6% of all comments in the focus group with high levels of implementation and 91.1% of all comments in the focus group with low levels of implementation.

Table 86

Number of Coded Responses by Focus Group

G. J. J.W.	Number of Responses			
Coded Theme ——	High	Low		
Teacher Beliefs	24	15		
2. Application	24	12		
3. Students	10	10		
4. Change process	12	7		
5. Time	5	14		
6. Knowledge	4	7		
7. Teacher Choice/Mandated	5	3		
8. Teacher Collaboration	3	4		
9. Focus	4	0		
10. Administrative Support	0	3		
11. Consistency	1	1		
12. Did not work	1	1		
13. Space	2	0		
14. Not Applicable	1	1		
15. Teacher Interest	0	1		

Note: High = Schools with high level of implementation; Low= Schools with low levels of implementation

Comparison of responses between the two focus groups yields similarities. In addition, both groups mentioned the value of the vocabulary and phrasing both as significant and as difficult to remember. Some of the verbiage specifically mentioned included:

- Were you trying to be helpful or hurtful?
- Did you like it when....Tell him/her "I don't like it when you..."
- *Is he the boss of you?*
- I notice instead of I like

Both focus groups also saw teacher collaboration, talking about what worked or didn't work and listening to other teachers as a benefit of the monthly book study meetings.

The two focus groups contrasted in their responses, also. Participants from schools with high levels of implementation mentioned teacher beliefs more frequently, 24 coded responses, compared to 15 coded responses from participants in schools with low levels of implementation. Both groups frequently mentioned the application of beliefs and practices in the classroom, although participants from schools with high levels of implementation commented on this more frequently (24 coded responses as compared to 12 coded responses). Participants from schools with high levels of implementation mentioned the change process more frequently than participants from schools with low levels of implementation (12 coded responses and seven coded responses, respectively). Specifically, they mentioned that, although they were doing it, changing their beliefs and their behaviors took time. However, participants from schools with high levels of implementation mentioned time as an impediment for implementation less frequently than participants in schools with low levels of implementation (five coded responses and 14 coded responses, respectively). Specifically, participants from schools with low levels of

implementation mentioned Conscious Discipline as taking too much time because they were overwhelmed with curriculum initiatives and the appropriate pacing of instruction. A close examination of Student coded responses yielded a significant difference in types of comments. Participants in schools with high levels of implementation emphasized students' positive reactions (seven coded responses) as a reason for implementing structures as compared to student need (three coded response) for the skill as a reason to implement a structure. In contrast, participants in schools with a low level of implementation more frequently commented on student need for the skill (eight coded responses) as compared to students' positive reaction to the structure (two coded response). Specific quotes from participants that focus on student reaction included, "I use 'My job is to keep you safe' and the children really like it" and "I was late today and the students wanted the greeting when I got in – they expect it and it helps to get the day started." On the other hand, examples of comments that focus on students' needs include "I have some students that need help with stress" and "I chose these things because it helps the students become aware of what they are doing." When asked who, if anyone, had influence over their decision to implement *Conscious Discipline* in their classrooms, participants from schools with a high level of implementation all said that it was a school-wide initiative; participants from schools with a low level of implementation said that their decisions were their own to make. One participant from a school with a low level of implementation even added, "If it hadn't been up to me, I wouldn't have done it."

## **Emerging Themes**

The 75-item survey measured teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness of teachers in 17

schools in addition to teacher demographic information. Teachers also self-reported the degree of implementation of *Conscious Discipline*. Observations were conducted in 17 schools: two morning greeting walkthroughs and one classroom structures walkthrough. From the quantitative data analysis, a number of clear themes emerge.

- The constructs of teacher beliefs, collective teacher efficacy, faculty trust in clients,
   academic emphasis, enabling bureaucracy, and faculty mindfulness were valid and reliable
   measures. Academic optimism was identified as a latent construct.
- An analysis of survey results found that teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, and faculty mindfulness significantly contributed to the self-reported degree of implementation of *Conscious Discipline* in the 17 schools.
   However, analyses of observations found that only teacher beliefs, SES, and participation in a *Conscious Discipline* book club predicted the degree of implementation.
- Enabling bureaucracy was not a significant predictor for the degree of implementation of professional development.
- Little correlation existed between any observation measure and the self-reported degree of implementation.

Finally, focus group participants explained the degree of implementation of professional development in their schools. A qualitative analysis of focus groups found differences between schools with high levels of implementation and schools with low levels of implementation.

These themes will be fully discussed in the next chapter.

### Summary

Three sets of data were collected: 489 online surveys measuring teacher beliefs and organizational climate; 51 observations including morning greetings and presence of *Conscious Discipline* structures in the classroom in each of the 17 schools; and two focus groups comprised of two schools with high levels of implementation and two schools with low levels of implementation. Quantitative analyses of survey and observation data investigated relationships among the constructs of teacher beliefs, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness and the demographic data of schools and teachers in the sample. Focus groups attempted to explain both quantitative results and the implementation of professional development in their schools. The next chapter will highlight the significant findings.

#### CHAPTER 5

#### Conclusions

#### Introduction

This study investigated the roles of teacher beliefs and organizational climate in the implementation of teacher professional development. With the degree of implementation of professional development as the dependent variable, the study examined the relationships among the degree of implementation, school and faculty demographic data, and the following constructs: teacher beliefs about classroom management, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness. This study also investigated the relationship between the degree of implementation of professional development and academic optimism, the latent construct for the combined variables of collective teacher efficacy, faculty trust in clients, and academic emphasis. Using mixed methodology, 489 teachers in 17 suburban elementary schools completed surveys measuring the constructs, researchers observed morning greetings and classroom structures, and a total of 16 teachers from four schools participated in two focus groups to explain the degree of implementation of *Conscious Discipline*, research-based classroom management.

Findings interpreted from the results of the research included teacher demographics, school demographics, organizational climate constructs, and predictors of the degree of implementation of professional development. First in this section, the findings are listed. Next, recommendations for practitioners and researchers are noted. The chapter continues with limitations and delimitations of the study, recommendations for further research, and reflections on this study.

### **Findings**

The first section of the findings lists the quantitative findings. It begins with the relationships between the independent variables of teacher demographic data, the school demographic data, and the organizational climate constructs. Next, findings about the latent construct of academic optimism are summarized. Finally, findings about the dependent variables, degrees of implementation, are listed. They include relationships between the observation and self-reported degrees of implementation and the independent variables of teacher demographic data, school demographic data, and organizational climate constructs. The section continues with the findings about the independent variables that predict the observation and self-reported degrees of implementation. It concludes with the qualitative findings, which synthesize the ideas from the two focus groups.

Variances between Teacher Demographic Data and Organizational Climate Constructs

1. Teachers who were older perceived themselves as more controlling in classroom management style. They believed that teachers in their school had strong collective teacher efficacy and a mindful approach to teaching. In addition, they had greater trust in students and parents and believed that students cared about their learning. Teachers who were older scored significantly higher than teachers who were younger on the constructs of Attitudes and Beliefs about Classroom Control, total collective teacher efficacy and the subscale measure of Student Discipline, faculty trust in clients, academic emphasis, and faculty mindfulness. This finding contradicted research (J. H. Cohen & Amidon, 2004) that found that older teachers were more likely to possess an indirect, less controlling

- teaching style. See Appendix K for a list of findings showing no significance based on the age of the teacher.
- 2. Male teachers perceived themselves as more controlling in their classroom management style, especially in the management of instruction. They scored significantly higher than female teachers on the measures of total Attitudes and Beliefs about Classroom Control and the subscale measure of Instructional Management. This finding supported previous research (J. H. Cohen & Amidon, 2004) that found male teachers were more likely to have a direct, controlling teaching style than female teachers. However, it contradicted research (N. Martin, Yin, & Mayall, 2006) that found male teachers less controlling than female teachers. See Appendix K for a list of findings showing no significance based on the gender of the teacher.
- 3. Teachers who participated in the *Conscious Discipline* book club perceived themselves as less controlling in their approach to classroom management. They scored significantly lower on Attitudes and Beliefs about Classroom Management than teachers who did not participate in the book club. See Appendix K for a list of findings showing no significance based on participation in the *Conscious Discipline* book club.
- 4. Teachers with more years of experience were more trusting of parents and students, and believed that students cared about their learning. They perceived their colleagues as having strong collective efficacy, especially with student discipline, and as being mindful in their approach to teaching. Teachers with more experience scored significantly higher than teachers with less experience on the measures of collective teacher efficacy including the subscale of Student Discipline, faculty trust in clients, academic emphasis,

and faculty mindfulness. This finding supported research (Goddard & Skria, 2006) that found teachers with more experience had stronger collective teacher efficacy.

No significant relationships between years of teaching experience and the constructs of the Attitudes and Beliefs about Classroom Management, the collective teacher efficacy subscale measure of Instructional Strategies, and enabling bureaucracy were found. These findings differed from previous research (Ritter & Hancock, in press) that suggested teachers with more experience were more likely to be less controlling in their approach to classroom management. It also contradicted research (N. Martin, Yin, & Mayall, 2006) that found more experienced teachers (six or more years of teaching experience) were more controlling in their approach to classroom management.

5. Teachers with more years in their current school believed that students cared about their learning and that teachers in their school were mindful in their approach to teaching. They scored significantly higher than teachers who were newer to schools on academic emphasis and faculty mindfulness. See Appendix K for a list of findings showing no significance based on the number of years in a teacher's current school.

Variances between School Demographic Data and Organizational Climate Constructs

6. Teachers in smaller elementary schools perceived themselves as less controlling in their approach to classroom management, especially in the management of instruction. They scored significantly lower than teachers in larger schools on the total Attitudes and Beliefs about Classroom Control and the subscale of Instructional Management.
Teachers in the smallest schools (less than 450 students) and largest schools (more than 650 students) had greater trust in parents and students, believed that students cared about

their learning, and perceived that teachers were mindful in their approach to teaching. Compared to teachers in schools with between 450 to 650 students, teachers in the smallest schools (less than 450 students) and largest schools (more than 650 students) scored significantly higher on faculty trust in clients, academic emphasis, and faculty mindfulness. This finding supported, in part, research which found significant, moderate but negative correlations between school size and faculty trust in clients (Smith & Birney, 2005) and contradicted research which found no significant differences between school size and academic emphasis (Bevans, Bradshaw, Miech, & Leaf, 2007). No significant differences between the size of the school and scores on the constructs of the Attitudes and Beliefs about Classroom Control subscale measure of People Management, collective teacher efficacy, and enabling bureaucracy were found. This finding contradicted research (Sinden, Hoy, & Sweetland, 2004) that found smaller schools had stronger enabling bureaucracy.

The schools with one year of *Conscious Discipline* book club, the teachers perceived themselves as less controlling in classroom management style, especially in the management of instruction than teachers in schools with two years of the book club. They also perceived their colleagues as having strong efficacy in instructional management, trusted students and parents, and believed students cared about their learning. Teachers in schools with two years of the *Conscious Discipline* book club scored significantly higher than teachers in schools with one year of book club on the total Attitudes and Beliefs about Classroom Control and the subscale measure of Instructional Management. They also scored significantly lower on the collective teacher efficacy subscale measure of

Instructional Strategies, faculty trust in clients, and academic emphasis. See Appendix K for a list of findings showing no significance based on the number of years a school had hosted a *Conscious Discipline* book club.

8. In schools with exceptionally strong PTA membership, teachers perceived themselves as less controlling in classroom management style, especially in the management of student behaviors. They perceived their colleagues as having strong efficacy, both in instruction and in discipline. In addition, they were more trusting of parents and students and believed students cared about their learning. Teachers in schools with more than 100% PTA membership scored significantly lower on the Attitudes and Beliefs about Classroom Control and the subscale measure of People Management than teachers in schools with less than 100% PTA membership. They scored significantly higher on collective teacher efficacy, faculty trust in clients, and academic emphasis. However, this was not consistent for every organizational climate construct.

Teachers in schools with between 60% and 80% PTA membership and teachers in schools with greater than 100% PTA membership believed that the bureaucratic organization of their schools helped them do their jobs as teachers. Along with teachers in schools with between 60% and 80% PTA membership, teachers in schools with more than 100% PTA membership scored significantly higher on enabling bureaucracy than teachers in schools with less than 60% PTA membership and schools with between 80% and 100% PTA membership.

Teachers in schools with between 60% and 80% PTA membership believed their colleagues were more mindful in their approach to teaching. They had significantly

higher scores on faculty mindfulness than teachers in schools with less than 60% and more than 80% PTA membership.

The analysis of variance did not find all organizational climate constructs to be significant. See Appendix K for a list of findings showing no significance based on the percentage of PTA membership.

9. The variances in organizational climate constructs by the percentage of students identified as gifted were significant but contrasting. No definitive conclusions could be drawn from the results.

Specifically, teachers in schools with more than 7.5% identified as gifted were more trusting of students and parents and believed that students cared about their learning. They scored significantly higher on faculty trust in clients and academic emphasis than did teachers in schools with less than 7.5% of students identified as gifted.

Teachers in schools with more than 7.5% students identified as gifted and in schools with between 3.5% and 5.5% of students identified as gifted perceived themselves as less controlling in their approach to classroom management and perceived their colleagues to have strong collective teacher efficacy, especially in instruction. However, they also perceived their colleagues as less mindful in their approach to instruction. They scored significantly lower than teachers in schools with less than 3.5% of students identified as gifted and in schools with between 5.5% and 7.5% of students identified as gifted on all measures of the Attitudes and Beliefs about Classroom Control. They had significantly higher scores on the total collective teacher efficacy and the subscale measure of Instructional Strategies. In contrast, teachers in schools with between

3.5% and 7.5% of students identified as gifted had significantly higher scores on both the collective teacher efficacy subscale measure of Student Discipline and faculty mindfulness. Previous research (Goddard & Skria, 2006) found that higher numbers of students identified as gifted predicted stronger collective teacher efficacy. Results from this study supported the finding by Goddard and Skria (2006) with two caveats: teachers in schools with between 3.5% and 5.5% also had higher scores on collective teacher efficacy, and higher scores on the subscale of Student Discipline were found in schools with between 3.5% and 7.5% of students identified as gifted.

Teachers in schools between 3.5% and 5.5% of students identified as gifted believed that the bureaucratic structure of their schools enabled them to do their jobs more effectively. They had significantly higher scores on enabling bureaucracy than teachers in schools with either less than 3.5% or greater than 5.5% of students identified as gifted.

10. The variances among schools in organizational climate constructs by the percentage of students receiving special education services were significant but contrasting. No definitive conclusions can be drawn.

For example, teachers in schools with greater percentages of students receiving special education services perceived themselves as more controlling in their approach to classroom management and perceived students as not as concerned about their learning.

Teachers in schools with a smaller percentage of students receiving special education services scored significantly lower on all measures of Attitudes and Beliefs about Classroom Control and significantly higher on academic emphasis.

Teachers in schools with between 9% and 15% of students receiving special education services were less trusting of parents and students and perceived their colleagues as having weaker collective teacher efficacy. They had significantly lower scores in collective teacher efficacy and faculty trust in clients than teachers in schools with less than 9% and more than 15% of students receiving special education services.

Teachers in schools with between 12% and 15% of students receiving special education services believed that the bureaucratic structure of their schools hindered them from effectively doing their job. They had significantly lower scores on enabling bureaucracy than teachers in schools with either less than 12% or greater than 15% of students receiving special education services.

Finally, teachers in schools with more than 15% of students receiving special education services perceived their colleagues as more mindful in their approach to teaching. They had significantly higher scores on faculty mindfulness than teachers in schools with less than 15% of students receiving special education services.

11. Teachers in schools with lower percentages of students receiving free or reduced lunch were more likely to trust parents and students and believe that students cared about their learning. Generally, as schools decreased in the percentage of students receiving free or reduced lunch, mean scores for faculty trust in clients, and academic emphasis increased. This supported research finding a strong relationship between faculty trust in clients and SES (Smith & Birney, 2005). It also supported research (Alig-Mielcarek, 2003) that found a significant correlation between SES and academic emphasis but contradicted

research (W. K. Hoy, Sweetland, & Smith, 2002) that found no significant correlation between SES and academic emphasis. However, there were exceptions to this trend.

Teachers in schools with a greater proportion of students receiving free or reduced lunch considered themselves more controlling in their approach to classroom management. They scored significantly higher on the total Attitudes and Beliefs about Classroom Control and the subscale of People Management. See Appendix K for a list of findings showing no significant correlations based on SES.

In schools with more than 50% of students receiving free or reduced lunch, teachers perceived their colleagues to have weaker collective efficacy. They had significantly lower scores on collective teacher efficacy as compared to teachers in schools with less than 50% of students receiving free or reduced lunch. This supported research (Adams & Forsyth, 2006; Goddard, LoGerfo, & Hoy, 2004) that found that SES predicted collective teacher efficacy but contradicted research (Goddard & Skria, 2006) finding no correlation between the two measures.

Teachers in schools with less than 20% and more than 50% of students receiving free or reduced lunch perceived the bureaucracy of their schools hindered them from doing their job and that teachers in their school were less mindful in their approach to teaching. They had significantly lower scores on enabling bureaucracy and faculty mindfulness than teachers in schools with between 20% and 50% of students receiving free or reduced lunch.

Correlations among Constructs: Teacher Beliefs, Collective Teacher Efficacy, Faculty Trust in Clients, Academic Emphasis, Enabling Bureaucracy, and Faculty Mindfulness

- 12. The constructs of Attitudes and Beliefs about Classroom Control, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy and faculty mindfulness were reliable measures. They had strong positive intercorrelations and internal reliability. Intercorrelations for each measure, ranging from .207 to .854, were statistically significant. The internal reliability for each measure was also strong and statistically significant, with alpha coefficients ranging from .749 for academic emphasis to .927 for faculty trust in clients. These findings supported research showing strong internal reliability for measures of Attitudes and Beliefs about Classroom Control, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy and faculty mindfulness (Barr, 2002; Gage, 2004; Geist, 2002; Goddard, Tschannen-Moran, & Hoy, 2001; W. K. Hoy, Smith, & Sweetland, 2002).
- 13. Teachers perceiving their schools as having a positive organizational climate had the following beliefs in common: a greater trust in parents and students, a greater perception that students cared about their learning, a stronger belief that their colleagues had strong collective efficacy and a mindful approach to teaching, and the belief that the bureaucratic structure of their schools helped them to do their jobs effectively. Conversely, teachers perceiving their schools as having a weaker organizational climate had the following beliefs in common: less trust in parents and students, a perception that students were not concerned about their learning, a belief that their colleagues had weaker collective efficacy and a less mindful approach to teaching, and the belief that the bureaucratic structure of their schools hindered them to do their jobs effectively.
  Organizational climate constructs correlated significantly with each other: positively and

strongly among collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness. This supported research (McGuigan & Hoy, 2006) that found significant, positive, moderate correlations between collective teacher efficacy and enabling bureaucracy and significant strong, positive correlations between collective teacher efficacy, faculty trust in clients, and academic emphasis. This finding also supported research (Gage, 2004) that found positive correlations between collective teacher efficacy, faculty trust, and school mindfulness. However, the correlation between collective teacher efficacy and faculty mindfulness found in this study (r = .504, p < .01) was not as strong as the .970 (p < .01) correlation found in research on mindfulness (Gage, 2004). It also contradicted research that found no relationship between faculty mindfulness and enabling bureaucracy (Gage, 2004).

14. Teachers who perceived themselves as less controlling had greater trust in parents and students and a stronger belief that students cared about their learning. Attitudes and Beliefs about Classroom Control correlated significantly and negatively with faculty trust in clients and academic emphasis. The first subscale, Instructional Management, correlated significantly and negatively only with academic emphasis. The second subscale, People Management, correlated significantly and negatively with collective teacher efficacy, faculty trust in clients, academic emphasis, and enabling bureaucracy. Although the Attitudes and Beliefs about Classroom Control subscale measure of People Management correlated significantly with enabling bureaucracy, the total measure of Attitudes and Beliefs and the subscale measure of Instructional Management showed no correlation. Faculty mindfulness and collective teacher efficacy showed no significant

correlations with Attitudes and Beliefs about Classroom Control. This was contradictory to an earlier study using the Pupil Control Ideology (Woolfolk & Hoy, 1990), in which the researchers found that preservice teachers high in teacher efficacy tended to be more humanistic, or less controlling in classroom management. It is important to note that the researchers investigated teaching efficacy, not collective efficacy, although research has found that the variance in teacher efficacy can be entirely predicted by collective efficacy (Goddard & Goddard, 2001).

# Academic Optimism

- 15. Collective teacher efficacy, faculty trust in clients, and academic emphasis formed the latent construct of academic optimism. Descriptive statistics found significant correlations among the factors of collective teacher efficacy, faculty trust in clients, and academic emphasis. The latent construct of academic optimism correlated both strongly and positively with collective teacher efficacy, faculty trust in clients, and academic emphasis. This supported research (McGuigan & Hoy, 2006) that also found strong positive correlations between academic optimism and collective teacher efficacy, faculty trust in clients, and academic emphasis. With an alpha coefficient of .939, the internal reliability of the 27 items forming the latent construct of academic optimism was strong.
- 16. Teachers who were older and with more experience perceived their schools to have a positive academic environment. They had significantly greater academic optimism mean scores than teachers who were younger with less teaching experience. See Appendix K for a list of findings showing no significant variance in academic optimism based on the other teacher demographic data.

- 17. Teachers in schools with a lower percentage of students receiving free or reduced lunch perceived their schools to have a strong positive academic environment. Mean scores for teachers on academic optimism increased significantly as the percentage of students receiving free or reduced lunch decreased. This supported research (McGuigan, 2005) that found a strong correlation between SES and academic optimism.
- 18. Teachers in both the largest (more than 650 students) and smallest (less than 450 students) schools perceived their schools as having a strong positive academic environment. Teachers in mid-sized schools (between 450 and 650 students) had significantly lower mean scores on academic optimism; in larger and smaller schools, teacher mean scores on academic optimism were significantly higher.
- 19. Teachers in schools with a lower percentage (less than 9%) of students receiving special education services perceived their schools as having a strong positive academic environment. They had significantly higher mean scores on academic optimism. The lowest mean scores for academic optimism were found in schools with between 9% and 15% of students identified for special education, followed by schools with greater than 15% of students identified for special education services.
- 20. Teachers in schools with greater percentages (more than 7.5%) of students qualifying for gifted services perceived their schools as having a strong positive academic environment. They had significantly higher mean scores on academic optimism. The lowest mean scores for academic optimism were found in schools with the smallest percentage (less than 3.5%) of students qualifying for gifted services, followed by schools in which between 3.5% and 7.5% of students identified as gifted.

- 21. Teachers in schools with greater than 100% PTA membership perceived their schools had a strong positive academic environment. They had significantly higher mean scores on academic optimism than teachers in schools with less than 100% PTA membership.
- 22. Teachers in schools in their first year of *Conscious Discipline* book club perceived their schools to have a strong positive academic environment. They had significantly higher mean scores on academic optimism than teachers in schools with two years of book club.
- 23. Teachers who believed their schools had a strong positive academic environment also believed that they were less controlling in their approach to classroom management, that the bureaucratic structure of their school helped them do their jobs, and that teachers in their schools were mindful in their approach to teaching. Academic optimism had a significant negative correlation with Attitudes and Beliefs about Classroom Control and significant positive correlations with enabling bureaucracy and faculty mindfulness. This supported research finding a significant positive correlation between academic optimism and enabling bureaucracy (McGuigan, 2005).

Correlations between Measures of Degree of Implementation of Professional Development

- 24. Teachers in schools reporting a high degree of implementation did not have equally high degrees of implementation in their schools according to observation data. The Self-Reported degree of implementation showed no correlation with the total Observation degree of implementation or the subscale observation measures of Greetings and Classroom Structures.
- 25. The total Observation degree of implementation correlated significantly, strongly, and positively with the subscale measure of Greetings and significantly, but weakly and

positively with the subscale measure of Classroom Structures. The subscale measures of Greetings and Classroom Structures showed significant positive correlations.

Correlations in Degree of Implementation by Teacher and School Demographics

26. Teachers in schools that had the greatest degree of implementation as defined by total Observation scores were more likely to be female, in smaller schools with greater participation in the book club and with fewer students proportionately receiving free or reduced lunch. The total Observation degree of implementation showed significant correlations: positively but weakly with gender, negatively but moderately with participation in the book club, and negatively but weakly with school size and SES. See Appendix K for a list of findings showing no significant correlations between the total observation degree of implementation based on the other teacher and school demographic data. The Observation subscale measures of Greetings and Classroom Structures varied in important ways.

Similar to the total Observation degree of implementation, teachers more likely to greet students in the morning also were in smaller schools with greater participation in the book club, with fewer students qualifying for free or reduced lunch and more students identified as gifted. The Observation subscale measure of Greetings correlated significantly: positively but weakly with percentage of students identified as gifted; and negatively but weakly with participation in the book club, school size, and SES. See Appendix K for a list of findings showing no significant correlations between the observation subscale of Greetings and the other teacher and school demographic data.

Teachers with more *Conscious Discipline* structures visible in the classroom were in schools with a greater percentage of female teachers who were younger. They were more likely to teach in schools with two years of *Conscious Discipline* book club in which more teachers participated. The observation subscale measure of Classroom Structures correlated significantly: positively but weakly with gender and negatively but weakly with book club membership, teacher age, and years of school book club. See Appendix K for a list of findings showing no significant correlations between the observation subscale of Classroom Structures and the other teacher and school demographic data.

Teachers in schools that had the greatest Self-Reported degree of implementation were more likely to be female, more experienced, and less likely to participate in a *Conscious Discipline* book club. They taught in schools with a greater percentage of PTA membership. The Self-Reported degree of implementation correlated significantly, positively but weakly with years of experience, book club membership, gender, and percentage of PTA membership. See Appendix K for a list of findings showing no significant correlations between the Self-Reported degree of implementation and the other teacher and school demographic data.

Correlations in Degree of Implementation by Organizational Climate Constructs

27. Schools with a greater total Observation degree of implementation were more likely to have teachers who were less controlling in their approach to classroom management, were more trusting of parents and students, had a stronger belief that students cared about learning, believed that the school's bureaucratic structure helped them do their jobs, and

Deservation degree of implementation showed significant correlations: negatively but weakly with Attitudes and Beliefs about Classroom Control and positively but weakly with faculty trust in clients, academic emphasis, enabling bureaucracy, and academic optimism. No significant correlations were found between the total Observation degree of implementation and the organizational climate constructs of collective teacher efficacy and faculty mindfulness. The observation subscale measures of Greetings and Classroom Structures differed.

Schools in which more teachers greeted students in the morning had teachers who perceived themselves as less controlling in their approach to classroom management, were more trusting of parents and students, had a stronger belief that students cared about learning, believed that the school's bureaucratic structure helped them do their jobs, and perceived their schools to have a strong positive academic environment. The Observation degree of implementation subscale measure of Greetings showed significant correlations: negatively and moderately with Attitudes and Beliefs about Classroom Control and positively but weakly with faculty trust in clients, academic emphasis, enabling bureaucracy, and academic optimism. No significant correlations were found between the Greetings observation subscale measure and the organizational climate constructs of collective teacher efficacy and faculty mindfulness.

The observation subscale measure of Classroom Structures did not correlate significantly with any organizational climate construct.

28. Schools in which teachers self-reported a greater degree of implementation contained teachers who believed their colleagues had strong teacher efficacy and were more mindful in their approach to teaching, were more trusting of parents and students, had a stronger belief that students cared about learning, believed that the school's bureaucratic structure helped them do their jobs, and perceived their schools to have a strong positive academic environment. The Self-Reported degree of implementation showed significant correlations: positively and moderately with collective teacher efficacy, faculty trust in clients, academic emphasis, and faculty mindfulness; and positively but weakly with enabling bureaucracy and academic optimism. No significant correlations between the Self-Reported degree of implementation and Attitudes and Beliefs about Classroom Control were found.

# Predictors of Degree of Implementation

To investigate which teacher demographic variables, school demographic variables, and organizational climate constructs predicted the degrees of implementation of professional development, a series of simple and multiple regressions were completed. The findings are summarized by total observation degree of implementation, the observation subscale measures of morning greetings and classroom structures, and the self-reported degree of implementation.

Both multiple regression and simple regression findings are included.

Total observation degree of implementation.

29. Schools with more teachers greeting students in the morning and with more *Conscious*Discipline structures present were more likely to be schools with a combination of lower percentages of students receiving free or reduced lunch, more teachers who participated

in the book club, and more teachers who perceived themselves as less controlling, especially in the management of instruction. In the best model using multiple regression, the combination of lower percentage of students receiving free or reduced lunch, greater teacher participation in the book club, and less controlling teachers (as defined by scores on the Attitudes and Beliefs about Classroom Control subscale measure of Instructional Management) predicted 77.1% of the variance in total Observation degree of implementation. Although this is the most important explanation, several simple regressions also found significant predictors of the Observation degree of implementation:

Teachers who perceived themselves as less controlling, especially in managing classroom instruction, were more likely to greet students in the morning and were more likely to have *Conscious Discipline* structures in their classroom. In a simple regression, the organizational climate construct of Attitudes and Beliefs about Classroom Control predicted 28.6% of the variance in the Observation degree of implementation of professional development. In a simple regression, the Attitudes and Beliefs about Classroom Control subscale measure of Instructional Management predicted 24.9% of the variance in the Observation degree of implementation. The Attitudes and Beliefs about Classroom Control subscale measure of People Management, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy, and faculty mindfulness were not significant predictors of the Observation degree of implementation.

Teachers in schools with lower SES who participated in the *Conscious Discipline* book club were more likely to greet students in the morning and were more likely to have

Conscious Discipline structures in their classroom. The demographic variables of teacher participation in a book club and SES were the only significant predictors of the Observation degree of implementation. In simple regressions, teacher participation in the book club predicted 37.6% of the variance and SES predicted 24.1% of the variance in total Observation degree of implementation.

Morning greetings.

30. Schools with more teachers greeting students in the morning were more likely to be schools with a combination of lower percentages of students receiving free or reduced lunch, with more teachers who participated in the book club and more teachers who perceived themselves as less controlling, especially in the management of instruction. In the best model using multiple regression, similar to the total Observation degree of implementation, lower percentages of students receiving free or reduced lunch, greater teacher participation in the book club, and less controlling teachers (as defined by scores on the ABCC Instructional Management) predicted 77.2% of the variance in the Observation subscale measure of Greetings degree of implementation. Although this is the most important explanation, several simple regressions also found significant predictors of the Greetings degree of implementation:

Teachers more likely to greet students in the morning perceived themselves as less controlling, were more trusting of parents and students, and believed that students cared about their learning. For the observation subscale of Greetings degree of implementation, significant predictors included the organizational climate constructs of the total Attitudes and Beliefs about Classroom Control and the subscales of Instructional

Management and People Management, faculty trust in clients, and academic emphasis. In simple regressions, Attitudes and Beliefs about Classroom Control explained 39.8% of the variance in the Observation subscale measure of Greetings; the Attitudes and Beliefs about Classroom Control subscale measures of Instructional Management and People Management explained 36.6 % and 29.5%, respectively, of the variance in Greetings. In a simple regression, faculty trust in clients and academic emphasis explained 29.2% and 28%, respectively, of the variance in the Greetings degree of implementation.

Teachers in schools with lower SES who participated in the *Conscious Discipline* book club were more likely to greet students in the morning. The teacher and school demographic variables that predicted the observation subscale of morning greetings included teacher participation in the book club and SES. In simple regressions, teacher participation in the book club and SES explained 26.5% and 25.6% of the variance in the Greetings degree of implementation, respectively.

Classroom structures.

- 31. Teachers who participated in the *Conscious Discipline* book club were more likely to have *Conscious Discipline* structures present in the classroom. For the Observation subscale of Classroom Structures degree of implementation, participation in the book club was the only significant predictor, explaining 53.6% of the variance in Classroom Structures degree of implementation.
  - *Self-reported degree of implementation.*
- 32. Schools in which teachers reported a high degree of implementation also had more teachers who perceived themselves as less controlling, especially in the management of

students, and perceived their colleagues as more mindful in the their approach to teaching. In the best model using multiple regression, faculty mindfulness and the Attitudes and Beliefs about Classroom Control subscale measure of People Management explained 66.2% of the variance in Self-Reported degree of implementation. Although this is the most important explanation, several simple regressions also found significant predictors of the Self-Reported degree of implementation:

33. Schools in which more teachers believed that the school implemented *Conscious* Discipline well also had teachers who perceived themselves as less controlling, believed that their colleagues had strong teaching efficacy in instruction and were mindful in their approach to teaching trusted parents and students, believed that students cared about their learning, and perceived their schools as positive academic environments. Significant predictors of the Self-Reported degree of implementation were teacher beliefs as measured by Attitudes and Beliefs about Classroom Control, total collective teacher efficacy and the subscale of Instructional Strategies, faculty trust in clients, academic emphasis, academic optimism, and faculty mindfulness. Sequentially, in simple regressions from strongest to weakest, significant predictors of Self-Reported degree of implementation were: faculty mindfulness explained 45.1% of the variance, Attitudes and Beliefs about Classroom Control explained 39.6%; the Attitudes and Beliefs about Classroom Control subscale measures of Instructional Management and People Management explained 25.7% and 41.8% of the variance, respectively; academic optimism predicted 36.2% of the variance; academic emphasis explained 31.7% of the variance; and collective teacher efficacy explained 24.3% of the variance and its subscale

- measure of Instructional Strategies explained 27.8% of the variance among schools in the Self-Reported degree of implementation of professional development.
- 34. Teachers in schools with a high degree of implementation of *Conscious Discipline* believed in the program, not only philosophically but also because of its effect on students. They found ways and time to implement it. In comparison, teachers in schools with low degrees of implementation said they did not really understand the philosophy of *Conscious Discipline* and could not find the time to implement it. The next sections detail these findings.

Teachers in schools with a high degree of implementation explained the reason as believing in *Conscious Discipline*, finding ways to transfer the professional development to classroom practice, and seeing the positive effects on students. For teachers in schools with a high degree of implementation, the most frequent comments included, in descending order, teacher beliefs, the application of the concepts learned in the book club to classroom practices, the change process, and the effect on students. Teacher beliefs, application of learning in the book club to classroom practice, and the change process were mentioned more frequently in the teacher focus group with a high degree of school implementation than in the teacher focus group with a low level of implementation.

Teachers in schools with a low degree of implementation explained the reason as being unable to find the time for a new initiative, although they recognized and believed in its value (to a lesser degree than teachers in schools with high degree of implementation). For teachers in schools with a low degree of implementation, the most frequent comments revolved, in descending order, around teacher beliefs, time

constraints, application of the concepts learned in the book club to classroom practices, the effect on students, lack of knowledge about *Conscious Discipline*, and the change process. Time constraints and lack of knowledge were mentioned more frequently in the teacher focus group with a low degree of school implementation than in the teacher focus group with a high degree of implementation.

## Recommendations for Practice

Based on findings, several recommendations for practice can be made.

- 1. When hiring teachers, consider the value of age and experience. Teachers who are older with more teaching experience scored significantly higher on collective teacher efficacy, faculty trust, academic emphasis, academic optimism, and faculty mindfulness. Each of those constructs have been proven to be positive indicators for student achievement (Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; W. K. Hoy, Sweetland, & Smith, 2002; McGuigan, 2005; Tschannen-Moran & Barr, 2004), conflict management (Tschannen-Moran, 2001), protection of students (Smith & Birney, 2005) and overall effectiveness of a school (W. K. Hoy, Tarter, & Hoy, 2006b).
- 2. Continue to use the measures of Attitudes and Beliefs about Classroom Control to measure teacher beliefs about classroom management, the Collective Teacher Belief Scale to measure collective teacher efficacy, the Omnibus-T Scale to measure faculty trust in clients, the OHI-E scale to measure academic emphasis, the ESS Scale to measure enabling bureaucracy, and the M-Scale to measure faculty mindfulness. This study found them to be reliable measures.

- 3. When schools or school systems assess implementation of an initiative, consider school demographics such as the size of the school, the percentages of PTA membership, students identified as gifted, and students receiving special education services along with SES. Since this study showed that school demographics play a role in implementation, they should be considered. It may take longer for a school with high SES to implement a program, and teachers in those schools may need additional support. To expect the same level of implementation may not be fair for teachers.
- 4. When schools or school systems assess implementation of an initiative, triangulate the results by using both quantitative and qualitative methods. Consider using surveys in tandem with observations, interviews, and/or walkthroughs to assess implementation. This study found no relationship between the survey and the observations, so multiple methods of assessment are essential to accurately assess implementation.
- 5. The book club should be used to provide professional development that is ongoing, structured, and provides opportunities for teachers to discuss successes and challenges.
  This study confirmed that participation in the book club led to greater implementation of professional development.
- 6. Promote parental involvement by encouraging parents to join the PTA. Schools with more than 100% PTA membership had stronger organizational climates: greater trust, greater collective efficacy, and stronger academic emphasis. Since those constructs had been shown to predict student achievement, schools would be well-served by stronger parent participation in the PTA.

### Limitations/Delimitations

- 1. A significant delimitation of the study was the role of the principal. Principals are integral to positive school climate, the change process, and implementation of new strategies (Marzano, Waters, & McNulty, 2005). This study did not measure faculty trust of the principal or principal mindfulness. It did measure faculty trust of clients and faculty mindfulness, finding them both strong predictors of self-reported degree of implementation. This study found that faculty trust in clients was important in the implementation of professional development, and faculty trust in the principal could play a significant role. Literature in the business world supports the importance of trust in leadership to accelerate change (Covey & Merrill, 2006). Educational research has found faculty trust an important factor in school collaboration (Hartzler, 2003), school effectiveness (Tarter & Hoy, 2004), the prevention of student bullying (Smith & Birney, 2005) effective leadership (Tschannen-Moran, 2004), and academic achievement (Bryk & Schneider, 2002; Tschannen-Moran, 2004).
- 2. Using 17 elementary schools in one large suburban school district is a significant limitation of the study. The study cannot be generalized to other suburban school districts or to urban or rural school districts, nor can it be generalized to secondary schools. Although 489 teachers completed the survey, the unit of study was the school. Seventeen schools is a small sample size, so the validity of the study may be questioned.
- 3. The methodology used was a significant limitation of the study. Specifically, teacher beliefs predicted the degree of implementation of *Conscious Discipline*. Teacher beliefs were measured once; as a result, the researcher could not assess whether beliefs had

changed as a result of the book club or whether existing beliefs about classroom control led teachers to participate in the book club. Measuring teacher beliefs prior to participating in professional development on classroom management would give a baseline from which to interpret later measures of teacher beliefs.

### Future Research

Based on the findings in this study, opportunities for future research are recommended. They are organized by school demographic variables, organizational climate constructs, and implementation of professional development.

- 1. Additional studies on the relationship between school size and organizational climate constructs should be conducted. Teachers in both schools with under 450 students and over 650 students scored significantly higher on faculty trust clients, academic emphasis, and faculty mindfulness than teachers in schools with between 450 and 650 students. Why the largest and the smallest of schools had greater scores on these constructs is worthy of further study. In addition, previous research found that smaller schools had stronger enabling bureaucracy (Sinden, Hoy, & Sweetland, 2004), which contradicted the finding in this study of a lack of significant variance in enabling bureaucracy by the size of the school.
- 2. Additional research into the relationship between SES and organizational climate variables should be conducted. Research has reported conflicting results. As examples, findings in this study contradicted findings on SES and academic emphasis (W. K. Hoy, Sweetland, & Smith, 2002) and collective teacher efficacy (Goddard & Skria, 2006).

- Additional research into the relationship between the percentage of students identified as gifted and organizational climate variables should be conducted. Results and analyses in this study are non-linear and/or bimodal and conflicting. Schools with greater percentages of students identified as gifted scored higher on the measures of collective teacher efficacy, faculty trust in clients, and academic emphasis; they had lower scores on enabling bureaucracy and mindfulness. Previous research (Goddard & Skria, 2006) found that school demographics, including the percentage of students identified as gifted, explained approximately half of the variance in teacher collective efficacy, so other variables must explain the remainder of the variance. It is not surprising that teachers in schools with more students identified as gifted have significantly greater mean scores on collective teacher efficacy, faculty trust in clients, and academic emphasis. Highachieving students foster strong efficacy, trust, and an academic focus. The lower mean scores on mindfulness were unexpected, and additional research should be conducted to find out why teachers in schools with a greater percentage of students identified as gifted are less mindful in their approach to teaching. Perhaps those schools do not face the challenges that encourage mindfulness (Weick & Sutcliffe, 2001). Mindful organizations are preoccupied with failure, not success, and are resilient, able to bounce back from setbacks. Schools with high percentages of students identified as gifted may experience fewer failures and setbacks, especially in academic achievement.
- 4. Additional research into the relationship between the percentage of students receiving special education services and organizational climate variables should be conducted.
  Results in this study are conflicting. Teachers in schools with smaller percentages of

- students receiving special education services had greater mean scores on collective teacher efficacy, faculty trust in clients, academic emphasis, and enabling bureaucracy, but lower mean scores on faculty mindfulness. The lower mean scores on mindfulness were unexpected, and additional research should be conducted.
- Research investigating the role of PTA membership in organizational climate should be conducted using the percentage of PTA membership as the measure of parental involvement. The findings that teachers in schools with greater than 100% PTA membership had stronger academic optimism, which included stronger collective teacher efficacy, faculty trust in clients, and academic emphasis, is important because previous research has found these variables significant in student achievement. The finding that teachers in schools with greater than 100% PTA membership also perceived themselves as less controlling is not surprising, given the greater trust and academic emphasis, but additional research could confirm this finding. The finding that schools with both 60% to 80% PTA membership and over 100% PTA membership had stronger enabling bureaucracy is also worthy of further study. Reasons for the bimodal finding should be investigated. The finding that schools with 60% to 80% PTA membership had stronger faculty mindfulness was also unexpected. If or why teachers in schools with greater percentages of PTA membership do not have greater mindfulness is worth of further study.
- 6. Research on the relationship of academic optimism to the implementation of professional development should continue. Academic optimism predicted over one-third of the self-

- reported degree of implementation and correlated with the observation degree of implementation. This finding should be confirmed by additional studies.
- 7. More research is needed using the Attitudes and Beliefs about Classroom Management to find antecedents and characteristics that predict teacher beliefs about classroom control. The finding in this study that teachers who were older perceived themselves as more controlling was contradictory to previous research (J. H. Cohen & Amidon, 2004). The finding in this study that male teachers perceived themselves as more controlling supported some research (J. H. Cohen & Amidon, 2004) and contradicted other research (N. Martin, Yin, & Mayall, 2006). The finding that teachers who participated in the *Conscious Discipline* book club perceived themselves as less controlling is important because that is one of the expected outcomes of implementing *Conscious Discipline* structures in the classroom. This significant finding should be validated by other studies.
- 8. Further research is needed comparing self-reported degree of implementation of professional development and observation degree of implementation. This study showed no correlation between the two measures. Since the implementations of many initiatives are measured by surveys, more research into surveys that validate observation data should be conducted. In addition, this study found that the predictor variables for self-reported degree of implementation were organizational climate constructs in contrast to the predictor variables for observation degree of implementation, which were teacher beliefs, participation in the book club, and SES. These predictor variables should be validated by additional studies.

- 9. Research on the book study as a method to implement professional development should continue. This study investigated the book study as the method of delivery for professional development on classroom management. Research should investigate book studies on other topics, such as differentiation, grading practices, instructional strategies, scientific inquiry, use of technology for instruction, or thinking skills, to find out whether the book study leads to a high degree of implementation in these academic areas.
- 10. Longitudinal research on continued implementation of school improvement initiatives should be considered. The finding that schools with one year of *Conscious Discipline* book club had greater degrees of implementation than schools with two years of book club was unexpected. Longitudinal studies should be conducted so that schools are not compared to other schools in their degrees of implementation; rather, they are compared to themselves over several years.
- 11. Research on effective professional development to improve classroom management should be conducted. This study investigated the effect of the book study on classroom management, finding that participation in the book study did increase the practices that support improved classroom management. Other professional development activities may support improved classroom management, such as coaching or classroom check-ups (Reinke, 2005). For example, principals may support a classroom management initiative by frequent classroom walkthroughs looking for evidence of academic engagement, opportunities to respond, the ratio of positive to negative interactions, and the frequency of disruption (Sprick, Knight, Reinke, & McKale, 2006).

12. Finally, research investigating the role of the principal in promoting implementation of professional development should be conducted. It would further knowledge about successful implementation of professional development (Marzano, Waters, & McNulty, 2005).

### Conclusion

Findings show that the measures of teacher beliefs about classroom management, collective teacher efficacy, faculty trust in clients, academic emphasis, enabling bureaucracy and faculty mindfulness were reliable instruments. Further, the constructs of collective teacher efficacy, faculty trust in clients, and academic emphasis formed the latent construct of academic optimism. Teacher demographics, school characteristics, teacher beliefs, and organizational climate variables significantly correlated with and predicted the degree of implementation of professional development. The combination of lower percentage of students receiving free or reduced lunch, greater teacher participation in the book club, and less controlling teachers predicted over three fourths of the variance in total observation degree of implementation. A lower percentage of students receiving free or reduced lunch, greater teacher participation in the book club, and less controlling teachers predicted over three fourths of the variance in morning greetings observation degree of implementation. Participation in the Conscious Discipline book club predicted over one half of the variance in classroom structures degree of implementation. Significant predictors of the self-reported degree of implementation were teacher beliefs about classroom control, total collective teacher efficacy and the subscale of Instruction, faculty trust in clients, academic emphasis, the latent construct of academic optimism, and mindfulness. The combination of faculty mindfulness and less controlling teacher beliefs about the management of

students predicted almost two thirds of the variance in the self-reported degree of implementation. No correlations between the self-reported degree of implementation and the observation degree of implementation were found.

The complexity of this study allows for reflection on the expected and unexpected findings in this study. Included in this section are conclusions on the book club as the method of delivery for professional development, the focus group as an explanation for the degree of implementation of professional development, and the management of the change process as it relates to teacher professional development.

The purpose of the *Conscious Discipline* book club was to create a classroom environment in which the relationships among students and the teacher are strong and positive, the teacher models emotionally intelligent behavior, the students have choices, and the classroom structure is based on rules and consequences rather than reward and punishment. The finding that teachers who participated in the book club perceived themselves as less controlling was important. In the focus groups, teachers reported their change in beliefs. For example, one teacher reported, "As I saw one structure work, I added another." This supports the model of professional development defined by Guskey (2000; 2002). According to Guskey, teacher beliefs change after they find that the initiative works. Because of this, he proposed providing professional development for teachers to use, rather than providing professional development to change beliefs.

The finding that schools with one year of the *Conscious Discipline* book club had a greater overall degree of implementation than schools with two years of book club is troubling.

In the focus group with a high level of implementation, a teacher from a school with two years of

book club thought that the second year of implementation was easier. This research did not investigate why some schools maintain or increase implementation while other schools falter in their efforts. Perhaps it is the result of the implementation dip (Fullan, 2001). Fullan (2001) suggested that implementation dips are inevitable in educational reform that changes teachers' practices and beliefs. Teachers struggle with the fear of change and the fear of lacking the necessary skills. Fullan further believed that effective leaders are sensitive to teachers' needs, adapting their leadership styles to act affiliative or authoritative or as a coach to keep the momentum going. An affiliative leader tries to create harmony; an authoritative leader gives clear direction to turn things around; and a coaching style of leadership offers support to improve performance (Goleman, Boyatzis, & McKee, 2002). Fullan's philosophy may have merit in this study, because, as a teacher in a high-implementation school in its second year said, "The principal did say that this year we would all do the morning greetings." Perhaps that principal sensed the need to authoritatively define expectations to impel implementation. Perhaps principals in schools in their second year with low levels of implementation did not believe in Conscious Discipline themselves, did not find sufficient support among the teachers, or did not understand the leadership dynamics essential for change.

Collective teacher efficacy has been found to be an important construct in student achievement, student achievement (Goddard, 2001; Goddard, LoGerfo, & Hoy, 2004; W. K. Hoy, Sweetland, & Smith, 2002; McGuigan, 2005; Tschannen-Moran & Barr, 2004), conflict management (Tschannen-Moran, 2001), and protection of students (Smith & Birney, 2005). However, in this study it had limited impact on the degree of implementation in professional development, only as a predictor in the self-reported degree of implementation. The sample in

this study may provide a reason for this unexpected finding. Teachers in suburban schools may have stronger collective teacher efficacy because student achievement is higher than in most urban school systems. Indeed, collective teacher efficacy in this study did vary significantly among schools, but the variance was the weakest of any of the organizational climate constructs. In the initial study using the Collective Teacher Belief Scale, collective teacher efficacy scores ranged from 5.7 to 8.3 on a 9-point Likert scale. In this study, collective teacher efficacy ranged from 7.01 to 8.29 with a mean of 7.74 as compared to 7.07 in the original study. Clearly most teachers in this study believed their colleagues had strong collective teacher efficacy.

The purpose of the focus groups was to explain why schools were successful in implementing professional development. To select schools for focus groups, the degree of implementation was the first criterion considered. Mean scores for teachers in the Observation degree of implementation varied from 3.799 in schools with a low degree of implementation to 5.477 in schools with a high degree of implementation. Mean scores for Self-Reported degree of implementation, on a 5-point Likert scale, also varied from 2.835 in schools with a low degree of implementation to 3.255 in schools with a high degree of implementation. The second criterion for selection was the percentage of teachers in the book club: 11.3% of the teachers participated in the book club in the schools with a low degree of implementation as compared to 78.6% of the teachers in schools with a high degree of implementation.

Demographic data also varied in one important way: 52% of students in the schools with low degrees of implementation received free or reduced lunch as compared to 31.5% of students in schools with high degrees of implementation. Socio-economic status has been found to make a difference in teacher efficacy (Goddard & Goddard, 2001), collective teacher efficacy (Goddard,

LoGerfo, & Hoy, 2004), academic achievement (Alig-Mielcarek, 2003; Barr, 2002; Goddard, LoGerfo, & Hoy, 2004; W. K. Hoy, Sweetland, & Smith, 2002; W. K. Hoy, Tarter, & Hoy, 2006b; McGuigan, 2005), and student bullying (Smith & Birney, 2005). That it made a difference in degree of implementation of professional development for classroom management is understandable.

The two focus groups also had important differences in mean scores on the constructs of faculty trust in clients and faculty mindfulness. The two schools with a high degree of implementation had greater mean scores on both faculty trust in clients and faculty mindfulness. Teachers in schools with a low degree of implementation had mean scores of 3.746 on faculty trust in clients on a 6-point Likert scale compared to mean scores of 4.455 for teachers in schools with a high degree of implementation. Further, teachers in schools with a low degree of implementation had mean scores of 4.223 on faculty mindfulness on a 5-point Likert scale, compared to 4.772 on faculty mindfulness for teachers in schools with a high degree of implementation. Examining faculty trust in clients first, the survey items include statements such as, "Teachers in this school trust their students," and "Students in this school care about each other." Conscious Discipline has a focus on building relationships. Research found that faculty trust in clients independently predicted a decrease in student bullying (Smith & Birney, 2005). Conscious Discipline also supports creating student autonomy. If teachers did not trust students, it would be difficult to give them more control over the classroom and their learning. If teachers did not believe that students cared about each other, they would see little value in Conscious Discipline structures such as the Friends and Family Board, the We Care Center, and the Kindness Center.

Scores on faculty mindfulness also varied in the focus groups, with schools with a low level of implementation scoring lower on faculty mindfulness. Survey items included such statements as, "Teachers in my building learn from their mistakes and change so they do not happen again," and "Too many teachers in my building give up when things go bad." The implementation of *Conscious Discipline* involves change in behaviors, classroom structures, and possibly changes in beliefs. The belief that teachers in their buildings were not capable of change and gave up easily could influence a teacher's willingness to implement *Conscious Discipline*. The teachers in the high implementation focus group even stated that they understood that everyone would be using *Conscious Discipline* at their schools. They were twice as likely to discuss what enabled them or hindered them from implementing *Conscious Discipline* in their classrooms.

Further comparisons of the two focus groups showed that teachers in schools with a high degree of implementation were more likely to mention teacher beliefs in their assessment of implementation than teachers in schools with a low level of implementation. Teachers in schools with a high degree of implementation never mentioned administrative support, although teachers in schools with a low degree of implementation mentioned a lack of administrative support as a reason for lower levels of implementation. Teachers in schools with a low degree of implementation were three times more likely to mention time as an obstacle to implementation than teachers in schools with a high level of implementation.

Analysis of the focus groups suggests an overall willingness to use *Conscious Discipline* in schools with high degree of implementation. Participants spoke of expectations, not mandates. Teachers in schools with a low level of implementation thought *Conscious Discipline* 

would be used in their building with more administrative support, yet one teacher noted that she would not have joined the book club had it been mandated. She participated because she had a choice.

Self-reported degrees of implementation and observation degree of implementation both have value despite the lack of correlation found in this study. The self-reported degree of implementation can easily be associated with the affective side of change, as in the Stages of Concern (Hall & Hord, 2001). In this model, teachers may be at the *Self* stage, assessing if and how the new initiative will affect them. *Task*, the next stage, revolves around getting materials ready and using the program. The last stage, *Impact*, assesses results, how the initiative is affecting the students, other teachers, etc. Using this model, the focus groups assess the affective side of change.

Hall and Hord (2001) also delineate the Level of Use, which are the teacher behaviors associated with an innovation. They classify teachers into categories of Nonusers and Users. The Users range from Level III, Mechanical or superficial users, to Level VI, Renewal Users who modify, research, and assess for the purpose of increased impact on students. Using this model, the greetings and classroom structures observations assessed the degree of use, ranging from Nonusers to Renewal Users.

First, connecting Stages of Concern to this study, the focus groups assessed the emotional states of teachers involved in the implementation of *Conscious Discipline*. Comments from the *Self* stage included, "I know I'm trying to do it, but I still go back to the control issue." Teachers in the *Task* stage commented, "I have to get through the pacing and other academics. I just don't have the time." Teachers in the *Impact* level of use talked about the effect of the initiative on

students with comments such as, "There are days I don't use the greeting apron, and the children will poke me in the spot where the greeting choice would have been." More comments from the focus group with high level of implementation were based on the students' positive reactions to *Conscious Discipline* structures and language, which indicates more teachers in the *Impact* level of use.

The observations assessed Level of Use. Each school had *Nonusers*, but schools with a high degree of implementation had fewer *Nonusers* than schools with a low degree of implementation. Teachers at the next level, *Mechanical Users*, sometimes adapt the new innovation. For example, one teacher said, "I'm not sure it's wrong to 'please' each other. I think everything has its place and incorporating this with what else we do – I would like to say that what we're doing is OK." Since initiatives usually take three to five years to implement successfully (Hall & Hord, 2001), teachers in this study were less likely to be at the highest level, *Renewal Users*, so no comments supporting this level of use could be gleaned from the focus groups. Specifically, no one mentioned researching or assessing the impact of *Conscious Discipline*.

## Reflection

This researcher is indebted to the principals who encouraged teachers to participate and willingly allowed access to schools and teachers. Opening one's school to scrutiny is an act of courage, and this researcher valued the 17 principals who, without hesitation, agreed to participate in the study.

The surveys provided valuable information, but observations provided the bulk of "real world" data. Walking through 517 classrooms reinforced the belief in the complexity of

teaching. Displaying *Conscious Discipline* structures in addition to the curricular word walls, literacy centers, computer-aided instruction, school safety notices, current units of study, writing aids, and genre lists takes commitment to children and to the profession. The walkthroughs enabled the researcher to collect evidence of extra hours of planning and preparation.

If teachers could spend the time observing morning greetings, they would see the profound differences in children's facial expressions as they entered classrooms. Younger students who were greeted by their teachers were smiling and more responsive to adults and other students. Younger students who walked into their classrooms without that teacher connection appeared preoccupied with their own thoughts rather than taking notice of others. Older students willingly participated in the greetings rituals. If they were not greeted by the teacher, older students were more engaged with peers. Although the morning greetings took valuable time, they appeared to have great value in building relationships with teachers. Those fifteen minutes every morning may impact the tone of the instructional day by preventing disruptive behavior and fostering cooperation.

If qualitative studies examine the affective side of teaching and schools and quantitative studies examine the behavioral side of teaching and schools, a mixed methodology integrates the best of both methods. Mixed methodology studies are time-consuming, but they are invaluable to accurate assessments and deeper understandings. Those involved in educational research and the legislation of educational mandates may learn as much spending time in schools as they do from examining testing data.

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