

Investigating the Role of Collective Trust, Collective Efficacy, and Enabling School Structures on Overall School Effectiveness

This manuscript has been peer-reviewed, accepted, and endorsed by the National Council of Professors of Educational Administration as a significant contribution to the scholarship and practice of school administration and K-12 education.



Julie Gray
University of West Florida

This study investigated the role of collective trust, collective efficacy, and enabling school structures on overall school effectiveness. While the concept of organizational effectiveness can be complex and difficult to measure, the results of this research demonstrated a connection of these variables to school effectiveness. Collective trust had a strong influence on organizational effectiveness, controlling for all the other variables including SES. This finding was consistent with earlier work of Tarter and Hoy (2004), which also indicated the significance of trust in teachers' perceptions of school effectiveness.

Over the last four decades many studies have been conducted about organizational effectiveness, even more recently in context to overall school effectiveness. It is widely accepted as a complex, multifaceted concept, one that warrants further investigation (Hoy & Ferguson, 1985; Mott, 1072). This study explores the role of collective trust (CT) which is comprised of teacher trust in principal, colleagues, and clients (students and parents), collective efficacy (CE), and enabling school structures (ESS) in relation to overall school effectiveness (SE). In order to determine the degree of school effectiveness, teachers assess the “general level of productivity, flexibility, adaptability, and efficiency in their schools” (Tarter & Hoy, 2004, p. 541).

When analyzing overall school effectiveness, it is important to consider inputs (personnel, facilities, financial and instructional resources), processes (curriculum, policies, parental involvement, and learning opportunities for all), and outcomes (student achievement, test results, graduation and attendance rates, and completion rates) of schools (NEA, 2013). We can better determine the level of effectiveness when we analyze teachers’ perceptions about each aspect of the school environment. Therefore, this study examined the role of teachers’ perceptions of trust, efficacy, and enabling structures in relationship to overall school effectiveness.

Theoretical Framework

This study hypothesizes that collective trust, collective efficacy, and enabling school structures will individually and jointly contribute to overall school effectiveness. The framework is based upon organizational theory and research related to school culture and climate. Much of the business literature lends itself to what has become organizational theory. This study asserts that collective trust, collective efficacy, and enabling school structures provide a foundation upon which a school can become more effective, meet goals, work efficiently, and improve teaching and learning, which this paper purports to be the goal of all schools. Forsyth, Adams, and Hoy (2011) described enabling structure, organizational mindfulness, and collective efficacy as “antecedents of collective trust” (p. 60). Hoy and Sweetland (2001) further surmised enabling school structures promote trusting relationships among faculty, which in turn affect school effectiveness and support this framework.

Collective Trust

Forsyth et al. (2011) developed the notion of collective trust, which builds upon previous literature about trust in the workplace. Trust is defined as “a faculty’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (p. 35). For the sake of this study, collective trust is comprised of teacher trust in principal, colleagues, and clients, including students and parents (Adams & Forsyth, 2010). Trust is considered an essential ingredient in the work of schools (Bryk & Schneider, 2002; Hoy & Tschannen-Moran, 1999). A healthy school culture must be built upon trusting, collegial relationships among teachers, principal, colleagues, students, and parents (Tarter & Hoy, 2004). A recent meta-analytic review of research about school effectiveness “demonstrated that teacher trust was the most powerful predictor of school effectiveness” (Mitchell, Sun, Zhang, & Mendiola, 2015, p. 168).

Forsyth et al (2011) noted that as a collective property with different references to relationships, collective trust represents teachers’ perceptions of trust of their colleagues, clients,

and their principal. If faculty members trust the principal, then they tend to have confidence that the principal will keep his word and act in their best interest. In regard to trusting their colleagues, teachers are more likely to believe that they can depend upon their coworkers, especially in challenging circumstances, and rely upon them to act with integrity. In fact, Hoy, Tarter, and Kottkamp (1991) found that faculty trust in principal and colleagues were both positively correlated with student achievement, which is often associated with overall school effectiveness.

Forsyth et al (2000) argued that in contrast to interpersonal trust, that which one person has with an individual, collective trust is defined by a group's willingness to be vulnerable to another group or even an individual. Collective trust can be developed from social and nonverbal interactions amongst group members. Further, teachers' perceptions of trust in the principal and their colleagues depend greatly upon the actions of each. Finally, the cultivation of trust within the organization is supported by optimistic faculty perceptions of their colleagues' instructional abilities and the enabling structure of the school (Hoy & Miskel, 2008; Tschannen-Moran, 2004). Collective trust and collective efficacy have been linked together as school properties that promote learning and facilitate student achievement (Goddard et al, 2000; Hoy, 2003).

Collective Efficacy

Collective efficacy is defined as "the groups' shared belief in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments" (Bandura, 1997, p. 477). In schools collective efficacy is represented by teachers' perceptions of the ability of their colleagues to educate students successfully (Goddard, Hoy, & Hoy, 2000). There is an assumption that the "more efficacious the teachers are as a group, the more likely they will sustain the efforts needed to develop and enhance student achievement" (Gray & Tarter, 2012). When collective efficacy is high, teachers believe that they can make a difference with their students and be effective in overcoming negative external influences because of their collective efforts (Forsyth et al., 2011).

Collective efficacy is also considered to be a strong determinant of teacher trust in colleagues and clients, including students and parents (Forsyth et al., 2011) and a strong predictor of student achievement despite socioeconomic status of the student population (Bandura, 1986; Goddard et al., 2000). Collective efficacy has also been linked to student achievement and overall school effectiveness (Tarter & Hoy, 2004). Thus, "collective efficacy should give teachers purpose, encourage them to plan, and take responsibility for student achievement" (Hoy & Sweetland, 2001, p. 317). Efficacious teachers tend to be resilient and overcome challenges rather than allowing obstacles to hinder their success in meeting their shared academic goals for their students (Forsyth et al. 2011).

Goddard, Hoy, and Hoy (2004) concluded "for schools, perceived collective efficacy refers to judgment of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (p. 4). When collective efficacy is perceived by teachers as high, they are more likely to have faith in the ability of their students and colleagues (Forsyth et al, 2011; Hoy, 2003). These teachers are often able to overcome external factors, such as low socioeconomic status of students and the community members (Bandura, 1986; Forsyth et al., 2011; Hoy, 2003).

As teachers' perceptions of collective efficacy increase so do their levels of trust in

clients, represented by students and parents (Forsyth et al., 2011; Hoy, 2003). Therefore, “high collective efficacy, in turn, stimulates teachers to set challenging student goals, to work harder, to persist longer in their teaching, to be resilient when they confront difficulties, and to seek and use constructive feedback” (Forsyth et al, 2011, p. 89). In other words, higher collective efficacy leads to more satisfied teachers and improved student achievement. Goddard et al. (2000) found collective teacher efficacy had “the potential to contribute to our understanding of how schools differ in the attainment of their most important objective – the education of students” (p. 483). Finally, for teachers’ beliefs in one another’s ability to be altered significantly, a major change would have to occur within the school structure or organization.

Enabling School Structures

Enabling school structures (ESS) represent the teachers’ belief that the administration and rules of the school help them in their work (Hoy & Sweetland, 2000, 2007). School organizations are centralized and formalized with varying degrees of decision making, policies, regulations, and rules (Gray, Kruse & Tarter, 2015; Hoy 2003). The formalization of the school ranges from hindering to enabling along a continuum (Hoy, 2003). Enabling school structure is established upon a “hierarchy of authority and a system of rules and regulations that help rather than hinder the teaching learning mission of the school” (Hoy, 2003, p. 91). This structure allows teachers to resolve issues and problems with the support of the principal who promotes professionalism and openness within the organization (Hoy & Sweetland, 2007). In contrast, hindering structures are more closely managed or controlled by the leader (Hoy, 2003). Hoy and Sweetland (2007) found that schools need a “structure that enables participants to do their jobs more creatively, cooperatively, and professionally” (pp. 362-363). There tends to be less conflict, more trust, and more professional autonomy in schools with enabling structures (Hoy, 2003; Hoy & Sweetland, 2001).

Teachers who described their school as effective were “characterized by (a) more participative organizational processes, (b) less centralized decision making structures, (c) more formalized general rules, and (d) more complexity or high professional activity” (Miskel, Fevurly, & Stewart, 1985, p. 114). Principals who support teachers in doing their jobs well, rather than hindering their work, are characterized by enabling school structures (Hoy & Sweetland, 2007). Schools with enabling structures “develop an atmosphere of trust and teacher commitment to the school and its mission” (Hoy, 2007, p. 372). Enabling school structures should allow teachers to do their jobs more effectively, professionally, and cooperatively (Hoy & Sweetland, 2001). Therefore, faculty in schools with enabling structures “view problems as opportunities, foster trust, value differences, learn from mistakes, anticipate the unexpected, facilitate problem solving, enable cooperation, encourage innovation, and [are] flexible” (Hoy, 2003, p. 92). These factors contribute to enabling school structures, as well as to the overall organizational effectiveness of the school.

Organizational Effectiveness

Organizational effectiveness is a general condition that determines the extent to which teachers perceive their school to be effective in achieving established goals, maintaining efficiency in operations, and an ability to adapt to changes within the organization (Hoy & Ferguson, 1985; Miskel et al., 1985). Based upon the original measure, Mott (1972) originally conceptualized

this multifaceted construct in a study conducted for NASA and in hospitals. Forsyth et al (2011) argued that if organizations are to survive and be effective, they must accommodate their environments, achieve their goals, maintain solidarity among their parts, and create and maintain a successful motivational system” (p. 84).

Mott’s (1972) instrument was reformulated by Miskel et al. (1985) as a measure of school effectiveness in five dimensions: quantity and quality of the product, efficiency, adaptability, and flexibility. The quantity and quality of the product in school environments generally refers to student achievement and other standards measures of school effectiveness (Hoy & Ferguson, 1985). Miskel et al (1985) defined adaptability as the ability to anticipate problems, develop solutions promptly, and to utilize new processes and resources as appropriate. In contrast, flexibility is described as the ability to make quick adjustments especially in emergency circumstances.

Forsyth et al (2011) noted that school effectiveness is used as “an umbrella term for an approach to evaluating schools” (p. 82). Forsyth et al. found theoretical and conceptual issues related to the link between trust and school effectiveness. Many concern themselves with the internal aspects of the organization while others consider the external factors, the outputs. In most cases schools are evaluated by student achievement data and determined to be effective or ineffective by supervising entities, usually the state board of education and accreditation boards. Forsyth et al. noted, “Admittedly, these are not perfect indicators of academic performance, but they are reliable measures of student achievement, and they have been used by states to measure academic progress” (p. 84).

Hoy and Ferguson (1985) later refined, improved, and validated the school effectiveness scale in order to be used in context to the school environment. Bailes (2015) noted, “Despite its continued reliability, the definition of organizational effectiveness remained controversial, especially when researchers used the measure to examine schools” (p. 149). School effectiveness has been further investigated by several researchers (Hoy, Tarter, & Kottkamp, 1991; Hoy & Miskel, 2008) and linked to school structures as well (Miskel et al., 1985; Miskel, McDonald, & Bloom 1983). Teachers who viewed their school as effective were “characterized by (a) more participative organizational processes, (b) less centralized decision making structures, (c) more formalized general rules, and (d) more complexity or high professional activity” (Miskel et al., 1985, p. 114).

While there has been much discussion about the complexities of school effectiveness, most researchers agree that effective schools prioritize student achievement and learning (Lezotte, 1989; Reynolds, Teddlie, Chapman, & Stringfield, 2015; Sweetland & Hoy, 2000). Hoy and Ferguson (1985) surmised “organizations were considered effective to the extent that they accomplished their goals” (Mitchell et al., 2015, p. 163). In this age of high stakes accountability, many view school effectiveness in terms of student achievement and test results, however for this study the focus is on teachers’ perceptions of the school’s effectiveness based upon the School Effectiveness measure (Hoy & Ferguson, 1985). Teddlie, Stringfield, and Reynolds (2000) emphasized the importance of contextual differences in schools that should be considered when analyzing school effectiveness. Specifically, they concluded that the socioeconomic status of student body, type of community, grade levels (elementary, middle or high), and governance of the school structure all contribute to the overall effectiveness of the school.

Research Questions and Hypotheses

This quantitative study investigated teachers' perceptions about school effectiveness, various types of trust, collective efficacy, and enabling school structures. The dependent variable for this study was overall school effectiveness, while the independent variables were collective trust, collective efficacy, and enabling school structures. The control variable was socioeconomic status, as measured by the proxy of the percentage of students eligible for free and reduced lunch services at each school. Figure 1 represents a conceptual diagram of the hypothesized relationships of the variables of this study. These research questions guided this study:

Q1: To what extent do collective trust, collective efficacy and enabling school structures explain school effectiveness?

Q2: To what extent are collective trust, collective efficacy, enabling school structures and school effectiveness related?

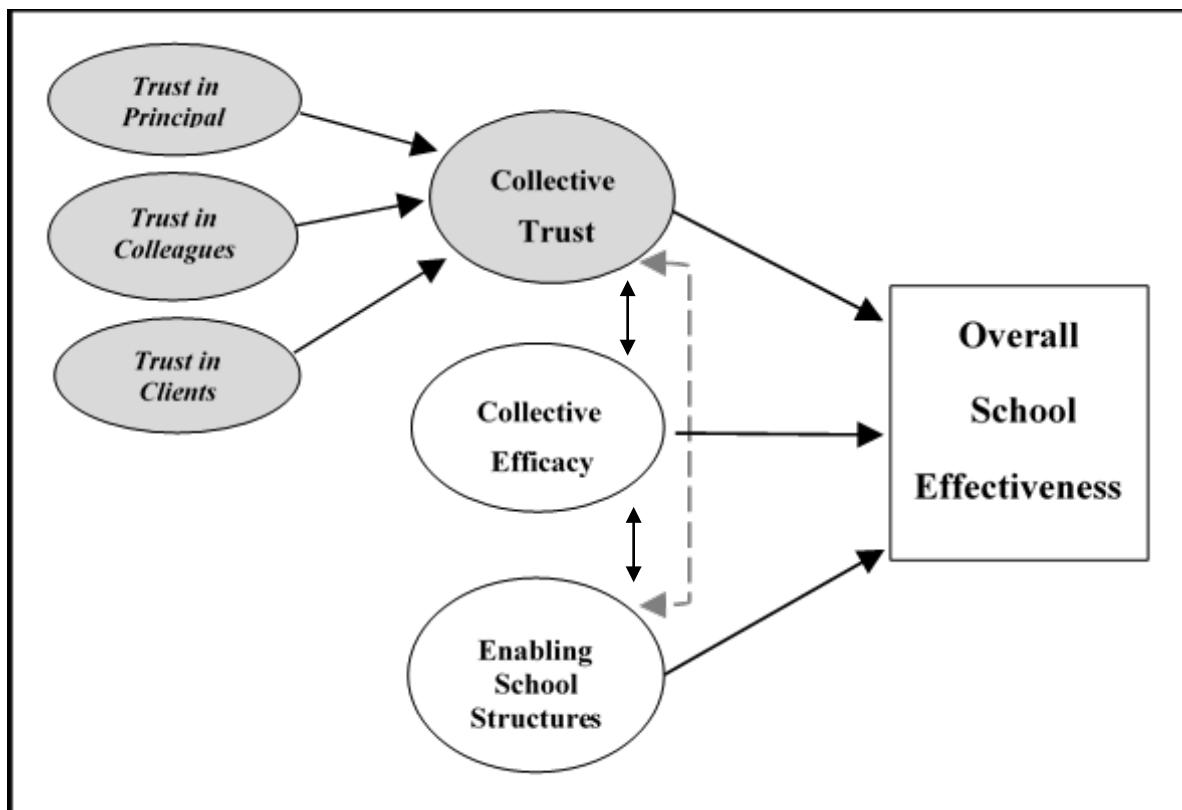


Figure 1. Conceptual Diagram Hypothesized Relationships

Hypotheses

Trust, efficacy, and enabling school structures should correlate with each other and school effectiveness. Therefore, the researcher in this study hypothesized:

H1: Collective trust, collective efficacy, enabling school structures, and overall school effectiveness will be correlated with each other.

Each of the independent variables should logically contribute to the effectiveness of the school, although there was guiding literature to support such thinking. Furthermore, the

variables were investigated through statistical regression and it was hypothesized that:

H2: Collective trust, collective efficacy, and enabling school structures will individually and jointly contribute to an explanation of overall school effectiveness.

Methodology

Sample

For this study a sample of Alabama elementary schools was identified, data were collected from the faculty in each school, and then the data were analyzed. The schools were randomly selected from all elementary schools in the state of Alabama and the school was the unit of analysis. In the following section the specifics of the sample of the study, reliability and variability of the measures, data collection process, and the statistical analyses will be described.

Teachers from 83 elementary schools from ten urban southeastern school districts made up the sample for this study. The public school districts had student enrollment that ranged from 1,600 to 17,000 students. The mean percentages of students who were eligible for free or reduced lunch services were 51% of the students enrolled. The ethnic make-up of the students enrolled in the schools in the sample was: 59% Caucasian, 34% African American, Hispanic (non-white) 4.3% and Asian/Pacific Islander 1%. Of the teachers from the district who participated in the study 39% had earned a bachelor's degree, 52% had a Master's degree, and 7.5% had a doctoral degree.

Data Collection

An existing database from an elementary school study in the state of Alabama provided the data for this study of 83 public schools. This quantitative study investigated teachers' perceptions about school effectiveness, various types of trust, collective efficacy, and enabling school structures. Surveys were completed during regularly schedule faculty meetings, participation was voluntary, and all schools were randomly selected throughout the state. Data were entered into Excel and imported into SPSS for statistical analysis.

At each school either the principal or secretary acted as the liaison for the school and encouraged teacher participation in the study. Hard copies of the trust, collective efficacy, enabling school structures, and school effectiveness instruments were provided and completed during regularly scheduled faculty meetings and gathered by a researcher. School visits occurred throughout the state of Alabama over two months. The results of the surveys were gathered, scored, and aggregated to the school level using Excel and SPSS software.

Instrumentation

Collective trust was measured as a combined variable to include: trust in principal, trust in colleagues, and trust in clients (students and parents) using the Omnibus Trust Scale, a 26-item Likert scale (Hoy & Tschannen-Moran, 2003). Sample items are "the principal doesn't tell teachers what is really going on (reverse scored)" and "teachers in this school trust each other." Each of the trust subscales has a history of reliabilities in the .8-.9 range (Hoy & Tschannen-Moran, 2003) and .96 for this study (Gray & Tarter, 2012). Trust in principal (8 items), trust in colleagues (8 items), and trust in clients (10 items) are subscales of the Omnibus Trust Scale.

Collective efficacy was measured using the short version of the Collective Efficacy (CE) Scale, a 12-item Likert-type scale which was developed by Goddard, Hoy, and Hoy in 2000. The Cronbach's alpha for the short form was .96 (Goddard et al., 2000) and .90 for this study. Sample items are "teachers here are confident they will be able to motivate their students" and "teachers in this school believe that every child can learn" (Goddard et al., 2000).

The Enabling School Structures (ESS) scale was used to measure enabling school structures. This scale is a 12-item, five point Likert-type scale that ranges from "never" to "always" which was developed by Hoy and Sweetland (2001). The Cronbach's alpha for the instrument was in the high .8 and .9 (Hoy & Sweetland, 2001) and .92 for this study (Gray & Tarter, 2012). Sample items are "administrative rules help rather than hinder" and "the administrative hierarchy of this school enables teachers to do their job" (Hoy, 2003).

School effectiveness was measured by the SE-Index, School Effectiveness Scale, an eight-item, six-point Likert-type scale that was developed by Hoy (2009). Sample items include "most everyone in the school accepts and adjusts to changes" and "teachers in this school anticipate problems and prevent them" (Miskel et al., 1985). The alpha coefficient of reliability for this measure was .94 for this study (Gray & Tarter, 2012).

Socioeconomic status (SES) was measured by the percentage of students qualifying for free and reduced lunch, a commonly accepted proxy for SES. The more students who qualify for lunch services, the lower the SES of the school tended to be, as expected.

Data Analysis

The descriptive data of the study are summarized by the means, standard deviations, and ranges for each of the variables reported (see Table 1). Next, the intercorrelations among the variables of the study are reported after statistical analysis was conducted (see Table 2). Finally, the results of the multiple regression analyses predicting overall school effectiveness are shared (see Table 3).

The independent variables for this study were collective trust, collective efficacy, and enabling school structures, while the dependent variable was overall school effectiveness. The components of collective trust are comprised of teacher trust in principal, trust in colleagues, and trust in clients (students and parents). While teacher perceptions were being measured, the school was the unit of analysis; therefore, the individual responses were aggregated to the school level for all variables.

Table 1
Descriptive Statistics of Sample

	N	Minimum	Maximum	Mean	Std. Deviation
Collective Trust	83	3.41	5.68	4.8008	.48149
Trust in Principal	83	3.04	5.98	5.2182	.57712
Trust in Colleagues	83	3.71	5.88	5.0088	.49230
Trust in Clients	83	3.09	5.79	4.1755	.62961
Collective Efficacy	83	3.62	5.55	4.6346	.49667
Enabling Structures	83	3.53	4.88	4.2577	.33849
Overall Effectiveness	83	6.19	8.82	7.6417	.60904
SES	83	9.30	99.00	55.0420	22.7266

The Pearson Correlation Coefficient was used to consider the relationship between each of the independent variables (collective trust, collective efficacy, and enabling school structures) with the dependent variable, overall school effectiveness. Multiple regression analysis was used to determine the individual and collective relationships between the independent variables to the dependent variable. The control variable was SES which was measured by a proxy indicator, the percentage of students eligible for free or reduced lunch services.

Figure 2 demonstrates the configuration of the hypothesized relationships between collective trust, collective efficacy, and enabling school structures as regressed on overall school effectiveness with the results of the statistical analysis. Multiple regression analysis was used to test the relationships of collective trust, collective efficacy, enabling school structures, and overall school effectiveness, controlling for SES (see Table 3).

Results

Hypothesis 1 was supported because all the variables were significantly correlated with one another (Table 2). Collective trust, collective efficacy, and enabling school structures had significant correlations with school effectiveness. Organizational effectiveness and collective trust shared the strongest and significant relationship with a .78 ($p < .01$) correlation. Collective efficacy and organizational effectiveness had a strong correlation of .65 correlation ($p < .01$), while enabling school structure and organizational effectiveness also had a moderate and significant correlation of .51 ($p < .01$).

Table 2
Pearson Correlations of All Variables (N=83)

	Collective Trust	Collective Efficacy	Enabling Structures	Free/Reduced Lunch (SES)
School Effectiveness (SE)	.78**	.65**	.51**	-.34**
Collective Trust (CT)	1	.81**	.58**	-.55**
Collective Efficacy (CE)		1	.43**	-.76*
Enabling Structures (ESS)			1	-.27*

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

As demonstrated in Figure 2, collective trust, collective efficacy, and enabling school structure explained 60% of the variance of school effectiveness while controlling for socioeconomic status. Collective trust had a significant effect on school effectiveness ($\beta = .55, \rho < .01$), while collective efficacy had a less significant effect on school effectiveness ($\beta = .37, \rho < .05$) (see Figure 2, Table 3).

Table 3
Regression of Effectiveness on ESS, Collective Trust, Collective Efficacy and SES

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	Beta		
(Constant)	1.223	.831		1.472	.145
Collective Trust (CT)	.685	.183	.551	3.749	.000
1 Collective Efficacy (CE)	.445	.205	.372	2.172	.033
Enabling Structures (ESS)	.165	.155	.095	1.066	.290
FRL (SES)	.007	.003	.270	2.355	.021

a. Dependent Variable: Effectiveness

Discussion

Collective trust (faculty trust in students, parents, colleagues, and the principal) had a strong influence on organizational effectiveness, controlling for all the other variables including SES. This finding was consistent Tarter and Hoy (2004) and Mitchell et al. (2015), who reported the significance of trust in creating effectiveness. Therefore, it was not surprising that collective

efficacy had a substantial and significant relationship with organizational effectiveness controlling for all the other variables in the regression. As Goddard (2002) noted, “Past school successes tend to raise a faculty’s belief in its collective capabilities” (p. 171). So, as teachers continue to experience success within the school organization their level of collective efficacy increases, as well as their confidence and self-efficacy. As hypothesized each of the variables in this study contributed to overall school effectiveness.

For this study the most significant predictor of overall school effectiveness was collective trust, as evidenced in other studies (Tarter & Hoy, 2004; Mitchell et al., 2015). Each of the dependent variables, collective trust, collective efficacy, and enabling school structures, had a moderate correlation with overall school effectiveness, with collective trust being the strongest.

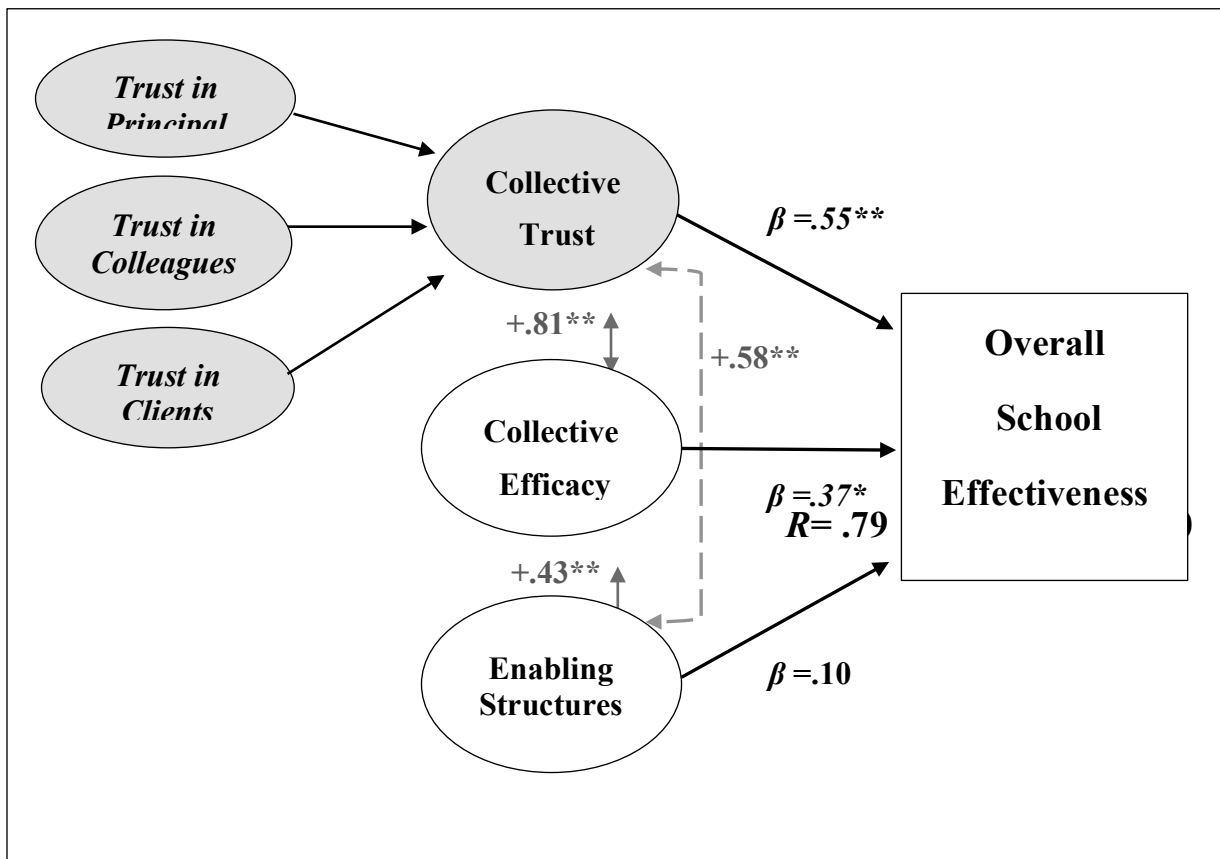


Figure 2. Conceptual Diagram Hypothesized Relationships with Results. ** Significant at 0.01 level * Significant at 0.05 level

There is also evidence that enabling school structures facilitate rather than hinder the teaching-learning process (McGuigan & Hoy, 2006). Further, enabling school structures “encourage trusting relationships among teachers and between teachers and the principal” (Hoy, 2003, p. 91). Collective teacher efficacy has a positive effect on students, and thus student achievement (Goddard et al., 2000).

Implications for Practice and Future Research Recommendations

In summary, this study demonstrates the necessity and importance of collective trust and collective efficacy in the establishment of overall school effectiveness. While correlated to school effectiveness, the regression showed that enabling school structures did not have as much of an effect as the other two independent variables did in explaining the variance. The reciprocal relationship of school effectiveness and collective trust confirms the hypotheses. These research findings can guide the practitioners in the field while extending the field of literature about school effectiveness, trust, efficacy, and school structures.

Hoy and Sweetland (2007) “hypothesize[d] that enabling school structures are important to the development of effective learning organizations . . . and to the creation of enabling knowledge” (p. 361). Schools with enabling structures should promote professional communication and relationships that are collegial, supportive, open and empowering. These schools also tend to have teachers with high collective efficacy which leads to shared responsibility of student success and academic achievement. As Goddard et al (2007) noted, “Collective teacher efficacy, therefore, has the potential to contribute to our understanding of how schools differ in the attainment of their most important objective – the education of students” (p. 143).

Forsyth et al. (2011) offered four general guidelines for practitioners: “establish trust in the principal by being trustworthy; be mostly a leader, sometimes a manager; expect, respect, and model organizational citizenship; and develop and nurture a culture of trust and optimism” (pp. 166-170). Establishing faculty trust in the principal should be a priority for school leaders, one that leads to healthier professional relationships and school climate (Calman, 2011; Forsyth et al., 2011; Hoy & Sabo, 1998).

Bryk and Schneider (2002) asserted that principals should promote a trusting school culture by believing in the ability of their teachers, sharing responsibilities, reaching out to parents, encouraging collaborative work practices, and maintaining high expectations for academics. School leaders must function as the drivers of change and improvement by encouraging collaboration and cooperation among all stakeholders, including students, parents, community members, and the faculty (Bryk & Schneider, 2002; Calman, 2011). Collective trust, collective efficacy, and enabling school structures contribute to overall school effectiveness based upon the findings of this study. Future studies could further investigate the roles of collective trust and efficacy in relationship to school effectiveness.

References

- Adams, C. M., & Forsyth, P. B. (2010). The nature and function of trust in schools. *Journal of School Leadership, 19*(2), 126-152.
- Bailes, L. (2015). Predictors of school effectiveness. In M. DiPaola, & W. Hoy (Eds.), *Leadership and school quality* (12th Volume in Research and Theory in Educational Administration series, pp. 147-160). Charlotte, NC: Information Age Publishing.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, New York: Sage Foundation.
- Calman, R. C. (2011). School Effectiveness: Eight Key Factors. *Education Quality and Accountability Office Connects*, Retrieved from: http://www.eqao.com/en/Our_Data_in_Action/articles/Pages/school-effectiveness-eight-key-factors.aspx
- Forsyth, P. B., Adams, C. M., & Hoy, W. K. (2011). *Collective trust: Why schools can't improve without it*. New York, NY: Teachers College, Columbia University.
- Goddard, R. D. (2002). Collective efficacy and school organization: A multilevel analysis of teacher influence in schools. In W. Hoy, & M. DiPaola (Eds.), *Theory and research in educational administration* (pp. 169-184). Charlotte, NC: Information Age Publishing.
- Goddard, R. G., Hoy, W. K., & Hoy, A. W. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researcher, 33*, 2-13.
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37* (2), 479-507.
- Gray, J., Kruse, S., & Tarter, C. J. (2015). Enabling school structures, collegial trust, and academic emphasis: Antecedents of professional learning communities. *Educational Management Administration & Leadership*. Advance online publication. doi: 10.1177/1741143215574505
- Gray, J., & Tarter, C. J. (2012). Collective efficacy, collegial leadership, and a culture of trust: Predicting academic optimism and overall effectiveness. In M. DiPaola, & P. Forsyth (Eds.), *Contemporary challenges confronting school leaders* (pp. 93-110). Charlotte, NC: Information Age Publishing.
- Hoy, W. K. (2007). An analysis of enabling and mindful school structures: Some theoretical, research, and practical considerations. In W. Hoy, & M. DiPaola (Eds.), *Essential ideas for the reform of American schools* (pp. 372-392). Charlotte, NC: Information Age Publishing.
- Hoy, W. K. (2003). An analysis of enabling and mindful school structures: Some theoretical, research, and practical considerations. *Journal of Educational Administration, 41*(1), 87-108.
- Hoy, W. K., & Ferguson, J. (1985). A theoretical framework and exploration of organizational effectiveness in schools. *Educational Administration Quarterly, 21*, 117-134.
- Hoy, W. K., & Miskel, C. G. (2008). *Educational administration: Theory, research, and practice* (8th ed.). New York: McGraw-Hill.
- Hoy, W. K., & Sabo, D. J. (1998). *Quality middle schools*. Thousand Oaks, CA: Sage.

- Hoy, W. K., & Sweetland, S. R. (2000). School bureaucracies that work: Enabling, not coercive. *Journal of School Leadership*, 10(6), 525-541.
- Hoy, W. K., & Sweetland, S. R. (2001). Designing better schools: The meaning and measure of enabling school structures. *Educational Administrative Quarterly*, 37, 296-321.
- Hoy, W. K., & Sweetland, S. R. (2007). Designing better schools: The meaning and nature of enabling school structures. In W. Hoy, & M. DiPaola (Eds.), *Essential ideas for the reform of American schools* (pp. 339-366). Charlotte, NC: Information Age Publishing.
- Hoy, W. K. & Tschannen-Moran, M. (1999). The five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, 9, 184-208.
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools/healthy schools: Measuring organizational climate*. Beverly Hills, CA: Sage.
- Hoy, W. K., & Tschannen-Moran, M. (2003). The conceptualization and measurement of faculty trust in schools: The omnibus T-scale. In W. K. Hoy & C. G. Miskel, *Studies in leading and organizing schools* (pp. 181-208). Greenwich, CT: Information Age Publishing.
- Lezotte, L. (1989). Based school improvement on what we knew about effective schools. *American School Board Journal*, 176(6), 18-20.
- McGuigan, L., & Hoy, W.K. (2006), Principal leadership: creating a culture of academic optimism to improve achievement for all students, *Leadership and Policy in Schools*, 5(3), 203-29.
- Miskel, C., Fevurly, R., & Stewart, J. (1985). Organizational structures and processes, perceived school effectiveness, loyalty, and job satisfaction. *Educational Administration Quarterly*, 15(3), 97-118.
- Miskel, C., McDonald, D., & Bloom, S. (1983). Structural and expectancy linkages within schools and organizational effectiveness. *Educational Administration Quarterly*, 19(1), 49-82.
- Mitchell, R. M., Sun, J., Zhang, S., Mendiola, B., & Tarter, C. J. (2015). School effectiveness: A meta-analytic review of published research. In M. DiPaola, & W. Hoy (Eds.), *Leadership and school quality* (12th Volume in Research and Theory in Educational Administration series, pp. 161-169). Charlotte, NC: Information Age Publishing.
- Mott, P. (1972). *The characteristics of effective organizations*. New York: Harper and Row.
- National Educator Association (2013). *Multiple Indicators of School Effectiveness*. A Policy Brief for the National Educator Association, Center for Great Public Schools, Retrieved from: <http://www.nea.org/assets/docs/NEAPolicyBriefMultipleMeasures.pdf>
- Reynolds, D., Teddlie, C., Chapman, C., & Stringfield, S. (2015, Aug.). Effective school processes. In C. Chapman, D. Muijs, D. Reynolds, P. Sammons, & C. Teddlie (Eds.), *The Routledge international handbook of educational effectiveness and improvement research, policy, and practice* (pp. 77- 99). Retrieved from <https://www.routledgehandbooks.com/doi/10.4324/9781315679488.ch3>
- Sweetland, S. R., & Hoy, W. K. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly*, 36(5), 703-729.
- Tarter, C. J., & Hoy, W. K. (2004). A systems approach to quality in elementary schools: A theoretical and empirical analysis. *Journal of Educational Administration*, 42, 539-554.
- Teddlie, C., Stringfield, S., & Reynolds, D. (2000). Context issues within school effectiveness research. In C. Teddlie & Reynolds, D. (Eds.), *The international handbook of school*

- effectiveness research* (160-185). London, UK: Falmer Press.
- Tschannen-Moran, M. (2004). *Trust Matters: Leadership for Successful Schools*. San Francisco: Jossey-Bass
- Ulrich, D., & Smallwood, N. (2004). Tangling with learning intangibles. In M. Goldsmith, H. J. Morgan, & A. J. Ogg (Eds.), *Learning organizational learning: Harnessing the power of knowledge* (pp. 65-78). San Francisco: CA: Jossey-Bass.