

5-2013

Efficacy Beliefs of Beginning Hispanic Teachers and The Organizational Health of Schools in a South Texas School District

Gisela S. Saenz
University of Texas-Pan American

Follow this and additional works at: https://scholarworks.utrgv.edu/leg_etd



Part of the [Educational Leadership Commons](#)

Recommended Citation

Saenz, Gisela S., "Efficacy Beliefs of Beginning Hispanic Teachers and The Organizational Health of Schools in a South Texas School District" (2013). *Theses and Dissertations - UTB/UTPA*. 702.
https://scholarworks.utrgv.edu/leg_etd/702

This Dissertation is brought to you for free and open access by ScholarWorks @ UTRGV. It has been accepted for inclusion in Theses and Dissertations - UTB/UTPA by an authorized administrator of ScholarWorks @ UTRGV. For more information, please contact justin.white@utrgv.edu, william.flores01@utrgv.edu.

EFFICACY BELIEFS OF BEGINNING HISPANIC TEACHERS
AND THE ORGANIZATIONAL HEALTH OF SCHOOLS
IN A SOUTH TEXAS SCHOOL DISTRICT

A Dissertation

by

GISELA S. SAENZ

Submitted to the Graduate School of the
University of Texas-Pan American
In partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 2013

Major Subject: Educational Leadership

EFFICACY BELIEFS OF BEGINNING HISPANIC TEACHERS
AND THE ORGANIZATIONAL HEALTH OF SCHOOLS
IN A SOUTH TEXAS SCHOOL DISTRICT

A Dissertation
by
GISELA S. SAENZ

COMMITTEE MEMBERS

Dr. Marie Simonsson
Co-Chair of Committee

Dr. Ralph Carlson
Co-Chair of Committee

Dr. Miguel de los Santos
Committee Member

Dr. Shirley Mills
Committee Member

May 2013

Copyright 2013 Gisela S. Saenz

All Rights Reserved

ABSTRACT

Saenz, Gisela S., Efficacy Beliefs of Beginning Hispanic Teachers and the Organizational Health of Schools in a South Texas School District. Doctor of Education (Ed. D), May, 2013, 204 pp., 44 tables, references, 109 titles, appendices, 6.

This quantitative study examined the relationship between teachers' sense of efficacy and school organizational health. Teachers' sense of efficacy was measured using three dimensions of teacher efficacy: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. Organizational health was measured using dimensions of school health for elementary, middle, and high school including: academic emphasis, institutional integrity, collegial leadership, resource influence, teacher affiliation, morale, principal influence, resource support, consideration, and initiating structure. The sample consisted of 498 beginning Hispanic teachers with one to five years of teaching experience. The sample included, 255 elementary, 126 middle school, and 117 high school teachers from one school district with a student population that was 99% Hispanic and 96% economically disadvantaged. Regression analyses were used to examine relationships among variables. The study found that the organizational health of elementary, middle, and high schools predicted teachers' sense of efficacy. Specifically, beginning Hispanic teachers in elementary, middle, and high schools felt efficacious in schools with a strong academic emphasis defined by a quest for academic excellence with high, but achievable academic goals.

DEDICATION

I dedicate this dissertation to the love of my life, my wonderful friend and husband, Michael. You have always encouraged me to pursue my dreams and you have always been there to support me. Thank you for your patience and your love.

I also dedicate this dissertation to my two beautiful sons, Michael Jr. and Brian Alex. You inspire me to be the best person I can be.

To my parents Florida and Eleazar Salinas, thank you for your love and support.

ACKNOWLEDGMENTS

It is with heartfelt appreciation that I acknowledge and thank Dr. Marie Simonsson, co-chair of my dissertation committee for her guidance and support. Your advice helped me grow as a student, researcher, and writer.

I acknowledge and thank my co-chair Dr. Ralph Carlson. Your enthusiasm for knowledge encouraged me to challenge myself to do more. You are a true teacher who inspires and motivates. I appreciate the time you gave to help me with this dissertation.

I acknowledge and thank my committee member, Dr. de los Santos for your encouragement and support. You truly model genuine and caring educational leadership. Your words of advice have always been appreciated.

I acknowledge and thank my committee member, Dr. Mills. Your valuable contribution greatly assisted me throughout the process.

I would like to extend a special thank you to my dear friend, Socorro Espinoza, who worked on her dissertation alongside me. Your support and encouragement have meant the world to me. Your steadfast friendship throughout our journey helped me to complete this dissertation.

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	xi
CHAPTER I. INTRODUCTION.....	1
Statement of the Problem.....	5
Need for the Study.....	8
Purpose of the Study.....	11
Research Questions.....	12
Significance of the Study.....	13
Research Design.....	14
Limitations of the Study.....	15
Definition of Terms.....	16
Summary.....	17
CHAPTER II. REVIEW OF THE LITERATURE.....	19
Teacher Efficacy.....	20

Student Achievement and Engagement.....	24
Classroom Management.....	28
Willingness to Implement New Instructional Strategies.....	29
Commitment to Teaching.....	32
Contexts and Variables that May Influence Efficacy Beliefs.....	34
Theoretical Framework for Teacher Efficacy and the Development and Measurement of Teacher Efficacy Construct.....	38
Social Learning Theory Framework for Teacher Efficacy.....	39
Development and Measurement of One Strand of the Teacher Efficacy Construct Based on Social Learning Theory.....	40
Social Cognitive Theory Framework for Teacher Efficacy.....	44
Development and Measurement of a Different Strand of the Teacher Efficacy Construct Based on Social Cognitive Theory.....	47
An Integrated Model to Measure Teacher Efficacy.....	49
Organizational Climate and Health of Schools.....	51
Historical Perspective of Schools as Social Organizations.....	51
Organizational Climate.....	52
Organizational Health.....	53
Studies on Organizational Climate and Health.....	55
Theoretical Framework for Organizational Health of Schools and the Development and Measurement of Organizational Health of Schools Construct.....	59

The Parsonian Theory of Organizational Health.....	59
Development and Measurement of the Organizational Health of Schools	
Construct.....	60
Relation of Teacher Efficacy and Organizational Health of Schools.....	62
Beginning Teachers.....	68
Perceived Problems of Beginning Teachers.....	69
Conceptions of Beginning Teachers.....	70
Perceptions of Support Received in the First Year of Teaching.....	73
Summary.....	76
CHAPTER III. METHODOLOGY.....	78
Research Questions.....	79
Research Design.....	80
Population and Sample.....	81
Instrumentation.....	82
Section One.....	83
Section Two.....	83
Section Three.....	84
Null Hypotheses.....	88
Data Collection Procedures.....	90
Data Analyses Procedures.....	91
Summary.....	91

CHAPTER IV. FINDINGS.....	93
Demographic Information.....	94
School District Demographic Information.....	94
Profile of the Participants.....	94
Exploratory Data Analyses.....	98
Confirmatory Data Analyses.....	99
Factor Analyses for Teachers’ Sense of Efficacy Scale.....	102
Factor Analyses for Organizational Health Inventory.....	104
Multiple Linear Regression Analyses.....	109
Summary.....	129
CHAPTER V. SUMMARY, DISCUSSION, AND CONCLUSION.....	133
Summary of the Problem.....	133
Discussion of Findings for Research Questions.....	135
Efficacy in Student Engagement.....	135
Efficacy in Instructional Strategies.....	140
Efficacy in Classroom Management.....	144
Conclusion.....	146
Implications and Recommendations.....	148
REFERENCES.....	153
APPENDICES.....	166
APPENDIX A PERMISSION LETTER TO USE TEACHERS’ SENSE OF EFFICACY SCALE.....	167

APPENDIX B PERMISSION LETTER TO USE THE ORGANIZATIONAL HEALTH INVENTORIES.....	169
APPENDIX C NOTICE OF APPROVAL – INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS (IRB).....	171
APPENDIX D SUPERINTENDENT’S LETTER FOR DATA COLLECTION APPROVAL.....	174
APPENDIX E ANONYMOUS SELF – REPORT SURVEY CONSENT FORM.....	176
APPENDIX F STEM - AND - LEAR DISPLAYS AND BOX - AND – WHISKER PLOTS.....	178
BIOGRAPHICAL SKETCH.....	204

LIST OF TABLES

	Page
Table 1: Number of Teachers in Final Sample.....	82
Table 2: Factor Structure for Teachers’ Sense of Efficacy Scale - Long Form.....	84
Table 3: Factor Structure for Organizational Health Inventory – Secondary (High School).....	85
Table 4: Factor Structure for Organizational Health Inventory –Elementary.....	86
Table 5: Factor Structure for Organizational Health Inventory – Middle.....	87
Table 6: Demographic Information for Elementary School Participants: Gender, Age, Completed Education Level, Number of Completed Years as a Teacher, Number of Completed Years as a Teacher in the Current School.....	95
Table 7: Demographic Information for Middle School Participants: Gender, Age, Completed Education Level, Number of Completed Years as a Teacher, Number of Completed Years as a Teacher in the Current School.....	96
Table 8: Demographic Information for High School Participants: Gender, Age, Completed Education Level, Number of Completed Years as a Teacher, Number of Completed Years as a Teacher in the Current School.....	97
Table 9: Descriptive Statistics for Variables (Elementary Schools).....	99
Table 10: Descriptive Statistics for Variables (Middle Schools).....	100
Table 11: Descriptive Statistics for Variables (High Schools).....	101
Table 12: Factors for Teachers’ Sense of Efficacy Scale (TSES) for Elementary (E), Middle	

School (M), and High School (H).....	103
Table 13: Final Factors for Teachers’ Sense of Efficacy Scale (TSES), Items, and Reliabilities.....	104
Table 14: Factors for Organizational Health Inventory for Elementary Schools (OH-E).....	105
Table 15: Final Factors for Organizational Health Inventory for Elementary Schools (OH-E), Items, and Reliabilities.....	106
Table 16: Factors for Organizational Health Inventory for Middle Schools (OH-M).....	106
Table 17: Final Factors for Organizational Health Inventory for Middle Schools (OH-M), Items, and Reliabilities.....	107
Table 18: Factors for Organizational Health Inventory for High Schools (OH-H).....	107
Table 19: Final Factors for Organizational Health Inventory for High Schools (OH-H), Items, and Reliabilities.....	108
Table 20: Regression Analysis of Full Model Between Efficacy in Student Engagement and Organizational Health of Elementary Schools.....	110
Table 21: Standardized Beta Coefficients Between Efficacy in Student Engagement and Organizational Health of Elementary Schools.....	110
Table 22: Regression Analysis of Model of Best Fit Between Efficacy in Student Engagement and Organizational Health of Elementary Schools.....	111
Table 23: Regression Analysis of Full Model Between Efficacy in Instructional Strategies and Organizational Health of Elementary Schools.....	112
Table 24: Standardized Beta Coefficients Between Efficacy in Instructional Strategies and Organizational Health of Elementary Schools.....	113

Table 25: Regression Analysis of Model of Best Fit Between Efficacy in Instructional Strategies and Organizational Health of Elementary Schools.....	113
Table 26: Regression Analysis of Full Model Between Efficacy in Classroom Management and Organizational Health of Elementary Schools.....	114
Table 27: Standardized Beta Coefficients Between Efficacy in Classroom Management and Organizational Health of Elementary Schools.....	116
Table 28: Regression Analysis of Model of Best Fit Between Efficacy in Classroom Management and Organizational Health of Elementary Schools.....	116
Table 29: Regression Analysis of Full Model Between Efficacy in Student Engagement and Organizational Health of Middle Schools.....	117
Table 30: Standardized Beta Coefficients Between Efficacy in Student Engagement and Organizational Health of Middle Schools.....	117
Table 31: Regression Analysis of Model of Best Fit Between Efficacy in Student Engagement and Organizational Health of Middle Schools.....	118
Table 32: Regression Analysis of Full Model Between Efficacy in Instructional Strategies and Organizational Health of Middle Schools.....	119
Table 33: Standardized Beta Coefficients Between Efficacy in Instructional Strategies and Organizational Health of Middle Schools.....	120
Table 34: Regression Analysis of Model of Best Fit Between Efficacy in Instructional Strategies and Organizational Health of Middle Schools.....	121
Table 35: Regression Analysis of Full Model Between Efficacy in Classroom Management and Organizational Health of Middle Schools.....	122

Table 36: Standardized Beta Coefficients Between Efficacy in Classroom Management and Organizational Health of Middle Schools.....	123
Table 37: Regression Analysis of Model of Best Fit Between Efficacy in Classroom Management and Organizational Health of Middle Schools.....	123
Table 38: Regression Analysis of Full Model Between Efficacy in Instructional Strategies and Organizational Health of High Schools.....	125
Table 39: Standardized Beta Coefficients Between Efficacy in Instructional Strategies and Organizational Health of High Schools.....	126
Table 40: Regression Analysis of Model of Best Fit Between Efficacy in Instructional Strategies and Organizational Health of High Schools.....	126
Table 41: Regression Analysis of Full Model Between Efficacy in Classroom Management and Organizational Health of High Schools.....	128
Table 42: Standardized Beta Coefficients Between Efficacy in Classroom Management and Organizational Health of High Schools.....	128
Table 43: Regression Analysis of Model of Best Fit Between Efficacy in Classroom Management and Organizational Health of High Schools.....	129
Table 44: Summary of Research Questions and Null Hypotheses Tested and Decisions.....	130

CHAPTER I

INTRODUCTION

Teacher efficacy has been defined as teacher beliefs that they can influence student outcomes (Wheatley, 2005). Teacher efficacy has been revealed to be powerfully related to educational outcomes such as teachers' persistence, enthusiasm, commitment, and instructional behavior, and to student outcomes such as achievement and motivation (Tschannen-Moran & Woolfolk Hoy (2001). Tschannen-Moran, Woolkfolk Hoy, and Hoy (1998) defined teacher efficacy as the teacher's belief in his or her capability to organize and execute actions that were required to accomplish specific teaching tasks in a particular context. Klassen, Tze, Betts, and Gordon (2011) defined teacher efficacy as the confidence that teachers had about their individual and collective ability to influence student learning. It was a key belief in the motivation that influenced their professional behavior (Klassen et al., 2011).

Research has shown that teachers with a high sense of efficacy contributed to student academic achievement because they devoted more class time to academic learning, provided more help to students who were having problems learning, and criticized students less for incorrect answers (Gibson & Dembo, 1984). Teachers with a high sense of efficacy perceived that they could overcome negative environmental factors with good teaching, and felt that if they exerted extra effort and tried different strategies, students could learn (Gibson & Dembo, 1984).

Ashton and Webb (1986) found strong support for the relation between teacher efficacy and the mathematics and language achievement of students. When teachers felt efficacious, they exerted extra effort in classroom instruction and were willing to persist when they worked with the most difficult students (Ashton & Webb, 1986). In a seminal study, Berman, McLaughlin, Bass, Pauly, & Zellman (1977) reported that when a new reading program was implemented in schools, teachers' sense of efficacy had a strong positive relationship with the project goals that were achieved, the amount of teacher change as a result of training, and the continuation of the use of project materials. Teachers' attitudes about their own professional competence had major effects on what happened to projects and how effective they were (Berman et al., 1977).

The construct of teacher efficacy has shown to be an important predictor of teachers' decisions to leave or stay in the teaching profession. Coladarci (1992) noted that efficacious inservice teachers showed a higher professional commitment to the teaching profession. Other researchers have linked teacher efficacy to commitment to the teaching profession (Rosenholtz, 1989; Ebmeier, 2003; Ware & Kitsantas, 2011). Evans and Tribble (1986) also established that preservice teachers with a high sense of efficacy showed greater professional commitment to teaching. Perrachione, Petersen, and Rosser (2008) reported that personal teaching efficacy appeared to influence teacher job satisfaction.

Teacher burnout may be an antecedent to teachers leaving the profession. Skaalvik and Skaalvik (2007) noted a strong correlation between low teacher efficacy and high burnout levels. Schwarzer and Hallum (2008) showed that low levels of efficacy were related to both high stress and burnout. Teachers with perceived low efficacy beliefs were most likely to leave the teaching profession (Glickman & Tamashiro, 1982).

Bandura (1997) wrote that teachers faced daily stressors such as disruptive and non-achieving students. When teachers with high efficacy beliefs were faced with daily stressors they directed their efforts to solve the problems (Bandura, 1997). Teachers with low efficacy beliefs avoided dealing with academic problems and turned their efforts inward to relieve their own emotional distress (Bandura, 1997). Avoidant behavior used by low efficacy teachers included disengaging themselves from instructional activities (Bandura, 1997). According to Bandura (1997) this pattern of coping by withdrawing used by teachers with low efficacy beliefs led to emotional exhaustion and created a growing sense of futility.

Research on beginning teachers has shown positive links between teacher efficacy and teacher outcomes. Beginning teachers who had a high sense of efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced less stress (Tschannen-Moran et al., 1998). Efficacious beginning teachers rated their teaching preparation programs higher and the difficulties of teaching lower than beginning teachers with a low sense of self-efficacy (Tschannen-Moran et al., 1998). Novice teachers with a high sense of efficacy were more likely to stay in the teaching profession (Knobloch & Whittington, 2002). School factors that influenced novice teachers' sense of efficacy were support and feedback they received, resources and facilities, isolation, overwhelmed and helplessness, school procedures, paperwork, workload, and unrealistic expectations (Knobloch & Whittington, 2002). Novice teachers were more efficacious when they received positive feedback from administrators, other teachers, parents, students, and community members. Woolfolk and Spero (2005) found that the levels of support teachers received during the first year of teaching correlated to teacher efficacy levels.

Bandura's (1997) theory of self-efficacy stressed that efficacy beliefs were most malleable early in learning. According to Bandura (1997) successful teaching experiences built a robust belief in personal efficacy and failures undermined efficacy, especially if the failures occurred before a sense of efficacy was firmly established. Thus, the first year of teaching could be critical to the development of teachers with high levels of efficacy (Bandura, 1997). Henson (2002) also found that personal self-efficacy became more difficult to impact in experienced teachers because it was an internal belief that became solidified with time.

Research in teacher education has attempted to identify school factors that influence teachers' decisions to stay or leave the profession. Liu (2007) studied the effect that school environment and individual teacher characteristics had on teachers' commitment to the profession. The predicted probability of first year teacher attrition rates could decrease from 19% to 4% if school structures allowed for teacher input into decision making (Liu, 2007). School structures that support beginning teachers have also been found to influence teachers' decisions to stay or leave the profession. Marable and Raimondi (2007) examined mentoring programs and found that first year teachers reported needing more administrative support, peer support, mentoring, training, and resources.

School climate was defined by industrial and social psychologists as teachers' perceptions of the work environment, and that it was influenced by formal and informal relationships, by the personalities of the participants, and by the leadership in the organization (Hoy, Tarter, & Kottkamp, 1991). School climate has been described using metaphors. Hoy and Woolfolk (1993) used a health metaphor because aspects of health were found to be good predictors of school effectiveness. The concept of school health captured the nature of student-

teacher, teacher-teacher, and teacher-administrator interactions (Hoy & Woolfolk, 1993). “A healthy school is one in which harmony pervades relationships among students, teachers, and administrators as the organization directs its energies toward its mission” (Hoy & Woolfolk, 1993, p. 356).

In schools with a healthy climate, teachers liked their colleagues, their school, their job, and their students, the principal was friendly, open, egalitarian, supportive, and expected the best from teachers (Hoy & Sabo, 1998). Principals in healthy schools were also influential with their superiors, they went to bat for teachers, and they got teachers the resources they needed (Hoy & Sabo, 1998). The school was protected from community pressures, and the school board resisted efforts of interest groups to influence policy (Tarter & Hoy, 1988). Hoy and Woolfolk (1993) defined a healthy school climate as one where there was a strong academic emphasis and a principal who had influence with superiors and used it on behalf of teachers. Hoy and Woolfolk (1993) found that a healthy school climate was conducive to the development of high teacher efficacy beliefs where teachers believed that they could influence student learning.

Statement of the Problem

The National Commission on Teaching and America’s Future (NCTAF, 2007) found that teacher turnover costs the nation more than \$7 billion annually for recruitment, administrative processing and hiring, professional development, and training of replacement teachers. The teacher turnover rate in the United States was studied by Ingersoll (2003). In a report sponsored by the Center for the Study of Teaching and Policy and the Consortium for Policy and Research in Education, Ingersoll (2003) found that the demand for new teachers was neither due to increases in student enrollment nor to increases in teacher retirement. The need was due to the

pre-retirement turnover rate of teachers. Most of the hiring of new teachers was to fill spots vacated by teachers who left the profession (Ingersoll, 2003). The report showed that overall, there were more than enough prospective teachers produced each year in the United States. School staffing problems were not due to teacher shortages, as in an insufficient supply of qualified teachers, rather school staffing problems were a result of high turnover rates in which large numbers of teachers left the profession for reasons other than retirement (Ingersoll, 2003). The data suggested that after five years of teaching, between 40 and 50% of all beginning teachers had left teaching altogether (Ingersoll, 2003). In the 1999-2000 school year, 534,000 teachers entered schools; in the following year 539,778 had moved from or left their schools (Ingersoll, 2003). The report indicated that not all employee turnover was detrimental. While low levels of turnover may be normal and efficacious for organizations, high turnover rates can be both cause and effect of performance for organizations (Ingersoll, 2003). The consequence of employee turnover varied among different types of organizations. For organizations such as schools, in which the work was non-routine and required extensive interaction among participants, employee turnover was especially consequential (Ingersoll, 2003). In describing the relation between teacher turnover and school cohesion and performance, Ingersoll (2003) wrote, "...high rates of teacher turnover are of concern not only because they may be an outcome indicating underlying problems in how well schools function, but also because they can be disruptive, in and of themselves, for the quality of school community and performance" (p. 13).

The turnover rates for beginning teachers may be higher than for more experienced teachers. The *Status of the American School Teacher, 2005-2006*, a report by the National Education Association (2010) indicated that teachers under 30 were less likely than those 40 and

older to indicate that they planned to stay in teaching until they were eligible for retirement. These teachers often responded that they would continue teaching until something better came along.

Ingersoll and Merrill (2010) reported that data from the Schools and Staffing Survey from 1987-1988 to 2007-2008 showed that the teacher workforce increased by 48% from 1987-1988 to 2007-2008. This ballooning of the workforce resulted in a large number of beginning teachers entering the workforce. However, turnover rates have also increased by 28% from the early 1980s to 2004-2005. Turnover rates were higher for beginning teachers; increasing from 21.4% in 1988 to 28.5% in 2004, a 31% increase (Ingersoll & Merrill, 2010). Significantly, in past decades the turnover rate did not differ by race or ethnicity, however, 2004-2005 data showed that turnover rates among minority teachers were significantly higher than for white teachers. In addition, 45% of all public school teacher turnover took place in just one fourth of public schools. The highest rates of turnover were in high poverty, minority, urban, and rural schools. Data indicated that in the beginning of the 2003-2004 school year, 47,000 minority teachers entered teaching. By the following year, 56,000 had left, 20% more than entered the previous year (Ingersoll & May, 2011).

Although strategies to recruit more minority teachers to place them in schools that serve minority students were successful, the careers of minority teachers were less stable than white teachers (Ingersoll & May, 2011). Minority teachers were more likely than white teachers to work in disadvantaged, hard to staff schools. Minority teachers were employed at higher rates in schools that served disadvantaged students, but they also left at higher rates (Ingersoll & May, 2011). Unlike white teachers, the demographic make-up of poverty level student enrollment or

the location of schools were not the reasons minority teachers left. Ingersoll and May (2011) reported that the reasons minority teachers left were school working conditions. School factors such as salary levels, lack of staff development, or lack of classroom resources had little impact on their decision to leave. The stronger school factors that contributed to their decision to leave were the level of collective faculty decision making influence in the school, and the degree of individual autonomy that teachers had in classrooms. Schools that had higher levels of faculty input into decision making and higher levels of teacher autonomy had significantly lower levels of minority teacher turnover.

Ingersoll (2003) wrote that teacher recruitment programs will not solve the staffing problems schools were facing if schools did not address the organizational sources of low teacher retention. The increasing turnover rate among beginning teachers and minority teachers in disadvantaged schools, which plays a critical role in school staffing and school outcomes such as student achievement requires solutions to keep minority teachers in the profession. High efficacy beliefs have shown to contribute to teacher commitment to the profession. Given that school factors such as school climate may have an influence on teacher efficacy beliefs, it is an area that requires further research.

Need for the Study

The present study investigated school health factors that may be related to efficacy beliefs of beginning Hispanic teachers in a South Texas school district that serves students identified as minority and economically disadvantaged. The high attrition rate for minority teachers that teach in schools with disadvantaged students requires investigation of school factors that influence efficacy levels of beginning Hispanic teachers. Efficacious beginning teachers are

more likely to stay in the teaching profession; therefore, it is important to examine health school factors that may contribute to efficacy beliefs. Hoy and Woolfolk (1993) found that school health was related to teacher beliefs about their ability to influence student learning. However, the study was conducted with teachers who taught in schools that served students from middle to high income levels. Pas, Bradshaw, and Hershfeldt (2012) wrote that despite the increased interest in teacher efficacy there was limited research focused on identifying teacher and school contextual factors that predicted changes in teacher efficacy.

Research has shown that beginning teachers face many obstacles in their first years of teaching. Romano (2008) found that beginning teachers identified more struggles than successes. The areas that beginning teachers struggled with were classroom management, content and pedagogy, personal issues, student learning, grading, special needs students, teacher evaluation, report card grading, and parents. Veenman (1984) described a reality shock that beginning teachers experienced in their first year of teaching. Teachers entered the profession with ideals about what teaching would be like, and were confronted with the rude realities of everyday classroom life (Veenman, 1984). Reality shock and the struggles beginning teachers encounter can lead to attrition if support for beginning teachers is not planned. Beginning teachers need to be supported so that they can overcome obstacles in their first years of teaching to be able to develop and maintain a high level of teaching efficacy.

The literature supports that beginning teachers with a high sense of efficacy are more likely to have a greater commitment to the profession. Research also indicates that self-efficacy is most malleable early in learning. There are school organizational factors that may affect teachers' sense of teaching efficacy. Therefore, it is critical to identify these factors so that

school leaders can find ways to influence efficacy beliefs of beginning Hispanic teachers. Identifying these factors is critical to understanding how to provide the support that beginning Hispanic teachers need to stay in the profession.

Milner and Woolfolk Hoy (2003) wrote that future studies on teacher efficacy should be done in a variety of cultural contexts as there are likely to be differences related to teachers' cultures, ways of knowing, and experiences. There is little knowledge about social and contextual factors on teacher efficacy, and socio cultural influences are being recognized as essential to the knowledge about teacher efficacy (Milner & Woolfolk Hoy, 2003). This study will add to the body of knowledge on teacher efficacy because the construct will be studied in a different socio-cultural context than it has previously been studied.

According to Hoy and Woolfolk (1993) few studies have explored the relationship between school organization and teacher efficacy. Hoy and Woolfolk (1993) cited two studies that have attempted to do this. One of these was conducted by Newmann, Rutter, and Smith (1989) which examined the effects of ten organizational features on teacher sense of efficacy, sense of community, and expectations for student achievement. Although the study did link aspects of school organization to teacher efficacy, there were difficulties with the precise definition and measurement of teacher efficacy, and the reliability of the scales for teacher efficacy were low (Hoy & Woolfolk, 1993).

The second study was conducted by Ashton, Webb, and Doda (1983) with 35 teachers in two different schools. The study assessed teacher sense of efficacy as it related to expectations for student achievement, work relations among teachers, level of student conflict, job satisfaction, stress, commitment to teaching, perceptions of the teacher's role, and attributions for

student success or failure. According to Hoy and Woolfolk (1993) the sample size of this study was a limitation in terms of generalizability. The sample population for the study was also not representative of a diverse teacher or student population.

Hoy and Woolfolk (1993) examined the relationship between teacher sense of efficacy and school organizational health using a sample of 179 teachers from 37 elementary schools. The schools in the sample were predominantly middle class schools, in which 27 of the 37 schools were in districts that were above average in wealth as determined by the state of New Jersey (Hoy & Woolfolk, 1993). Hoy and Woolfolk (1993) pointed out that this study needed to be replicated with a more diverse sample population.

The present study broadened the body of knowledge of teacher efficacy beliefs and organizational health factors. Understanding school organizational health factors that are related to teacher efficacy in schools may help to decrease the attrition rate for minority teachers. It is important to understand school organizational health factors that predict efficacy beliefs of beginning Hispanic teachers so that those charged with supervising beginning Hispanic teachers can plan appropriate support structures in schools. Furthermore, understanding predictors of teacher efficacy of beginning Hispanic teachers who teach in schools that serve minority students from economically disadvantaged backgrounds is critical to ensure that efficacious Hispanic teachers stay in the profession.

Purpose of the Study

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District.

Teaching efficacy beliefs of beginning Hispanic teachers in elementary, middle, and high school were studied using three subscales: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. School organizational health was studied using individual teacher perceptions of the health of their school using multiple subscales of school health.

This study contributed to the knowledge base relating to teacher efficacy and organizational health by examining these variables with Hispanic teachers in schools with large numbers of minority students that are identified as economic disadvantaged. This investigation was intended to build upon Hoy's and Woolfolk's (1993) study with urban and suburban upper middle class elementary school samples. To date, few if any studies have been done on efficacy beliefs of beginning Hispanic teachers and the organizational health of schools that serve students identified as economic disadvantaged. This study will extend Hoy's and Woolfolk's (1993) study by including middle and high school teachers.

Research Questions

The following research questions were used to guide the research.

1. How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in elementary schools?
2. How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in elementary schools?
3. How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in elementary schools?

4. How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in middle schools?
5. How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in middle schools?
6. How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in middle schools?
7. How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in high schools?
8. How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in high schools?
9. How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in high schools?

Significance of the Study

The teacher attrition rate for minority teachers is higher than that for white teachers. There is a need to keep beginning Hispanic teachers in the teaching profession. It is necessary to understand school organizational factors that influence efficacy beliefs of beginning Hispanic teachers because research has shown that teachers with high efficacy beliefs show a greater commitment to teaching. Few studies have been done on the development of efficacy beliefs among novice teachers; efficacy beliefs of first year teachers are related to stress and commitment to teaching, and to satisfaction with support and preparation (Woolfolk Hoy, 2000). Novice teachers who completed their first year of teaching that had a high sense of efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and expressed

less stress. “Confident new teachers gave higher ratings to the adequacy of support they had received than those who ended their year with a shakier sense of their own competence and a less optimistic view of what they could accomplish” (Woolfolk Hoy, 2000, p. 6). Attention to the factors that support the development of a strong sense of efficacy among preservice and novice teachers is worth the effort because once it is established, self-efficacy beliefs seem resistant to change (Woolfolk Hoy, 2000).

Understanding the relation between school organizational health factors and efficacy beliefs of beginning Hispanic teachers may provide insight into the development of district and school induction programs. Such programs should be aimed at enhancing the early teaching experiences of beginning Hispanic teachers to increase efficacy beliefs.

Research Design

A quantitative design was used in this study. The study used a convenience sample of beginning Hispanic teachers with one to five years of teaching experience from a large school district in South Texas that serves minority students that are predominantly identified as economic disadvantaged. Literature on beginning teachers considers teachers with one to five years of experience to be beginning teachers. Survey data was collected during the fall teaching semester. Beginning teachers in the school district completed the survey during a meeting scheduled by the principal at each of the schools in the district.

Quantitative data were collected to measure the dependent and independent variables. Data for the dependent variables of efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management of beginning Hispanic teachers were collected using the Teachers’ Sense of Efficacy Scale developed by Tschannen-Moran and Woolfolk Hoy

(2001). Data for the independent variables of school health were collected using the Organizational Health Inventory for Elementary Schools (Hoy, Tarter, et al., 1991; Hoy & Tarter, 1997), the Organizational Health Inventory for Middle Schools (Hoy & Sabo, 1998), and the Organizational Health Inventory for Secondary Schools (Hoy & Feldman, 1987; Hoy, Tarter et al., 1991). Multiple regression analyses were used to determine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District.

Limitations of the Study

The sample for this study was beginning Hispanic teachers from schools that serve minority students predominantly identified as economically disadvantaged. The teachers in the study taught in one school district which may indicate that they experienced similar programmatic induction activities and teacher trainings. Schools within the same district generally have similar structures such as student grouping, teacher planning periods, parent organizations, opportunities for participation in decision-making, availability of resources, and teacher schedules. This should be considered in interpreting the results of this study. Although it is tempting to assume that personal and organizational factors alone influence teacher efficacy other factors may account for teacher efficacy beliefs (Hoy & Woolfolk, 1993). For example, high teacher motivation may contribute to positive perceptions of academic emphasis, and student achievement may affect teacher efficacy and school climate (Hoy & Woolfolk, 1993). These potential factors should also be considered in interpreting the findings of this study.

Definition of Terms

The following terms are defined as they were used in this study.

Teacher efficacy – Teacher efficacy is defined as a teacher’s belief in his or her capability to execute courses of action that will lead to successful task accomplishment in particular contexts (Tschannen-Moran et al., 1998). A teacher’s efficacy belief includes a combination of the teacher’s perception of competence and the knowledge of the task requirements in the teaching situation (Tschannen-Moran et al., 1998).

Beginning Hispanic teachers - In this study beginning teachers are inservice teachers that have between one and five years of teaching experience. The teaching staff in the district for this study is 94% Hispanic. All beginning teachers were invited to complete the study survey.

However, only teachers who self-identified as Hispanic in the demographic section of the survey were included in the study.

School climate - School climate is teachers’ perceptions of the work environment that is defined by formal and informal relationships, personalities of participants, and leadership in the organization (Hoy, Tarter, et al., 1991).

Organizational health – Organizational health of schools is defined using several dimensions of school health as listed below and described by Hoy, Tarter, et al., 1991; Hoy and Tarter, 1997; and Hoy & Sabo, 1998.

Institutional integrity – A school that has institutional integrity is not vulnerable to narrow vested interests of community groups.

Collegial leadership – Collegial leadership is the behavior of the principal that is friendly, supportive, open, and guided by norms of equality.

Resource influence – Resource influence is the principal’s ability to affect the actions of supervisors to the benefit of teachers.

Teacher affiliation – Teacher affiliation is the sense of friendliness, and strong affiliation that exists among teachers. Teachers feel good about each other, and have a sense of accomplishment from their job.

Academic emphasis – Academic emphasis is the schools’ press for achievement. Students meet high expectations for achievement by working hard, seeking extra work, and respect other students who get good grades.

Consideration – Consideration is principal behavior that is friendly, supportive, and collegial. The principal looks out for the well-being of faculty members and is open to suggestions.

Principal influence – Principal influence is the principal’s ability to influence the actions of supervisors. Influential principals can persuade supervisors to get additional consideration, and are impeded by the hierarchy.

Initiating structure – Initiating structure is the principal’s task and achievement oriented behavior.

Morale – Morale is the sense of trust, confidence, enthusiasm, and friendliness that exists among teachers.

Summary

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District.

Teaching efficacy beliefs of beginning Hispanic teachers in elementary, middle, and high school

were studied using three subscales: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. School organizational health was studied using individual teacher perceptions of the health of their school using multiple subscales of school health.

Teacher efficacy is a construct that has been linked to teacher commitment to the teaching profession. High levels of teacher efficacy have shown to increase commitment to teaching while low levels of teacher efficacy have been linked to job stress and burnout. Beginning teachers face many obstacles that are linked to teacher attrition. Attrition rates for minority teachers have been shown to be higher than for other teachers. Studies have shown that efficacious beginning teachers are more likely to stay in the teaching profession. There are school organizational health factors that promote and hinder teacher efficacy levels. This study examined the relationship between efficacy of beginning Hispanic teachers and school organizational health factors in schools that serve minority students identified as economic disadvantaged to broaden the knowledge base of teacher efficacy. Teacher efficacy was examined in a cultural context not previously studied. The significance of this study is that it is critical to understand school structures that promote high efficacy levels of beginning Hispanic teachers to identify support structures to keep them in the profession.

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. Teaching efficacy beliefs were studied using three subscales: efficacy in student engagement; efficacy in instructional strategies; and efficacy in classroom management of beginning Hispanic teachers in elementary, middle, and high school. School organizational health was studied using individual teacher perceptions of the health of their school using multiple subscales of school health.

The review of the literature examined the following topics: teacher efficacy; the theoretical framework for teacher efficacy; the development of the teacher efficacy construct; the organizational health of schools; the theoretical framework for organizational health of schools, the development of the organizational health construct; the relation of teacher efficacy and organizational health of schools; and beginning teachers.

The literature on teacher efficacy was examined to understand how a teacher's sense of efficacy relates to school outcomes such as student achievement, classroom management, teacher willingness to implement new instructional strategies, teacher commitment to teaching, and

contexts and variables that may influence efficacy beliefs. The literature on school organizational health was studied to understand school climate and school health, and how school health influences teacher efficacy. The literature on beginning teachers was analyzed to understand school factors that influence beginning teachers' decisions to stay or leave the profession. The major intent of the review was to understand the relationship of teacher efficacy and school organizational health.

Databases that were used to find the literature sources used in the review of the literature were Academic Search Complete, Education Full Text, ERIC, JSTOR, PsycARTICLES, PsycINFO, and Dissertations and Theses. These databases were searched for peer-reviewed articles written in English from 1970 to 2012. Search terms in article titles that were utilized were teacher efficacy, teacher self-efficacy beliefs, self-efficacy beliefs of beginning teachers, organizational health, organizational climate, organizational health of schools, beginning teachers, novice teachers, and problems of beginning teachers.

Teacher Efficacy

Teacher efficacy has been researched for more than 30 years and has been identified as an important attribute of effective teachers. The construct of teacher efficacy developed in part from Bandura's (1977) self-efficacy theory. Bandura (2000) described perceived efficacy beliefs as follows:

Efficacy beliefs influence whether people think erratically or strategically, optimistically or pessimistically; what course of action they choose to pursue; the goals they set for themselves and their commitment to them; how much effort they put forth in given endeavors; the outcomes they

expect their efforts to produce; how long they persevere in the face of obstacles; their resilience to adversity; how much stress and depression they experience in coping with taxing environmental demands; and the accomplishments they realize. Statistical analyses that combine the findings of numerous studies confirm the influential role of perceived self –efficacy in human adaptation and change (p. 75).

Bandura (1993) noted that there was a difference in possessing knowledge and skills and being able to use them under taxing situations. Personal accomplishment required skill but also self-beliefs to use the skill well (Bandura, 1993). Efficacy beliefs influenced how people felt, thought, motivated themselves, and behaved (Bandura, 1993). Bandura (1993) wrote that most courses of action were initially shaped in thought. People’s beliefs in their efficacy influenced the type of scenarios they constructed for themselves before setting out on a course of action. People with a high sense of efficacy visualized success scenarios that provided positive guides for their performance. People with a low sense of efficacy visualized failure scenarios and dwelt on things that could go wrong (Bandura, 1993). Self-efficacy beliefs influenced thought patterns and emotions that influenced goal directed actions in situations where people believed they had control (Tschannen-Moran & McMaster, 2009). Self-efficacy was described as a future oriented belief about the competence a person believed they would have in a given situation (Tschannen-Moran & McMaster, 2009).

Teacher efficacy was initially defined by two seminal studies by the RAND Corporation. One of these studies was conducted by Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal, Pauly, & Zellman, (1976) which defined teacher efficacy as the extent to which teachers

believed that they had the capacity to produce an effect on the learning of students. The second seminal study, conducted by Berman et al. (1977) defined teachers' sense of efficacy as a belief that the teacher could help even the most difficult or unmotivated student. Tschannen-Moran et al. (1998) wrote that in the span of a teaching career a high level of teacher efficacy could mean more resilience, higher motivation, and greater effort and persistence.

According to Woolfolk Hoy and Spero (2005) teacher efficacy was teachers' judgments about their ability to promote student learning. It was future oriented and had more to do with a perception of competence than with an actual level of competence. This was an important distinction because people regularly overestimate or underestimate their actual abilities and this can have consequences for the actions they take. "A capability is only as good as its execution. The self-assurance with which people approach and manage difficult tasks determines whether they make good or poor use of their capabilities. Insidious self-doubts can easily overrule the best of skills" (Bandura, 1997, p. 35).

Bandura (1997) wrote that creating classrooms that were conducive to learning rested heavily on the self-efficacy of teachers. Teachers' beliefs in their instructional efficacy partly determined how they structured academic activities in their classrooms, and also shaped students' evaluations of their own capabilities (Bandura, 1997). Teachers who believed in their own ability to promote learning created mastery experiences for their students, and those with doubts about their instructional efficacy created classroom environments that were likely to undermine students' judgments about their abilities and their cognitive development (Bandura, 1997).

Schwarzer and Hallum (2008) described perceived teacher self-efficacy as a protective effect when teachers coped with adversity. An optimistic belief in one's competence enhanced motivation to find constructive ways of coping. Self-efficacious teachers viewed the daily demands of teaching less threatening than those that had self-doubts about their professional performance (Schwarzer & Hallum, 2008). Schwarzer and Hallum (2008) described the essential difference between self-efficacy and other constructs such as self-concept, self-esteem, and locus of control. Self-efficacy was an internal attribution, it was prospective in that it referred to a future behavior, and it was an operant construct meaning that it was a good predictor of actual behavior.

Gist and Mitchell (1992) also explained the difference between self-efficacy and other concepts such as self-esteem and self-worth. Self-esteem was as trait reflecting a characteristic of an individual, an affective evaluation of the self, such as feelings of self-worth or self-liking. While self-efficacy was a judgment about task capabilities that was not inherently evaluative (Gist & Mitchell, 1992). Self-efficacy was a motivational construct that influenced how individuals made choices, set goals, their emotional reactions, effort, coping, and persistence (Gist & Mitchell, 1992). Bandura (1997) wrote that perceived self-efficacy was concerned with judgment of personal capability and self-esteem was concerned with self-worth. Individuals may judge themselves to be inefficacious in a specific activity, yet not have a low sense of self-worth because they do not invest their self-worth into that activity and conversely, an individual may perform an activity well yet not have pride in performing it well (Bandura, 1997). Pajares (1996) wrote that self-concept was measured at a broader level of specificity and it included feelings of

self-worth. Self-concept judgments could be domain specific but not task specific. Self-concept judgments were more global and less context dependent than self-efficacy (Pajares, 1996).

In some studies researchers have defined the construct of teacher efficacy as being comprised of two separate factors: personal teaching efficacy and general teaching efficacy (Ashton & Webb, 1986; Gibson & Dembo, 1984; Hoy & Woolfolk, 1990). Personal teaching efficacy was described as a teachers' assessment of their own teaching competence (Ashton & Webb, 1986). General teaching efficacy was teachers' expectations that teaching, in general, could influence student learning (Ashton & Webb, 1986). Studies in the literature on teacher efficacy have linked it to student achievement and engagement, classroom management, teacher willingness to implement new instructional strategies, and to commitment to teaching. Other studies have examined contexts and variables that may influence teacher efficacy. A discussion of research in these areas follows.

Student Achievement and Engagement

Ashton, et al. (1983) documented that teachers' sense of efficacy was related to student achievement, specifically in mathematics ($r = .78; P < .003$), and in communication classes ($r = .83; P < .02$). Ashton et al., (1983) found that teachers with a high sense of efficacy were more likely to be attentive to the individual needs of students and responded to student needs in a positive and supportive style that encouraged student enthusiasm and involvement in decision-making.

Gibson and Dembo (1984) wrote that teachers that had a high sense of instructional efficacy contributed to student academic achievement. Teachers with a high sense of efficacy devoted more class time to academic learning, provided more help to students who were having

problems learning, and praised students for academic success (Gibson & Dembo, 1984). Teachers with a high sense of efficacy felt that if they exerted extra effort and tried different strategies students could learn, and that they could overcome negative environmental factors with good teaching (Gibson & Dembo, 1984). Teachers that had a low sense of efficacy spent more time on non-academic tasks, criticized students when they failed, and gave up on students who did not learn readily (Gibson & Dembo, 1984). Teachers with a strong sense of instructional efficacy supported students' intrinsic interests and academic self-directedness (Gibson & Dembo, 1984).

Ashton and Webb (1986) found strong support for the relation between teacher efficacy and the mathematics and language achievement of students. "When teachers' sense of teaching efficacy was added to the regression equation, the variance accounted for by the students' prior achievement was increased by 24%" (Ashton & Webb, 1986, p. 138). Students' language achievement was also significantly related to teacher efficacy beliefs. "When teacher's sense of personal efficacy was added to the regression equation the variance accounted for increased by 46%" (Aston & Webb, 1986, p.138). Teachers with a low sense of efficacy doubted their ability to influence student learning and therefore avoided activities that they perceived to be beyond their capabilities (Ashton & Webb, 1986). Teachers with a low sense of efficacy reduced their efforts and gave up when they were faced with challenging classroom situations (Ashton & Webb, 1986). Teachers with a high sense of efficacy believed they had a positive effect on student performance, therefore were motivated to try harder when they were confronted with obstacles, and experienced pride in their accomplishments when the work was done (Ashton & Webb, 1986).

Soodak and Podell (1994) asked teachers to provide suggestions for a student with reading difficulties who was difficult to teach. The responses were coded as either teacher based-suggestions or non-teaching suggestions. The teacher-based suggestions made by teachers included instructional strategies such as peer tutoring, cooperative learning, changes in materials or methods, and strategies to address emotional or behavioral needs. The non-teaching suggestions made by teachers were solutions outside the classroom such as eliciting parent participation to solve the student's problem. Soodak and Podell (1994) examined the relation between teachers' sense of efficacy and the suggestions they made. Teachers were classified according to three groups: those who made more teacher-based suggestions, those who made more non-teacher based suggestions, and those who made an equal number of suggestions. Teachers who made more teacher - based suggestions had significantly higher levels of personal teaching efficacy than those that made more non-teaching based suggestions (Soodak & Podell, 1994). Personal teaching efficacy played a role in teachers taking responsibility for finding a solution for the problems of the difficult to teach student (Soodak & Podell, 1994). However, Soodak and Podell (1994) found no difference between the three groups in general teaching efficacy.

Tournaki and Podell (2005) studied the difference in teacher predictions on the academic success of students based on teachers' level of efficacy. One instrument to measure teacher predictions and one to measure teacher efficacy levels were used. Using analysis of variance the researchers found that teachers with high teacher efficacy made more positive predictions of student academic success than did teachers with low efficacy levels. Also, teachers with low teacher efficacy levels made more positive predictions about the academic success of attentive

students than they did of low attentive students. Teachers with high teacher efficacy levels did not differentiate in their predictions of success between attentive and inattentive students.

Teachers with high teacher efficacy levels believed that inattentive students could still succeed academically. Teachers' sense of efficacy influenced their academic predictions for students in relation to student characteristics. Low efficacy teachers predicted poorer academic outcomes of students who displayed characteristics that impeded teaching and learning, while high efficacy teachers were more resilient when facing students with such characteristics (Tournaki & Podell, 2005).

Martin, Sass and Schmitt (2012) studied teacher efficacy beliefs and student engagement. The researchers defined student engagement as a teachers' ability to provide support for learning and to motivate students to learn. The researchers hypothesized that efficacy in student engagement was an indirect cause of intent-to-leave the teaching profession. Data for the study was collected online from 631 certified teachers from elementary, middle, and high schools. The instrument to measure teacher efficacy was the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001). Findings showed that teachers who doubted their ability to engage students were likely to increase their efforts to control instruction which led to greater stress from student behavior and a lessened sense of accomplishment. This drained emotional energy, and diminished job satisfaction which may cause teachers to leave the profession. A limitation of this study was that data was collected at one point during the school year and teacher stress, burnout, and intent-to-leave may vary during the school year (Martin et al., 2012).

Classroom Management

The relation between teacher sense of efficacy and classroom management has also been documented. Rose and Medway (1981) found that highly internal teachers, those who believed that they had control over the events in the classroom, gave fewer disciplinary commands to students in low socio-economic schools, and in high socio-economic schools these teachers had fewer students engaged in inappropriate behavior. Classroom behaviors that were found to be more characteristic in classrooms of highly internal teachers were fewer disciplinary commands, lower rates of inappropriate student behavior, and higher rates of student self-directed activity (Rose & Medway, 1981). These teachers also maximized instructional efficiency. Rose and Medway (1981) found that teachers who attributed student outcomes to their actions employed improved educational practices more often than external teachers, those who did not believe they had control over student outcomes.

Hoy and Woolfolk (1990) wrote that teachers with a low sense of instructional efficacy had a custodial orientation and relied on extrinsic inducements and negative sanctions to get students to study. Teachers with a custodial orientation viewed the school as an autocratic organization with a rigid pupil-teacher status hierarchy (Hoy & Woolfolk, 1990). Teachers viewed discipline as teacher control instead of student self-discipline (Hoy & Woolfolk, 1990). Teachers with a high sense of self-efficacy held a humanistic perspective of the school and believed in a democratic atmosphere with open channels of two-way communication (Hoy & Woolfolk, 1990).

Woolfolk, Rosoff, & Hoy (1990) found that teachers with a greater sense of personal teaching efficacy and general teaching efficacy seemed more trusting of students and more able

to relinquish control and share responsibility for solving classroom problems with students. Teachers with optimistic beliefs that all students could be taught had a more humanistic view of pupil control, and had a higher tendency to support student autonomy in problem solving.

In a study using secondary school teachers to examine the perceived self-efficacy for classroom management and burnout, Brouwers and Tomic (2000) found that teachers that were faced with continuous disruptive classroom behavior were more likely to give up when they had little confidence in their ability to maintain order in the classroom. They were more likely to do less to solve order problems in the classroom.

Willingness to Implement New Instructional Strategies

Other studies have found a connection between teacher efficacy and willingness to implement new programs and teaching strategies. In a study of teachers who participated in a staff development program to improve performance, Smylie (1988) wrote that in deciding whether to adopt new knowledge and skills, teachers were likely to rely on knowledge, beliefs, or perceptions related to their practice and also on cues from the organizational environment of the school and the classroom. Smylie (1988) found that in the context of staff development, teachers' perceptions of their beliefs about their practice were the most significant predictors of change. The direct relationship between personal teaching efficacy and change suggested that teachers were more likely to change their behavior to improve their classroom effectiveness if they believed that they were instrumental to the learning of their students (Smylie, 1988).

Berman et al. (1977) studied teacher characteristics that related to the use of a new reading program. The researchers found that teacher's sense of efficacy, the belief that the teacher could help the most difficult or unmotivated student, showed a strong positive

relationship to program implementation. Not only was teacher sense of efficacy positively related to improved student achievement, it was also positively related the project goals that were achieved, the amount of teacher change, and the continuation of project materials. Berman et al. (1977) wrote, “Teachers’ attitudes about their own professional competence, in short, appears to have major effects on what happens to projects and how effective they are” (p. 137).

Guskey (1988) explored the relationship between teacher efficacy and teacher attitudes toward the implementation of new instructional practices. The sample group consisted of 120 teachers from elementary and secondary schools from one urban district, one suburban district, and one rural district participating in a staff development program. Analysis of variance indicated that there was no difference among the three different groups of teachers (rural, urban, sub-urban) with regard to grade level assignments, gender of the teacher, or any of the teacher attitude measures (Guskey, 1988). Correlations among the variables showed that years of experience and grade level assignments were not significantly related to efficacy measures. However, teachers with higher efficacy scores rated the new mastery learning strategies as more important ($r = .42; P < .01$), more congruent with their current practice ($r = .36; P < .01$), and less difficult to implement ($r = .33; P < .01$).

A study using quantitative analysis and qualitative inquiry was conducted by Onafowora (2004) to study novice teachers’ perceptions of self-efficacy and how it related to their pedagogy at the beginning of their professional development. The sample for the study was a group of 25 novice teachers who volunteered to participate in a professional development program. In this setting novice teachers observed master teachers teaching and discussed instructional strategies with the master teachers. The sample group of novice teachers worked predominantly with

African American and Latino students. Qualitative data included written responses to open ended questions and focus group discussion transcripts. Quantitative data was collected using a Likert type teacher efficacy questionnaire. Results from the study were that novice teachers did not show consistency in feeling empowered to create learning environments that allowed them to motivate students and promote student learning. In their oral and written reports, teacher responses focused on discipline and minimal administrative support rather than on instruction and student interaction.

Rimm-Kaufman and Sawyer (2004) conducted a study to determine how the implementation of a program designed to help teachers maintain productive learning environments, motivate students, and make decisions predicted teachers' self-efficacy beliefs. A significant finding from the study was that there was an association between teachers that implemented the new program and those that had higher levels of teacher sense of efficacy. Although a link was found between implementation of the discipline program practices and teacher sense of efficacy, the researchers noted that the direction of the findings was unclear as to whether teachers who were more efficacious implemented the program or teachers who used the program practices felt more efficacious (Rimm-Kaufman & Sawyer, 2004).

Using quantitative methods to determine the effects of professional development on teacher efficacy, Ross and Bruce (2007) studied two groups of 6th grade mathematics teachers, one group received training on strategies for teaching mathematics, and a control group. The researchers anticipated that providing staff development that addressed the four sources of efficacy information would have a positive impact on teacher efficacy. Using multivariate analysis of covariance the researchers analyzed teacher efficacy levels for classroom

management, for instructional strategies, and for student engagement. Ross and Bruce (2007) found that professional development had a positive effect on teacher expectations about their ability to manage students in the mathematics classroom. The researchers did not find significant differences in efficacy levels between the two teacher groups with regard to teacher efficacy for instructional strategies and teacher efficacy for student engagement.

In a qualitative study Cantrell and Callaway (2008) studied the implementation of a literacy program and teacher efficacy levels. The researchers used interviews from 16 teachers from six schools in three districts in southeastern states who participated in a content literacy project. The researchers were interested to find the efficacy characteristics of low and high project implementers. Findings from the study were that high implementers of the program exhibited a higher sense of general efficacy than low implementers. When high implementers were asked about what the most important influence on students' literacy learning was, the salient response was the belief in the responsibility of teachers to influence student learning no matter what difficulties were found in students' home and family experiences. All high implementers voiced that difficult home experiences could be overcome by teachers.

Commitment to Teaching

Teacher efficacy has been linked to teachers' commitment to stay in the teaching profession (Rosenholtz, 1989). Organizational social psychologists have described commitment to work as an internal motivation (Rosenholtz, 1989). "Where people are highly motivated, their feelings are closely tied to how well they perform; good performance is self-rewarding and provides the incentive for continuing to perform well" (Rosenholtz, 1989, p. 139).

In examining teacher commitment, Coladarci (1992) studied eight different variables: personal teacher efficacy, general teacher efficacy, climate: principal, climate: teacher, teacher student ratio, salary, experience, and gender to predict teacher commitment. Personal and general teaching efficacy were the two strongest predictors of commitment to teaching. “That is, other things being equal, a greater commitment to teaching would be expected among teachers who believe student achievement can be influenced through skillful instruction, who have confidence in their own ability to influence student achievement, and who assume personal responsibility for the level of student achievement they witness in their classrooms” (Coladarci, 1992, p. 334).

Ebmeier (2003) investigated the link between teacher efficacy, teacher commitment, and teacher supervision. The study was conducted to understand how principal supervision influenced teacher efficacy and commitment. The connection between principal behavior and support and teacher efficacy was examined. Two samples were used for the study, a calibration sample of 222 teachers, and a validation sample of 332 teachers. Participants were K-12 teachers in a large mid-western metropolitan area. One instrument with multiple scales was used. The different scales included were: a commitment and trust scale, a personal efficacy scale, an external influences scale, an active principal supervision scale, a principal support of teaching scale, and a satisfaction with working conditions scale. The research questions measured the extent to which teachers viewed the quality of working conditions as healthy and satisfactory. Results showed that class visits and conferencing activities on their own did not affect a teachers’ confidence. Principal supervision only affected teacher efficacy when teachers perceived that the principal had a real interest and commitment to supporting teachers.

Limitations of this study were that other organizational variables in schools could also account for the increase or decrease in teacher efficacy. Caprara, Barbaranelli, Borgogni and Steca (2003) also studied the relation of teacher commitment and job satisfaction. They found that in schools where teachers see the principal as a good leader, they expand more effort in pursuing common goals.

Ware and Kitsantas (2011) examined the relationship between teacher efficacy and teacher commitment to understand the extent to which factors such as teacher efficacy, collective efficacy, and principal efficacy predicted teacher commitment. The sample was 26,257 teachers and 6711 principals from public schools expected to meet No Child Left Behind (2002) goals. The researchers used data from the 1999-2000 Schools and Staffing Survey. The researchers conducted exploratory multi-level analysis of the relationship between measures of teacher and principal efficacy beliefs to a measure of teacher commitment. Findings from the study showed that teacher efficacy in enlisting administrative direction, efficacy to make decisions, and efficacy to control some aspects of classroom operation increased teacher commitment.

Schwarzer and Hallum (2008) examined the relationship between self-efficacy, job stress, and burnout. The quantitative study used a sample of 608 Syrian teachers and 595 German teachers. Data was obtained using measures for self-efficacy, stress, and burnout. Using analysis of variance and correlation analysis the researchers found that teachers with low self-efficacy might be more vulnerable for events that may cause job stress and subsequent burnout.

Contexts and Variables That May Influence Efficacy Beliefs

Woolfolk Hoy and Spero (2005) conducted a longitudinal study to examine changes in teachers' judgment of their efficacy from entry into a beginning preparation program through the

first year of teaching. The sample group was 53 prospective teachers enrolled in a Master's of Education program at a major mid-western public university. The instrument used to measure teacher efficacy was Gibson's and Dembo's (1984) Teacher Efficacy Scale Short Form. There were three phases of data collection: during the first quarter of the teacher preparation program; after student teaching; and at the end of the first year of teaching. The researchers found that efficacy rose during the teacher preparation and student teaching periods, but fell during the actual teaching experience. Woolfolk Hoy and Spero (2005) found evidence to support protecting efficacy during the first year, since efficacy levels correlated with support provided during the first year of teaching. When support was withdrawn, efficacy levels fell. A limitation of this study was the small sample size, and that participants were from one preparation program.

Tschannen-Moran and Woolfolk Hoy (2007) explored two sources of teacher efficacy proposed by Bandura (1986, 1997): verbal persuasion defined as support from administrators, colleagues, parents, and community; and mastery experience defined as satisfaction with past teaching successes. The researchers were interested in finding differences between novice and experienced teachers in relation to efficacy beliefs as a result of these two sources of efficacy. The participants were 225 teachers who were graduate students in three universities in Ohio and Virginia, and teacher volunteers from two elementary schools, one middle school, and one high school. Teachers had between 1 and 29 years of teaching experience. The instruments used were the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), and other items to measure perceptions of support. Correlational analyses and multiple regression analysis were used to analyze the various sources of efficacy. Results showed that the contextual variable most strongly related to efficacy for novice teachers was teaching resources. For

experienced teachers teaching resources were less related to self-efficacy beliefs. For novice teachers none of the verbal persuasion variables were related to efficacy beliefs. For experienced teachers, support and involvement from parents and community were weakly related to self-efficacy beliefs. For novice and experienced teachers, mastery experience was modestly related to sense of efficacy, with a stronger correlation for novice teachers than for experienced teachers. Demographic variables such as race and gender were not found to be related to efficacy beliefs for novice or experienced teachers.

Milner and Woolfolk Hoy (2003) conducted a qualitative study using case study method to identify sources of self-efficacy in an unsupportive environment. Observations in and out of the classroom and interviews over a five month period were conducted to study the experience of one African American teacher in a high school with only two other African American teachers. The researchers found that sources of efficacy were respect from students and parents, and from successful self-reflective experiences. Barriers to self-efficacy were social and collegial isolation from peers, and the burden of invalidating stereotypes among colleagues and students (Milner & Woolfolk Hoy, 2003).

In a qualitative study, Puchner and Taylor (2006) observed the relation of collaboration, student achievement and teacher efficacy. Two groups of four elementary teachers in a Pre K through eighth grade school implemented a new initiative to improve teaching that required collaboration among the teachers. The staff development approach consisted of using lesson study that required different patterns of collaboration among the teachers. Using observations and teacher interviews to observe the use of lesson study, the researchers found that teacher

collaboration resulting in increased student achievement was a source of teacher efficacy (Puchner & Taylor, 2006).

Bruce and Ross (2008) conducted a qualitative study to examine staff development and sources of teacher efficacy. Participants were four pairs of third grade teachers and two pairs of sixth grade teachers. Data sources were teacher observations, including peer observations, interviews, field notes and teacher self-assessment. One of the findings of the study was that the staff development program had positive effects on teachers' beliefs about their capacity to teach mathematics. Teachers' judgments about their capabilities to influence student learning were affected by the sources of efficacy information. Teachers reported increases in efficacy due to: recognizing that existing practices were similar to those used by the presenter (vicarious experience); by receiving positive feedback from their peers (social and verbal persuasion); and by successfully applying new instructional strategies (mastery experience).

Tschannen-Moran and McMaster (2009) studied the effect that four professional development formats had on the source of self-efficacy beliefs of elementary teachers. This was a quasi-experimental design using 93 primary teachers from nine schools from different public school systems as the sample. Four different treatment groups were formed and different treatments were assigned: treatment one provided information only; treatment two provided information and modeling; treatment three provided information, modeling, and practice; treatment four provided information, modeling, practice, and coaching. Data were collected using a teacher efficacy scale, a measure for implementation of a new reading strategy, and a scale to measure sense of efficacy for literacy instruction. Using descriptive statistics and analysis of variance the researchers found that teacher efficacy beliefs for reading instruction and

for implementing a new strategy increased when the staff development that was provided supported mastery experiences as explained by Bandura (1997). Some of the teachers had efficacy levels that dropped when the staff development did not include coaching (Tschannen-Moran & McMaster, 2009).

Fry (2009) conducted a qualitative study to identify what made four novice elementary teachers feel successful and want to remain in the teaching profession. Fry (2009) examined teacher personal characteristics and professional experiences to see how they contributed to increased self-efficacy. Fry (2009) found that the two teachers that remained in teaching were resilient and were able to overcome obstacles they faced early in their teaching. These teachers also had a high sense of efficacy for instructional strategies. Effective preparation programs combined with meaningful staff development early in the teachers' careers solidified their commitment to teaching.

Theoretical Framework for Teacher Efficacy and the Development and Measurement of the Teacher Efficacy Construct

The research on teacher efficacy has been based on two theoretical bases (Tschannen-Moran et al., 1998). Rotter's social learning theory provided the basis for one strand of teacher efficacy research and measurement, and Bandura's social cognitive theory provided the basis for a different strand of research and measurement of teacher efficacy (Tschannen-Moran et al., 1998). Tschannen-Moran et al. (1998) developed a model for teacher efficacy that considered both theoretical bases. The construct of teacher efficacy that was used in this study was based on this integrated model using a scale developed by Tschannen-Moran and Woolfolk Hoy (2001). The next sections will describe each theory, the development of teacher efficacy measurements

based on each theory, and the Tschannen-Moran et al. (1998) integrated model for teacher efficacy.

Social Learning Theory Framework for Teacher Efficacy

Rotter's social learning theory provided the theoretical base for one strand of teacher efficacy research (Tschannen-Moran et al., 1998). Rotter (1982) grounded social learning theory on the measurement and prediction of three variables used to predict the potential of behaviors occurring in different situations. These variables were behavior potential, expectancy, and reinforcement value. Rotter (1982) defined behavior potential as the potential of any behavior occurring in any situation or situations in relation to any single reinforcement or set of reinforcements. Expectancy is the probability of a reinforcement occurring as a result of a specific behavior (Rotter, 1982). Reinforcement value is the preference for a particular reinforcement over any other alternative reinforcement (Rotter, 1982). A reinforcement or reward strengthens the expectation that a certain behavior will be followed by an expected reinforcement (Rotter, 1982).

Rotter (1960) wrote that a relationship between a preferred goal or a reinforcement value and a behavior could only be made by introducing the concept of expectancy and the individual's history with that experience. The expectancy that the behavior will lead to a positive outcome rather than a failure or negative reinforcement also had bearing on the behavior (Rotter, 1960). Rotter (1966) defined the concept of internal versus external control of reinforcement. The role of reinforcement, reward or gratification was recognized by students of human nature as crucial in the acquisition and performance of skills and knowledge. Reinforcements and rewards were viewed or reacted to differently by people (Rotter, 1966). What determined how an individual

viewed reinforcement, depended on whether the individual perceived the reward to be contingent on his behavior, or if he perceived it was out of his control and independent of his actions (Rotter, 1966).

Rotter (1966) wrote that in our culture when reinforcement was perceived to be out of the control of a person it was usually viewed as luck or fate. Rotter (1966) labeled events perceived this way as a belief in external control. An individual's belief that events were contingent on his own behavior or his own characteristics was labeled as a belief in internal control. The variable of external versus internal control of reinforcement has been widely studied in relation to human behavior (Rotter, 1966). Rotter (1966) wrote that this variable was significant in understanding the nature of learning processes in different situations. Even in the same situations there were differences among individuals in the degree to which they attributed personal control to reward.

According to Rotter (1966) individuals with strong beliefs that they could control their own destiny were more open to the environment. And, the environment provided useful information for future behavior. Individuals with a belief in their own destiny took steps to improve environmental conditions (Rotter, 1966). These individuals placed great value in skill or achievement, and were more concerned with ability and failure (Rotter, 1966).

Development and Measurement of One Strand of the Teacher Efficacy Construct Based on Social Learning Theory

Rotter's social learning theory (1982) provided the theoretical base for researchers to develop a construct of teacher efficacy (Tschannen-Moran et al., 1998). Rotter's internal versus external locus of control was used by the RAND Corporation for two studies that showed that teacher efficacy had a positive influence on the success of new reading programs and on the

implementation and continuation of the new reading programs in schools. The studies were U. S. Department of Education several year, two phase studies of federally funded programs designed to introduce innovative teaching practices in public schools (Armor et al., 1976; Berman et al., 1977). The first phase of the study was to identify strategies and conditions to promote change in schools (Armor et al., 1976). The second phase of the study was on the form that implementation of strategies took at schools and what factors promoted or deterred sustainment of the strategies (Berman et al., 1977).

In these studies, RAND included two statements in the research survey on the success of several reading programs and interventions. The first statement was: “*When it comes right down to it, a teacher really can’t do much because most of a student’s motivation and performance depends on his or her home environment.*” (Armor, et al., 1976, p. 23). The second statement in the survey that teachers responded to was: “*If I really try hard, I can get through to even the most difficult or unmotivated students*” (Armor, et al., 1976, p. 23). Teachers were asked to indicate the level that they agreed with the two statements (Tschannen-Moran et al., 1998). “The sum of the scores on the two items was called *teacher efficacy* (TE), a construct that purported to reveal the extent to which a teacher believed that the consequences of teaching-student motivation and learning-were in the hands of the teacher, that is, internally controlled” (Tschannen-Moran et al., 1998 p. 205).

The Berman et al., (1977) study showed that characteristics of teachers had major effects on the continuation of a project, “Above all, teachers’ sense of efficacy emerged as a powerful explanatory variable; it had major positive effects on the percentage of the project goals achieved, improved student performance, teacher change, and continuation of project methods

and materials” (Berman et al., 1977, p.73). Berman et al. (1977) described teacher sense of efficacy as a belief that the teacher can help even the most difficult to teach, and unmotivated students. Teachers’ attitudes about their professional competence showed to have major implications for project effectiveness (Berman et al., 1977). This study increased interest in the construct of teacher efficacy, but researchers were concerned about the reliability of the two-item scale used in the RAND studies, and as a result, other measures were developed that were more comprehensive yet still based on Rotter’s internal versus external locus of control (Tschannen-Moran & Woolfolk Hoy, 2001).

One of these measures was the Teacher Locus of Control Scale (Rose & Medway, 1981) which was designed to measure elementary school teachers’ generalized expectancies for internal-external control over student success and failure in the classroom. The scale consisted of 28 forced choice items that required teachers to endorse an option as either indicating internal or external control of classroom events (Rose & Medway, 1981). Fourteen of the items described positive or success situations and fourteen described negative or failure situations in classrooms. Separate scores for beliefs in internal responsibility for successes (I+) and for internal responsibility for failures (I-) were provided. Different versions of the scale were used in separate studies including two validity studies. In each study items were kept if they clustered together on their specific subscale, and if they produced significant biserial correlations, and removed if they did not (Rose & Medway, 1981). Rose and Medway (1981) found that the Teacher Locus of Control Scale was a viable method for measuring teachers’ perceptions of control within the classroom. The researchers also found that the two Teacher Locus of Control

subscales were only moderately correlated to each other ($r = +.33$; $P < .04$) (Rose & Medway, 1981).

Guskey (1981) developed a measure for teacher efficacy based on Rotter's conception of internal versus external locus of control. The Responsibility for Student Achievement (RSA) scale measured teacher beliefs in internal versus external responsibility for academic successes and failures of students. The scale was composed of 30 alternative-weighting items describing either a positive or negative student achievement experience that happens in classroom life. Each stem was followed by an alternative item stating that the event was caused by the teacher and another alternative item that the event occurred because of factors outside of the teacher's control (Guskey, 1981). Teachers were asked to distribute 100 points between the two alternatives. Scores for responsibility for student success (R+) were obtained by averaging across all positive items, and scores for responsibility for student failure (R-) were obtained by averaging across all negative items. In reliability tests the consistency of teachers' RSA responses over time were found to be moderately high. Teachers were given the questionnaire a second time, after a four month interval. Test-retest correlations were .739 for total R scores, .718 for R+ scores, and .784 for R- scores (Guskey, 1981). These correlations were statistically significant at the .01 level (Guskey, 1981). Guskey (1982, 1988) compared scores from the RSA scale for responsibility for student success (R+) and responsibility for student failure (R-) to teacher efficacy as measured with the two RAND items and found high correlations between these measures, correlations ranging from .72 to .80. However, in comparing only the subscale for student success (R+) and the subscale for student failure (R-) Guskey (1982, 1988) found low correlations between the two (.20). Guskey (1987) reported that positive and negative

performance outcomes were independent and separate measures and not a continuum of the same measure. Guskey (1987) found that teachers assumed higher levels of responsibility for positive outcomes than for negative outcomes. Teachers were more confident in their ability to influence positive outcomes than to prevent negative ones (Guskey, 1987).

Social Cognitive Theory Framework for Teacher Efficacy

Bandura's social cognitive theory provided the theoretical base for a different strand of teacher efficacy research (Tschannen-Moran et al., 1998). In *Self Efficacy: Toward a Unifying Theory of Behavioral Change*, Bandura (1977) explained how perceived self-efficacy could influence individuals' choice of behavior, and expectations of success could help individuals increase coping efforts once new behaviors were initiated. "Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts" (Bandura, 1977, p. 194).

Bandura's social cognitive theory was based on the assumption that psychological procedures could create and strengthen "expectations of personal efficacy" (1977, p. 193). This theory included two different types of expectations; outcome expectancy and efficacy expectation. Outcome expectancy was a person's estimate that a given behavior would lead to a certain outcome, and efficacy expectancy was the conviction that one could successfully execute the behavior that would result in the outcome (Bandura 1977).

An individual's expectations of personal efficacy are based on four sources of information (Bandura, 1997). These sources of information formed the basis for an individual's judgment of self-efficacy: enactive mastery experiences, vicarious experiences, verbal

persuasion, and physiological and affective states (Bandura, 1997). Bandura's construct of self-efficacy was based on these four sources of information for behavioral change.

Enactive mastery experiences provided the most influential information because they provided the best evidence of success (Bandura, 1997). Performance successes raised the expectation of increased future successes. Repeated successes increased self-efficacy and repeated failures lowered self-efficacy (Bandura, 1997). When strong efficacy expectations were built by repeated successes, occasional failure further increased self-efficacy because individuals gained confidence that they could overcome failure by persisting in the new behavior (Bandura, 1997). According to Bandura (1997) performance successes did not necessarily raise efficacy beliefs, nor did performance failures necessarily lower efficacy beliefs. Changes in efficacy beliefs resulted from the cognitive processing of the information. The same level of performance success could raise, lower, or not affect self-efficacy, depending on how the individual interpreted the success (Bandura, 1997).

Vicarious experience or seeing others perform activities without adverse consequences increased an individual's belief that they too could accomplish the behavior without adverse consequences (Bandura, 1977). Modeled behavior with clear outcomes provided more efficacy information than if the modeled activity was ambiguous (Bandura, 1977). Observing competent models could teach effective strategies to deal with challenging and threatening environmental conditions (Bandura, 1982). Observing activities that have successful outcomes provided more behavioral improvement than observing activities without evident consequences (Bandura, 1977).

Verbal persuasion was another means of strengthening peoples' beliefs that they had the capabilities to accomplish what they sought (Bandura, 1997). Verbal persuasion was used to get people to believe that they had the capabilities to achieve what they needed to achieve (Bandura, 1982). People who were told that they had the capabilities to master certain tasks were more likely to expend greater effort and sustain it longer than if they had self-doubt and dwelt on deficiencies when difficult tasks were presented (Bandura, 1997). Persuasive information was usually given in the form of feedback for a performance.

Physiological and affective states were the fourth source of efficacy information. According to Bandura (1993) people's beliefs in their capabilities determined how much stress and depression they experienced in difficult situations. People who believed they had control over threats did not have disturbing thought patterns (Bandura, 1993). People who believed that they could not manage threats viewed their environment as being dangerous, and magnified problems and worried about events that rarely happened (Bandura, 1993). People noticed physical activation during stressful situations and attributed it to physical dysfunction (Bandura, 1993). People viewed their physiological activation in stressful situations as being vulnerable to dysfunction. Since high arousal could hinder performance, people expected that they would be successful when they were not experiencing physiological activation (Bandura, 1993).

Goddard, Hoy, & Woolfolk Hoy (2004) used Bandura's sources of efficacy information to explain teacher efficacy. The perception that a performance had been successful raised efficacy beliefs and increased the expectation that future teaching performance would be proficient (Goddard et al., 2004). When a skill was modeled well by someone the teacher

identified with, the teacher's self-efficacy increased (Goddard, et al., 2004). If the modeled behavior did not go well, the teacher's self-efficacy decreased (Goddard et al., 2004). Social persuasion included encouragement and feedback from supervisors, or colleagues (Goddard et al., 2004). Affective states such as arousal, excitement or anxiety affected an individual's perceptions of their capabilities (Goddard et al., 2004).

Development and Measurement of a Different Strand of the Teacher Efficacy Construct Based on Social Cognitive Theory

Bandura's social cognitive theory provided the theoretical base for researchers to develop a different construct of teacher efficacy (Tschannen-Moran et al., 1998). This section will describe the development of a teacher efficacy construct based on Bandura's theory of self-efficacy.

Gibson and Dembo (1984) developed an instrument to measure teacher efficacy based on Bandura's self-efficacy theory. Factor analysis of responses using a thirty item instrument yielded two factor structures that corresponded to the two types of efficacy beliefs that Bandura (1977) described as outcome expectancy and efficacy expectancy. Gibson and Dembo (1984) labeled one factor personal teaching efficacy and associated it with Bandura's efficacy expectancy where teachers believed their abilities could result in positive student learning. They associated the second structure with outcomes expectancy in which teachers believed they had no influence over the environment. Gibson and Dembo (1984) labeled this belief general teaching efficacy.

According to Bandura (1997) the construct of teacher efficacy as used in the RAND studies was too "globally conceptualized" and an assessment of the measure should be

“broadened to gauge its multifaceted nature” (p. 243). In the RAND studies teachers’ sense of personal efficacy was conceptualized by one question involving teacher efficacy in educating difficult and unmotivated students. General teaching efficacy was conceptualized by a second item on overcoming the negative impacts of an adverse home environment on students’ motivation to learn (Bandura, 1997).

Bandura (1997) wrote that although Gibson and Dembo (1984) improved the instrument by including multiple items which improved the reliability of the measure, teachers’ efforts were governed more about what they believed they could accomplish than by their view of the abilities of other teachers to overcome environmental factors. Teachers’ sense of efficacy was not uniform across subjects; therefore teacher efficacy scales should be linked to different domains of teaching (Bandura, 1997). Teachers who consider themselves to be highly efficacious in mathematics instruction may not feel the same way about teaching science, therefore teacher efficacy scales should be linked to different knowledge domains (Bandura, 1997). “Their effectiveness is also partly determined by their efficacy in maintaining an orderly classroom conducive to learning, enlisting resources and parental involvement in children’s academic activities, and counteracting social influences that subvert students’ commitments to academic pursuits” (Bandura, 1997, p. 243).

Bandura developed an instrument to measure teacher efficacy that accounted for the broader range of teachers’ work. Bandura’s Teacher Self-Efficacy Scale is a 30 item instrument that has seven subscales: efficacy to influence decision making, efficacy to influence school resources, instructional efficacy, disciplinary efficacy, efficacy to enlist parental involvement, efficacy to enlist community involvements, and efficacy to create a positive school climate.

Guskey and Passaro (1994) studied the two dimensions of teacher efficacy, personal teaching efficacy and general teaching efficacy to bring clarity to the two measures. Guskey and Passaro (1994) found that teaching efficacy was in fact two dimensional. The finding that general teaching efficacy and personal teaching efficacy were independent of each other was consistent with the work of Ashton and Webb (1986), Gibson and Dembo (1984), and Woolfolk and Hoy (1990). According to Guskey and Passaro (1994) teachers made no distinction between their personal ability to influence student learning and the ability of teachers in general to influence student learning, but they did draw distinctions about the influence that they and all teachers had on student learning.

An Integrated Model to Measure Teacher Efficacy

Using these two theoretical bases for teacher efficacy, Tschannen-Moran et al. (1998) developed an integrated model for teacher efficacy. According to Tschannen-Moran et al. (1998) teaching was content specific because teachers could feel efficacious in some teaching situations, and not in others. Therefore, teacher efficacy included not only a teachers' perception of their competence, but also an analysis of the teaching task (Tschannen-Moran et al., 1998). The model was based on Bandura's four sources of efficacy information to assess personal competence, and Rotter's internal versus external locus of control in analyzing the teaching task. Tschannen-Moran et al. (1998) wrote that in making judgments about their efficacy teachers had to assess what would be required of them in specific teaching situations, which they called analysis of the teaching task. Tschannen-Moran et al. (1998) noted a similarity in general teaching efficacy and analysis of the teaching task. General teaching efficacy was a measure of teachers' beliefs about their ability to overcome external environmental factors such as home and

family influences that could hinder teaching (Tschannen-Moran et al., 1998). In analyzing the teaching task, general teaching efficacy reflected external constraints to teaching.

Using the Tschannen-Moran et al. (1998) model of teacher efficacy and the suggestion that a measurement of teacher efficacy should include perceptions of personal competence and an analysis of the teaching task, Tschannen-Morann and Woolfolk Hoy (2001) developed a new measure of teacher efficacy. The Teacher's Sense of Efficacy Scale measured teacher efficacy using three subscales; efficacy for student engagement; efficacy for instructional strategies; and efficacy for classroom management. Tschannen-Moran and Woolfolk Hoy (2001) examined the construct validity of the instrument by correlating it to other measures of teacher efficacy. Scores on the Teachers' Sense of Efficacy Scale were positively related to both of the RAND items, and to the personal teaching efficacy and general teaching efficacy factors of the Gibson and Dembo (1984) instrument.

Labone (2002) recognized the Tschannen-Moran et al. (1998) model of teacher efficacy as a key factor in maturing the construct. According to Labone (2002) the model clarified the confused theoretical bases for teacher efficacy by considering both social cognitive theory and social learning theory. The Tschannen-Moran et al. (1998) model used the sources of efficacy information from social cognitive theory and locus of control from social learning theory in analyzing the teaching task and the context of the task. "By considering both conceptual strands the model provides a new platform for research" (Labone, 2002, p. 342). It allowed for the concept of teacher efficacy to be explored using more intensive methodologies, and for the extension of the concept to contexts outside the classroom (Labone, 2002).

Organizational Climate and Health of Schools

This section will present a historical perspective of schools as organizations, and explain the concepts of organizational climate and organizational health. Studies that examine school climate and health will be reviewed.

Historical Perspective of Schools as Social Organizations

An early study on the work of teachers within school organizational structures was conducted by Bidwell (1965). In *The School as a Formal Organization*, Bidwell (1965) wrote, "...teaching demands affective bonds between teacher and student which are foreign to the enactment of a bureaucratic office" (p. 979). Bidwell described how the bureaucratic organization of schools formed barriers for teachers who were expected to deal with the variability of student abilities. Bidwell (1965) wrote that teachers were expected to manage day to day fluctuations in response to instruction, and at the same time adhere to administrative control in decision making.

Another early study on the organization of schools was conducted by Rutter, Maughan, Mortimore, Ouston, and Smith (1979). In *Fifteen Thousand Hours*, Rutter et al., (1979) wrote that teaching performance was a function of the school environment as well as personal qualities of teachers, "Our observations suggested that it was very much easier to be a good teacher in some schools than in others. The overall ethos of the school seemed to provide support and a context which facilitated good teaching" (p. 139). The researchers noted that the results of their study provided strong indications of particular features of school organization and functioning that made for success (Rutter et al. 1979). In successful schools teachers said that their views were represented in decision making. Teachers in these schools also said that senior colleagues

knew what they were doing because of group planning. Through group planning supervisors provided support. Rutter et al., (1979) noted that the more successful schools were not overly regimented, “Rather, good morale and the routine of people working harmoniously together as part of an efficient system meant that both supervision and support were available to teachers in a way which was absent in less successful schools” (Rutter, et al., 1979, p. 137). In less successful schools teachers were isolated, teaching their own syllabus, and there was little interest in what or how they were doing (Rutter, et al., 1979).

Organizational Climate

The concept of organizational climate originated in the 1950s as social scientists studied differences in work environments (Hoy, Tarter et al., 1991). A definition of school climate based on the work of industrial and social psychologists is, “a general term that refers to teachers’ perceptions of their work environment; it is influenced by formal and informal relationships, personalities of participants, and leadership in the organization” (Hoy, Tarter et al., 1991, p. 9). The organizational health of schools is concerned with the aspects of teacher-teacher, and teacher-principal interactions in schools (Hoy, Tarter et al., 1991).

Organizational climate has been defined and measured as a useful concept to study business organizations and schools (Halpin & Croft 1963). Halpin and Croft (1963) defined organizational climate as the personality of the school and described it on a continuum from open to close. Hoy and Sabo (1998) also described school climate as open or closed. In a school with an open climate, teacher-teacher, and teacher-principal interactions were genuine and supportive of each other (Hoy & Sabo, 1998). Teachers and principals were receptive to

each other's ideas and both were committed to tasks. In a school with a closed climate interactions were guarded, suspicious, and controlling (Hoy & Sabo, 1998).

Organizational Health

Miles (1969) was the first to use a health metaphor to describe organizations that change and grow. According to Miles (1969) a healthy organization was one that not only survived in its environment, but continued to cope adequately over the long haul, and continuously developed and extended its surviving and coping abilities. Short run operations could be effective or ineffective, but continued survival, adequate coping, and growth were taking place (Miles, 1969).

Miles' (1969) described ten dimensions of organizational health. These dimensions were not mutually exclusive and interacted with each other in the organization. The first three dimensions (goal focus, communication adequacy, and optimal power equalization) had to do with tasks within the organization: setting goals, transmitting messages, and how decisions were made (Miles, 1969). Goal focus in a healthy organization was described as having goals that were clear to members of the organization and were accepted by the members (Miles, 1969). Communication adequacy implied that vertical and horizontal communication and communication to and from the surrounding environment were relatively distortion free (Miles, 1969). Optimal power equalization referred to the equitable distribution of influence in an organization. Three dimensions (resource utilization, cohesiveness, and morale) had to do with the internal state of the organization and the maintenance needs of the staff (Miles, 1969). Resource utilization meant that personnel in the organization were used effectively. Cohesiveness was the attraction that members felt to the organization. Morale was defined as

individual sentiments, feelings of well-being, satisfaction and pleasure as opposed to feelings of discomfort and dissatisfaction (Miles, 1969).

Four dimensions of the organization (innovativeness, autonomy, adaptation, and problem solving adequacy) had to do with growth and change (Miles, 1969). Innovativeness defined a system that grew, developed and changed over time instead of remaining routine and standard (Miles, 1969). Autonomy was defined as an organization that did not respond passively to demands from the outside. While it did not respond rebelliously, it did maintain independence from the environment. Miles (1969) defined adaptation as the process an organization experienced when environmental demands did not match the resources of the organization and as a result the organization and the environment restructured and evolved to change. Problem-solving adequacy in an organization was defined as having structures in place for sensing problems and for inventing possible solutions, for making decisions, and for implementing and evaluating them (Miles, 1969).

Hoy and Feldman (1987) described a healthy school as one with positive student, teacher, and administrator relationships. In a healthy school teachers liked their colleagues, their school, their job, and their students (high teacher affiliation); the principal was friendly, open, egalitarian, supportive, and expected the best from teachers (high collegial leadership) (Hoy & Sabo, 1998). Principals in open schools were also influential with their superiors, they went to bat for teachers, and they got teachers the resources they needed (Hoy & Sabo, 1998). A healthy school was protected from community pressures; the board resisted efforts of interest groups to influence policy (high institutional integrity) (Tarter & Hoy, 1988). An unhealthy school was vulnerable to destructive outside forces, such as parental demands (low institutional integrity)

(Hoy & Sabo, 1998). In an unhealthy school the principal provided little direction or structure, exhibited little encouragement for teachers (low collegial leadership), and had low influence with superiors. Teachers did not like their colleagues, or their jobs, and were suspicious, aloof, and defensive (low teacher affiliation) (Hoy & Sabo, 1998). Unhealthy schools had a minimal press for academic life; neither teachers nor students took academic life seriously, and high academically oriented students were ridiculed by other students and were a threat to teachers (Hoy & Sabo, 1998).

Studies on Organizational Climate and Health

Tarter and Hoy (1988) examined two aspects of trust, faculty trust in the principal, and faculty trust in colleagues. The study group was a sample of 75 secondary schools in New Jersey. Using data from the Organizational Health Inventory for secondary schools, correlation coefficients were computed for each aspect of health and each dimension of trust. Multiple regression analysis was used to determine the best predictors for trust in the principal and for trust in colleagues. Correlation results for trust in the principal showed that the following factors were statistically significant: institutional integrity ($r=.36; P < .01$), consideration ($r=.52; P < .01$), initiating structure ($r=.26; P < .01$), and morale ($r=.24; P < .01$). The higher the general health of the school, the higher the faculty trust in the principal ($r=.42; P < .01$) (Tarter & Hoy, 1988). Principal influence, resource support, and academic emphasis were not statistically associated with faculty trust in the principal (Tarter & Hoy, 1988). Factors that predicted trust in the principal were consideration and institutional integrity. These two variables explained 31% of the variance. Factors that were significantly associated with faculty trust in colleagues were: institutional integrity ($r=.25; P < .05$), principal influence ($r=.35; P < .05$), consideration ($r=.29; P$

<.05), morale ($r=.50$; $P <.01$), and academic emphasis ($r=.30$; $P <.05$). Initiating structure and resource support were not related to faculty trust in colleagues. Factors that predicted trust in colleagues were morale and principal influence. These two variables accounted for 30 percent of the variance in faculty trust in colleagues.

Smylie (1992) explored the relationship between teachers' willingness to participate in school decision making and four antecedent variables: the principal-teacher relationship, norms influencing working relationships among teachers, teachers' perceived capacity to contribute to decisions, teachers' sense of responsibility, and accountability in working with students. Findings showed that teachers' willingness to participate in decision making was related primarily to the relationship with the principal (Smylie, 1992). This relationship was the only statistically significant influence on a teachers' willingness to participate in decision making (Smylie, 1992). Teachers appeared to be more willing to participate in decision making if their relationship with the principal was more open, collaborative, facilitative, and supportive. They were less willing to participate if they characterized their relationship with the principal as closed, exclusionary, and controlling (Smylie, 1992). Blasé and Kirby (2009) noted that effective principals worked to enhance teacher's sense of efficacy in working with students of all abilities and cultural backgrounds. Effective principals influenced school climate by setting expectations for teacher behavior (Blasé & Kirby, 2009).

Sweetland and Hoy (2000) studied the relationship between school climate and teacher empowerment and the relationship between teacher empowerment and school effectiveness based on mathematics and reading achievement scores. Four dimensions of school climate were studied: collegial leadership, teacher professionalism, academic press, and environmental press.

The researchers postulated that healthy and open interpersonal relations should facilitate empowerment of teachers. The sample included 86 New Jersey middle schools, which included 2,741 teachers. The sample was not random, but it included urban, suburban, and rural schools from diverse regions and all socioeconomic levels of the state. Scales for organizational health, teacher empowerment and teacher effectiveness were used. Results showed that teacher empowerment was related to collegial relationships ($r=.55$, $P < .01$). Principal leadership that was supportive, egalitarian, and neither directive nor restrictive was conducive to the empowerment of teachers. Teacher commitment to students, respect for the competence of colleagues, friendship, and engagement in teaching were significantly correlated with teacher empowerment ($r=.49$; $P < .01$). Academic press was also statistically correlated to teacher empowerment ($r= .58$; $P < .01$). Schools where teachers set high attainable goals and in which the principal obtained resources and used influence to support teacher activities had teachers who were empowered in teaching and learning decisions. Environmental press was not significantly related to teacher empowerment ($r=.06$, *ns*). The hypothesis that climate variables would combine to predict teacher empowerment was tested. The multiple R was .67, 43% of the empowerment variance was explained.

Hoy, Smith and Sweetland (2002) conducted a study to determine what aspects of school climate would predict faculty trust. Faculty trust is a key element in maintaining organizational effectiveness, and it is a salient ingredient of a healthy and open school climate (Hoy et al., 2002). The researchers used an organizational climate questionnaire to measure four aspects of school climate: the relationship between the school and the community (institutional vulnerability); the relationship between principal and teachers (collegial leadership); the

relationship among teachers (professional teacher behavior); and the relationship between parental and principal press for achievement (achievement press). The sample for the study was 97 high schools, including urban, suburban, and rural schools that comprised the entire range of socio-economic levels. The results showed that the collegial leadership of the principal was positively associated with the professional behavior of teachers, and achievement press was positively related to collegial leadership. Faculty trust was positively associated with all aspects of school climate, but professional teacher behavior had the highest correlation.

Bevans, Bradshaw, Miech, and Leaf (2007) used hierarchical linear modeling to examine the relation between school and staff level characteristics on the perception of organizational health in 37 elementary schools. Staff level factors: gender, race/ethnicity, age, occupational role in the school, and school level factors: student enrollment, faculty turnover, student mobility rate, and free/reduced meals rate were used to predict the five dimensions of organizational health. The dimensions assessed were institutional integrity, collegial leadership, resource influence, staff affiliation, and academic emphasis. Student performance indicators were: attendance and suspension rates, reading achievement, and math achievement. In collegial leadership, administrators perceived themselves to be better leaders than their staff did even after controlling for school characteristics (Bevans et al., 2007). The cross level interaction between occupational role and staff turnover predicted collegial leadership. Non-administrative staff may perceive high turnover to be a result of administrator removal, or staff request to transfer to another school, thus the perception that high turnover is due to poor administrative leadership (Bevans et al., 2007). Administrators may perceive high turnover to be a result of replacing unsatisfactory performing staff with more qualified staff and thus an indication of positive

leadership (Bevans et al., 2007). Faculty turnover and student mobility predicted academic emphasis (Bevans et al., 2007).

Theoretical Framework for Organizational Health of Schools and the Development and Measurement of the Organizational Health of Schools Construct

This section will explain the theoretical framework that supports organizational health of schools and the development of instruments to measure organizational health of schools.

The Parsonian Theory of Organizational Health

The conceptual framework for organizational climate was based on Parsonian social systems theory (Parsons, Bales, & Shils, 1953). Parsons (1951) defined social systems, "...a social system consists in a plurality of individual actors interacting with each other in a situation which has at least a physical or environmental aspect, actors who are motivated in terms of a tendency to the 'optimization of gratification' and whose relation to their situations, including each other, is defined and mediated in terms of a system of culturally structured and shared symbols" (p. 6). Parsons et al. (1953) explained four types of needs that an organization has to meet as it relates to different situations and survives in its environment. The needs are adaptation, goal gratification, integration, and latency (Parsons et al., 1953). These needs are defined as acquiring sufficient resources and accommodating to their environments, setting and implementing goals, maintaining solidarity within the system, and creating and preserving the unique values of the system (Parson et la., 1953).

Parsons (1967) also described three levels of control over these needs. These three levels of control within the hierarchical structure of organizations are the technical system, the managerial system, and the institutional system. In educational organizations the technical

system is the teaching and learning process, the managerial system is the internal administrative function which is the principal as administrator and his/her ability to develop trust, commitment and motivation. The institutional system is the connection between the school and its environment. The managerial system has two main functions: to mediate between the technical organization and those who use its product; and to procure resources necessary to carry out the technical function of the organization (Parsons, 1967). As the technical organization is controlled by the managerial organization, the managerial organization is controlled by the institutional structures and agencies of the community (Parsons, 1967).

Development and Measurement of the Organizational Health of Schools Construct

Halpin and Croft (1963) pioneered the measurement of organizational health in a study to identify the critical aspects of teacher and teacher interactions, and teacher and principal interactions. They developed the Organizational Climate Descriptive Questionnaire (OCDQ) that measured the organizational climate of an elementary school. The instrument contained 64 Likert type items that described the interactions between teachers and principals in schools. The instrument measured behavior on eight dimensions, four for group interaction and four for the behavior of the leader. Group dimensions were disengagement, hindrance, esprit, and intimacy. Leader behaviors were aloofness, production emphasis, thrust, and consideration. Using data obtained from these eight dimensions, Halpin and Croft (1963) developed school profiles that described the climate of the school on a continuum from open, autonomous, controlled, familiar, paternal, to closed.

The terminology for health was used as a description of climate in measuring the climate of secondary schools (Hoy & Feldman, 1987). Hoy, Tarter et al. (1991) described the process

used to develop an instrument to measure the climate of schools using Miles' (1969) ten dimensions of healthy organizations which focus on task, maintenance, and growth needs. An instrument with 113 items to measure the ten dimensions was initially developed by an advanced doctoral seminar in organizational theory and research, and then refined by a panel of two professors and two doctoral students. The instrument was tested using a sample of 153 secondary school teachers from a diverse set of secondary schools in New Jersey (Hoy, Tarter et al., 1991). A factor analysis with varimax rotation yielded only six factors. Morale which represented six items was the factor with the highest items. Only twenty nine of the 113 items loaded on to six of the ten factors. These factors were morale, cohesiveness, resource utilization, optimal power equalization, academic emphasis, and institutional integrity. The unsuccessful attempt to develop an instrument using Miles' (1969) theory led to the use of Parsons' et al. (1953) and Parsons' (1967) theoretical analysis of organizations as the basis for the measurement of school health. Parsons (1967) three levels of control: technical, managerial, and institutional were used by Hoy and Feldman (1987) to develop the Organizational Health Inventory for Secondary Schools. Hoy and Feldman (1987) described a healthy school as one in which the technical, managerial, and institutional levels were in harmony. Items in the health inventory that supported the technical level were related to morale, cohesiveness, trust, order, and achievement. Items that supported the managerial level focused on principal behaviors such as task and achievement, collegial behavior, supportive behavior, the ability to influence supervisors, and the ability to provide resources for teachers. Items that supported the institutional level were community and parent influences. Organizational Health Inventories used

to measure the organizational health of elementary schools (Hoy, Tarter et al., 1991; Hoy & Tarter, 1997) and middle schools (Hoy & Sabo, 1998) were also developed.

Relation of Teacher Efficacy and Organizational Health of Schools

The two constructs that were examined in this study were teacher efficacy and school organizational health. This section will review studies on the relation of teacher efficacy and school organizational health.

Few studies have explored the relationship between school organizational health and teacher efficacy (Hoy and Woolfolk, 1993). Studies that have linked teacher sense of efficacy to school organizational health have analyzed teacher efficacy as the independent variable. Two studies that examined the relation between teacher efficacy and school organization with teacher efficacy as the dependent variable are Ashton et al. (1983) and Newmann et al. (1989).

Ashton et al. (1983) studied the relation of teacher efficacy and school structure in two differently organized middle schools. One school was organized using the middle school structure with a team teaching approach. The other school used the junior high approach with each of four content area teachers teaching in isolation of each other. The purposes of the study were to develop a conceptual framework for future research on the relationship between teacher sense of efficacy and student behavior and achievement, to study factors that develop or inhibit teacher sense of efficacy, to study teacher behaviors that indicate teacher sense of efficacy, and to identify methods to influence the development of teacher sense of efficacy (Ashton et al., 1983).

This study did not find a significant relationship between school organization structures and teachers' sense of efficacy. There was a trend approaching significance, indicating that

middle school teachers had a higher sense of efficacy than junior high teachers, as measured by their total score on the RAND efficacy items ($F(1, 46) = 2.32; P < .10$) suggesting the need for further investigation of the relationship between school organization and teachers' sense of efficacy.

Newmann et al. (1989) conducted a study of high school teachers in 353 schools to explore the influence of ten organizational features on teacher efficacy, community, and expectations. The survey included 150 questions on a variety of teacher attitudes, perceptions and behaviors. To develop the dependent variables the researchers selected questions that contained appropriate content to create dependent variables for efficacy, community, and expectations (Newmann et al., 1989). An exploratory factor analysis confirmed that the items chosen for each variable clustered on the measure intended (Newmann et al., 1989). Alpha reliability scores for the efficacy, community, and expectation constructs were .65, .74, and .51 respectively. Results of regression analysis showed that organizational features of schools such as student orderly behavior, encouragement for innovation, and administrator responsiveness were more powerfully related to efficacy than background factors of schools such as size, student demographics, and context (urban, suburban). Student orderly behavior was the most influential factor in teachers' believing that they could teach with confidence.

Pas et al. (2012) examined the influence of teacher and school factors on the development of teacher efficacy and burnout. Four groups of factors that the researchers hypothesized to be related to teacher efficacy and burnout were considered. These factors were: teacher demographic characteristics; teacher experience; teacher perceptions of the school environment such as principal leadership, teacher affiliation, academic emphasis, and student and parent

involvement; and school-level contextual factors such as organizational health, indicators of disorder, and principal turnover. The sample consisted of 600 teachers in 31 Maryland public elementary schools. The demographic characteristics of the teachers were 85.2 % white, and 8.41 years of experience. The student population was 18.28% free and reduced meals. Subscales of the Organizational Health Inventory (Hoy & Feldman, 1987) were used to measure school context. Teacher efficacy was measured using a subscale of the Teacher Efficacy Scale (Hoy & Woolfolk, 1993), and other measures for burnout, parent and student involvement, and teacher preparedness were used. Data were collected at three different points in time during two school years to observe changes in teacher efficacy and burnout. Correlation analysis was conducted between all teacher variables and school variables. Results showed that the three teacher perceptions of the school (collegial leadership, teacher affiliation, and academic emphasis) were significantly related to teacher efficacy. Higher ratings of collegial leadership during the first point were significantly associated with the intercept of teacher efficacy. Ratings that reflected better leadership were associated with high ratings for initial efficacy. However, collegial leadership was not significantly associated with growth in efficacy. Teacher affiliation was not significantly related to the intercept or growth of teacher efficacy. Higher ratings on the academic emphasis scale were related to the intercept of teacher efficacy. Teachers who reported that students emphasized academic achievement also reported higher levels of teacher efficacy. Academic emphasis was not significantly related to the growth of teacher efficacy.

Lee, Dedrick, and Smith (1991) studied the relation between school organization, self-efficacy, and job satisfaction of secondary teachers. The sample for the study included 8,488 teachers from 47 Catholic schools and 307 public schools. Two separate dependent variables for

teacher efficacy and teacher satisfaction were constructed. A strong relationship was found between efficacy and the amount of control teachers had in the classroom. Amount of control in the classroom was constructed from data on influence on selection of textbooks and instructional materials, instructional content, teaching techniques, disciplining of students, and the assignment of homework. Principal leadership and staff influence in decision making were found to be strongly correlated. Principal leadership was also strongly related to staff influence, encouragement of innovation, and administrative responsiveness. Partition of the total variance in teacher efficacy into within and between school components was as follows, the within school variance pooled across schools was .5529 and the between school variance was .0712. The proportion of total variance accounted for between schools was .114. Measures of school organization that were strongly related to mean efficacy were average teacher control, principal leadership, and student disorder ($P \leq .001$). Schools with less orderly environments are less likely to have efficacious teachers ($P \leq .01$). School demographic factors of social economic status and size were positively related to efficacy ($P \leq .01$).

Hoy and Woolfolk (1993) analyzed the relationships between the two dimensions of teaching efficacy (general teaching efficacy and personal teaching efficacy) and school climate, with teacher efficacy as the dependent variable. The study sample was 179 elementary teachers randomly selected from 37 elementary schools in New Jersey. Of the 37 schools, 27 were from above average wealth as determined by the state of New Jersey; the sample was skewed toward more advantageous districts. Five teachers were selected from each school. The teachers had a mean average of 14.43 years of experience, and the average age was 42 years and eighty-three percent were women. The average class size was 21 students. General teaching efficacy and

personal teaching efficacy were measured using a version of the Gibson and Dembo (1984) Teacher Efficacy Scale adapted by Woolfolk and Hoy (1990). A short version of the Woolfolk and Hoy Teacher Efficacy Scale was used for this study which consisted of five items for general teaching efficacy and five items for personal teaching efficacy. The alpha coefficients of reliability were .77 for personal teaching efficacy and .72 for general teaching efficacy for this sample. School organization health was measured using the Organizational Health Inventory for elementary schools (Hoy, Tarter et al., 1991; Hoy & Tarter, 1997) which measured the dimensions of institutional integrity, principal influence, consideration, resource support, morale, and academic emphasis. Alpha coefficients for each of the factors in the sample were: institutional integrity (.86), principal influence (.83), consideration (.91), resource support (.87), morale (.89), and academic emphasis (.72). Correlational analysis showed that academic emphasis, experience, and educational level were significantly related to personal teaching efficacy. Institutional integrity, academic emphasis, and experience predicted general teaching efficacy. The relationship between personal and general teaching efficacy was weak, but statistically significant ($r = .15$; $P < .05$). The two variables shared less than 3% of the common variance; this was similar to other studies that showed the two variables were independent of each other. Multiple regression analysis was performed to study the independent effect of the organizational health variables on personal and general teaching efficacy. Principal influence, academic emphasis, and educational level predicted personal teaching efficacy. Teachers who perceived that their principal exerted influence on their behalf, perceived an academically oriented environment, and had taken graduate work had stronger beliefs that they could motivate and reach students. Institutional integrity and morale had significant independent effects on

sense of general teaching efficacy. Hoy and Woolfolk (1993) theorized that teachers' sense of efficacy would be most directly related to other personal attributes, then to relationships with other teachers, then to principal characteristics, and finally to institutional factors. A hierarchical multiple regression analysis showed that personal variables contributed significantly to personal teaching efficacy. Group factors of academic emphasis and morale also accounted for a significant increase in the variance, although academic emphasis accounted for most of the increase. Of the two leadership variables, principal influence and consideration, principal influence accounted for more of the variance. Institutional integrity did not explain any of the variance in personal teaching efficacy. Only institutional integrity and morale showed a significant relationship with general teaching efficacy.

Tobin, Muller, and Turner (2006) analyzed the influence of individual predictor variables such as participation in organizational learning, organizational learning, and organizational climate on personal self-efficacy and teaching efficacy. In this study teaching efficacy was defined as the belief that the role of teaching plays an important role in motivating and influencing students compared to other variables in the environment (Tobin et al., 2006). Personal self-efficacy was defined as people's beliefs about their capabilities to exercise control over events. The study was conducted in a school district with thirty-five schools (24 elementary, 7 middle, and 4 high schools), with more than 28,000 students. The data in this study did not support that organizational climate played a role in teacher perceptions of efficacy. Results indicated that organizational climate was not a useful predictor of teaching efficacy.

Taylor and Tashakkori (1995) studied the extent that teacher perceptions of decision participation and school climate predicted sense of efficacy and job satisfaction. The researchers

identified five dimensions of school climate and hypothesized that these dimensions would be significant predictors of teachers' sense of efficacy. The five dimensions were principal leadership, student discipline, faculty collegiality, lack of obstacles to teaching, and faculty communications. Using regression analysis the best predictors of teachers' sense of efficacy were faculty communication and lack of obstacles to teaching. A small proportion of the variance in teachers' sense of efficacy was explained by the model ($R^2 = .14$; $P < .001$). The addition of gender and years of teaching increased R^2 to .17 (Taylor & Tashakkori, 1995).

Beginning Teachers

Research supports that efficacious beginning teachers remain in the profession. It is important to understand problems that beginning teachers experience and school structures that are supportive for beginning teachers. This section will review the literature on beginning teachers.

“Novice teachers who exhibit a high sense of efficacy are more likely to persist and stay in the profession” (Knoblock & Whittington, 2002, p. 331). According to Knoblock and Whittington (2002) education, experience and support can help novice teachers feel more efficacious and be more effective teachers. Tschannen-Moran et al. (1998) noted that beginning teachers' efficacy beliefs were related to the level of commitment to teaching, stress levels, and the satisfaction with the support they received in the first year of teaching. Beginning teachers with high efficacy levels reported a higher satisfaction with teaching, a more positive reaction towards teaching, lower levels of stress, and highly rated the support they received; while less efficacious teachers ended their first year with “a shakier sense of their own competence and a less optimistic view of what teachers could accomplish” (Tschannen-Moran, et al., 1998, p. 236).

Personal self-efficacy became more difficult to impact in experienced teachers because it was an internal belief that became solidified with time (Henson, 2002). Long term professional development that required teachers to think critically about their performance resulted in changes in self-efficacy beliefs of experienced teachers (Henson, 2002). After the initial teaching years, efficacy beliefs are more difficult to change. Bandura (1997) cautioned that positive changes in self-efficacy only happen when there is compelling feedback that changes beliefs in capabilities.

Perceived Problems of Beginning Teachers

Veenman (1984) conducted a review of the international literature on studies on the perceived problems experienced by beginning teachers. From each of the studies the most serious problems reported by beginning teachers were identified. Classroom discipline was the most seriously perceived problem of beginning teachers. Motivating students was the second perceived problem. Beginning secondary teachers perceived this to be a bigger problem than elementary teachers. Dealing with individual differences among students was the third largest problem identified. Varying curricular and instructional practices to meet the needs of individual students was a difficult task for beginning teachers. The fourth and fifth largest problems identified were assessing student work and relations with parents. Teachers complained about their inadequate preparation to maintain effective relationships with parents, parent's lack of support for their ideas, and parent's lack of interest for the well-being of their children at school. Teachers also reported that parents had a lack of confidence in the competence of beginning teachers.

According to Good and Brophy (1987) new teachers experienced problems because they had only had general training and were not ready for a specific job in a specific school. There

were some problems that teachers could not prepare for in advance. “First-year teachers are not only becoming teachers and learning to deal with students, parents, and other adults, they are also assuming new responsibilities (making new friends, paying off loans, etc.). Thus, anxiety and role conflict are expected when one becomes a full-time teacher” (Good & Brophy, 1987, p. 562). Beginning teachers also reported that their teaching changed from student-centered to more traditional teaching after the initial teaching experience (Good & Brophy, 1987).

Romano (2008) studied the types of successes and struggles that beginning teachers faced. Romano (2008) found that beginning teachers identified more struggles than successes. The categories for success or struggle identified were: classroom management, content and pedagogy, external policy, personal issues, parents, report card grading, student learning, special needs students, and teacher evaluation (Romano, 2008). The category which caused the most struggles was external policy. Classroom management was the second largest struggle category.

In the review of the literature on beginning teachers and factors that influence their decision to stay or leave the profession, two themes were observed. One was the conceptions that beginning teachers brought to teaching and how these conceptions influenced their experience during the first year. Another theme was the perception of support that beginning teachers received during the first year.

Conceptions of Beginning Teachers

Teaching is unusual because those who enter the profession have had an opportunity to observe members of the occupation at work (Lortie, 1975a). The apprenticeship of observation is a phenomenon of how schooling influences those who end up in the teaching profession (Lortie, 1975a). American students spend as much as 13,000 hours in classrooms observing

teachers (Lortie, 1975a). For students who later become teachers this experience provided a perception of what teaching would be like. According to Lortie (1975a) there were two major restrictions to this phenomenon. Students only saw teachers from one vantage point, on a stage. “Students do not receive invitations to watch the teacher’s performance from the wings; they are not privy to the teachers’ private intentions and personal reflections on classroom events” (Lortie, 1975a, p. 62). Students were not included in events such as goal setting, making preparations, and only assessed teachers’ work on personal and student centered bases. From this perspective what students learned about teaching was intuitive and imitative rather than explicit and analytical (Lortie, 1975a). In the Five Towns research study conducted by Lortie (1975a), a large proportion of respondents provided information about how their work was influenced by the teaching they received. One of the questions asked teachers to describe an outstanding teacher they had; 42% of the respondents connected their own teaching practices with that teacher (Lortie, 1975a).

Lortie (1975b) wrote that the initial teaching period was a severe testing for new teachers. From the beginning of their career teachers are required to take over a class, establish leadership, and maintain it over a period of time (Lortie, 1975b). No matter how well they have prepared some would be teachers are chased out of the profession by rebelling students or they find the beginning teaching experience more draining than rewarding (Lortie, 1975b). Quinn and D’Amato Andrews (2004) also noted that beginning teachers are expected to complete all tasks that are required of veteran teachers from the first day of their career.

The transition from a teacher training program to the first teaching job can be a dramatic transition for beginning teachers (Veenman, 1984). “Reality shock” was a term used to describe

the “collapse of the missionary ideals formed during teacher training by the harsh and rude reality of everyday classroom life” (Veenman, 1984, p. 143). “Reality shock” was not a short event that passed quickly; it was “the assimilation of a complex reality which forces itself incessantly upon the beginning teacher, day in and day out” (Veenman, 1984, p. 144).

Feiman-Nemser and Floden (1986) defined the socialization process of novice teachers as the interaction with experienced teachers that caused them to come to hold the same values and practices shared by the group. Most studies of socialization were conducted on student teachers and first year teachers which was a period most probable for passing on a teaching culture (Feiman-Nemser & Floden, 1986). Novice teachers imitated other teachers and learned the acceptable ways of acting. Experienced teachers were the most influential group for novice teachers. The limited contact, that administrators had with teachers limited their contribution to the socialization process. The egg-crate structure of schools and school schedules encouraged teacher isolation by preventing them to see what others were doing which made it more difficult for teachers to know how well they were doing (Feiman-Nemser & Floden, 1986). The arrangement of schools encouraged privacy; teachers were not supposed to invade other’s classrooms or offer advice on methods or content unless they were instructed to do so (Feiman-Nemser & Floden, 1986). The physical isolation relayed the message that teachers should cope with their problems alone, which reinforced the norm of individualism (Feiman-Nemser & Floden, 1986).

Most school organizations functioned in a way that teachers performed their work in isolation from other teachers. Meyer and Rowen (1978) wrote that the work of education occurred in the isolation of self-contained classrooms which was removed from the coordination

and control of the organization. A majority of principals reported no day-to-day interactions between teachers in the same grade level, and 83 percent reported no interaction between teachers in different grade levels (Meyer & Rowen, 1978).

Perceptions of Support Received in the First Year of Teaching

Yost (2006) identified successful support structures for novice teachers during their first year of teaching. Yost (2006) reported that successful field experiences and student teaching experiences that were connected to course work built teachers' self-confidence and self-efficacy and encouraged a higher level of competence in the first year (Yost, 2006). Critical reflection as a problem-solving tool empowered teachers to cope with the challenges that they encountered in their first few years of teaching (Yost, 2006). The most positive aspect of the induction program was the opportunity to network with other teachers and with a mentor teacher (Yost, 2006). Yost (2006) also found that unsupportive environments may cause highly efficacious teachers to transfer to other schools instead of leaving the profession.

Algozzine, Gretes, Queen, and Cowen-Hathcock (2007) conducted a study to examine beginning teachers' perceptions of their induction programs. The variables studied were induction program activities, assistance received in teaching and nonteaching areas, and support received from mentor, administrators and other colleagues (Algozzine et al., 2007). Activities under each category were rated according to levels of participation and then ranked for effectiveness by the participants. The activity in which the largest number of teachers participated in – formal evaluations or observations by administrators- received the fourth highest effectiveness ranking.

Cherubini (2007) used a qualitative research design to examine the induction experiences of 173 beginning teachers from two school boards. Data collection consisted of learning logs used by participants for ten months of the school year. Cherubini (2007) found that beginning teachers recognized that the induction program was responsive to their needs in and out of the classroom, and that beginning teachers desired to emulate leading educators who furthered their own learning.

Marable and Raimondi (2007) studied two groups of first year teachers. One group received mentoring and one group did not. The purpose of the study was to determine if there was a difference in the teacher perceptions of support received between those who were mentored and those who were not. The survey administered focused on teacher perceptions of support received in the first year of teaching (Marable & Raimondi, 2007). Both groups perceived the most support received was from peers (Marable & Raimondi, 2007). Teachers in the mentor program identified the mentor as the most significant source of support (Marable & Raimondi, 2007). However, even teachers without a mentor identified other professionals as supportive, and administrators were equally identified by both groups as supportive (Marable & Raimondi, 2007). Both groups identified politics in administration and training received as least supportive (Marable & Raimondi, 2007).

D'Amato Andrews and Quinn (2005) analyzed first year teachers' perceived support during their first year. Results showed that there was a significant difference in the amount of perceived support between teachers who had been assigned a mentor by the district, those who had been assigned a mentor by the principal and those who did not have a mentor (D'Amato Andrews & Quinn, 2005). Teachers who did not have a mentor assigned to them showed the

highest perceived support. They indicated that team teaching and supportive staffs at the schools were factors that assisted them greatly (D'Amato Andrews & Quinn, 2005). Teachers who had been assigned a mentor selected at the district level showed low perceived support. Some possible reasons for the low perceived support explained by D'Amato Andrews and Quinn (2005) were mentor mismatch, unsupportive school climates, and mentors teaching a different subject than the mentee in secondary schools. Another group of first year teachers were assigned a mentor by the principal. Teachers in this group also perceived low support. The reasons indicated were mostly particular to the schools such as an interim principal at one school, and a mentor who quit in the middle of the school year in another school (D'Amato Andrews & Quinn, 2005).

Quinn and D'Amato Andrews (2004) conducted a study of 182 first year teachers in one school district to determine levels of support received by beginning teachers. First year teachers who felt that the principal was supportive also felt that other staff members were supportive. The significant correlation between the total support score and the principal support score suggested that principals that are supportive also had staffs that were supportive of new teachers (Quinn & D'Amato Andrews, 2004).

Anhorn (2008) studied first year teacher experiences and found that teachers valued the field experience of their preparation program and the class work and time in university paled in comparison to field experiences. In a study of eighteen new secondary teachers Smethem (2007) found that formal induction had a negative impact on some new teachers' initial expectations of their career. Teachers expressed dissatisfaction, lowered their career aspirations or sought to leave (Smethem, 2007).

Summary

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. Teaching efficacy beliefs of beginning Hispanic teachers in elementary, middle, and high school were studied using three subscales: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. School organizational health was studied using individual teacher perceptions of the health of their school using multiple subscales of school health.

Teacher efficacy was defined as teacher beliefs that they have the capability to influence student learning. Teacher efficacy has been linked to student achievement, classroom management, willingness to implement new teaching strategies, and commitment to teaching and teacher stress and burnout. Organizational health was defined as the personality of the school, and was a result of teacher/teacher and teacher/principal interactions. The literature on beginning teachers described the struggles that beginning teachers faced in the first years of teaching, the conceptions that beginning teachers brought to teaching, and how beginning teachers perceived the support that they received in the early years of teaching.

Based on this review of the literature on teacher efficacy, organizational health of schools, and beginning teachers, research is needed on the efficacy beliefs of beginning teachers with diverse cultural backgrounds. Research on teacher efficacy beliefs of beginning teachers who teach students from diverse cultural backgrounds is also needed. Qualitative and quantitative research studies should be conducted on the work of Hispanic teachers. Qualitative

studies use the collection, analysis and interpretation of comprehensive narrative and visual data to gain insight into a phenomenon (Gay, Mills, & Airasian, 2009). Quantitative analysis can explain, predict, or control phenomenon of interest (Gay, Mills, & Airasian, 2009). Both approaches should be used to further understand sources of efficacy beliefs of beginning Hispanic teachers that teach in schools with student populations that are identified as economic disadvantaged.

CHAPTER III

METHODOLOGY

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. The construct of teaching efficacy was measured using three subscales in the Teacher's Sense of Efficacy Scale. These subscales were: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. The construct of school organizational health was measured using individual teacher perceptions of the health of their school. The organizational health of elementary schools was studied using five factors of health: institutional integrity, collegial leadership, resource influence, teacher affiliation, and academic emphasis as measured by the Organizational Health Inventory for Elementary Schools. The organizational health of middle schools was studied using six factors of school health: institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation, and academic emphasis as measured by the Organizational Health Inventory for Middle Schools. The organizational health of high schools was studied using seven factors of school health: institutional integrity, initiating structure, consideration, principal influence, resource support,

morale, and academic emphasis as measured by the Organizational Health Inventory for Secondary Schools.

Research Questions

The following research questions were addressed in the study:

1. How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in elementary schools?
2. How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in elementary schools?
3. How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in elementary schools?
4. How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in middle schools?
5. How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in middle schools?
6. How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in middle schools?
7. How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in high schools?
8. How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in high schools?
9. How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in high schools?

This chapter described the research design, the population and sample, instrumentation, data collection procedures, data analysis procedures, and limitations of the study.

Research Design

A quantitative research design was selected to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. The dependent variables consisted of individual teacher scores for sense of efficacy in student engagement (Y_1), sense of efficacy in instructional strategies (Y_2), and sense of efficacy in classroom management (Y_3). The independent variables for school health for elementary schools were measured using individual teacher scores for their perception of the health of their school in the following subscales: institutional integrity (X_1), collegial leadership (X_2), resource influence (X_3), teacher affiliation (X_4), and academic emphasis (X_5). The independent variables for school health for middle schools were measured using the following subscales: institutional integrity (X_1), collegial leadership (X_2), principal influence (X_3), resource support (X_4), teacher affiliation (X_5), and academic emphasis (X_6). The independent variables for school health for high schools were measured using the following subscales: institutional integrity (X_1), initiating structure (X_2), consideration (X_3), principal influence (X_4), resource support (X_5), morale (X_6), and academic emphasis (X_7).

Multiple linear regression analyses were used to derive the linear combination of the independent or predictor variables that accounted for the variance in the dependent variables. A goal of multiple regression analysis is to obtain a partition of variance for the dependent

variables into variance that can be accounted for or predicted by each of the predictor variables, taking into account the overlap or correlations between the predictors (Warner, 2013).

Population and Sample

The sample of 498 teachers in the present study was a purposive convenience sample of beginning teachers from a selected K-12 school district that is comprised of 23 elementary schools, 8 middle schools, and five high schools. To obtain the sample, a roster of all teachers with one to five years of teaching experience was obtained from the district's human resource office. Six hundred teachers were identified as beginning teachers. Beginning teachers for this study were those that had more than one year of teaching experience and five or less years of teaching experience. The identified sample of six hundred teachers consisted of three hundred one elementary teachers, one hundred fifty five middle school teachers, and one hundred forty four high school teachers. Teachers who completed the survey were asked to self-identify race and ethnicity in the demographic information section of the survey instrument. Only teachers who self-identified as Hispanic were included in the study. Of the six hundred teachers in the sample, five hundred forty one completed the survey. Fifty nine teachers were either absent, away from the schools when the surveys were administered, or chose not to participate in the study. Of the five hundred forty one surveys, forty three were not used due to teachers not self-identifying as Hispanic or due to missing data. The total number of surveys meeting inclusion criteria for this study was four hundred ninety eight; two hundred fifty five elementary school surveys, one hundred twenty six middle school surveys, and one hundred seventeen high school surveys, which accounted for an 83% usable return rate. Table 1 presents the sample information by school level.

Table 1

Number of Teachers in Final Sample

Number in Sample		Number Absent or Away From School	Number That Completed Survey	Number That Did Not Identify as Hispanic or Missing Data	Final Sample
Elementary	301	28	273	18	255
Middle School	155	17	138	12	126
High School	144	14	130	13	117
Total	600	59	541	43	498

Instrumentation

This study used five instruments as the primary source of self-reported data collected from beginning teachers that participated in the study. Each teacher completed a survey with three sections. Section one was a demographic information survey. Section two was the Teacher's Sense of Efficacy Scale to gather data for the dependent variables. Section three was the Organizational Health Inventory for Elementary Schools, the Organizational Health Inventory for Middle Schools, or the Organizational Health Inventory for Secondary Schools to gather data for the independent variables. Permission was obtained to use these survey instruments. Permission letters are included in Appendix A and Appendix B.

A description of each of the instruments follows with information of the validity and reliability of each instrument. The reliability of a test measure is the degree to which the test consistently measures what it is supposed to measure (Gay et al., 2009). The reliability of a

study allows for replication and consistency. The validity of a test measure is concerned with whether the test items are relevant to the measurement of the intended content (Gay et al., 2009).

Section One

Each beginning teacher completed a survey containing questions on demographic characteristics such as age, gender, educational level, years of teaching experience, years of teaching at the current school, and ethnicity, and race.

Section Two

The Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001) was used to gather data for teacher efficacy beliefs. The instrument contained twenty four questions that asked teachers to indicate their opinion about what they can do in relation to specific student and classroom situations. Teachers responded using a nine point Likert scale with anchors ranging from Nothing, Very Little, Some Influence, Quite a Bit, and A Great Deal. The instrument contained three subscales which were: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management.

Three separate studies were conducted to refine the factor structure of the scale (Tschannen-Moran & Woolfolk Hoy, 2001). Reliabilities for the subscales were .87 for efficacy for student engagement, .91 for efficacy for instructional strategies, and .90 for efficacy for classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). Tschannen-Moran and Woolfolk Hoy (2001) examined the construct validity of the instrument by testing the correlation of this instrument with other measures of teacher efficacy. Strong correlations between this instrument and other measures of teacher efficacy indicated that the Teachers' Sense of Efficacy

Scale was a valid instrument to measure teacher efficacy. Table 2 shows the factor structure for Teachers' Sense of Efficacy Scale – Long Form.

Table 2

Factor Structure for Teachers' Sense of Efficacy Scale – Long Form

Factor	Items
Efficacy in Student Engagement:	1, 2, 4, 6, 9, 12, 14, 22
Efficacy in Instructional Strategies:	7, 10, 11, 17, 18, 20, 23, 24
Efficacy in Classroom Management:	3, 5, 8, 13, 15, 16, 19, 21

Section Three

Each teacher completed one of the organizational health inventory scales depending on the school level they taught. The organizational health of high schools was measured using the Organizational Health Inventory for Secondary Schools (OHI-S) (Hoy & Feldman, 1987; Hoy, Tarter et al., 1991). The instrument contained forty-four questions to measure seven dimensions of organizational health. The seven dimensions measured were: institutional integrity, initiating structure, consideration, principal influence, resource support, morale, and academic emphasis.

In responding to the survey, teachers indicated the extent to which each statement best described their school. The instrument contained items with a four point Likert scale with anchors ranging from: Rarely Occurs, Sometimes Occurs, Often Occurs, and Very Frequently Occurs.

The OHI-S was tested for stability of the factor structure and validity. The alpha coefficients of reliability were as follows: institutional integrity (.91), principal influence (.87), consideration (.90), initiating structure (.89), resource support (.95), morale (.92), and academic emphasis (.93). The stable factor structure supported the construct validity of the seven dimensions of school health (Hoy, Tarter, et al., 1991). The items that measured each dimension were related to the dimension that had been predicated from the research (Hoy, Tarter, et al., 1991). Table 3 shows the factor structure for the Organizational Health Inventory for Secondary Schools, which was used with high school teachers.

Table 3

Factor Structure for Organizational Health Inventory – Secondary (High School)

Factor	Items
Institutional Integrity (II)	1, 8, 15, 22, 29, 36, 39
Initiating Structure (IS)	4, 11, 18, 25, 32
Consideration (C)	3, 10, 17, 24, 31
Principal Influence (PI)	2, 9, 16, 23, 30
Resource Support (RS)	5, 12, 19, 26, 33
Morale (M)	6, 13, 20, 27, 34, 37, 40, 42, 44
Academic Emphasis (AE)	7, 14, 21, 28, 35, 38, 41, 43

The health of elementary schools was measured using the Organizational Health Inventory for Elementary Schools (OHI-E). The OHI-E was developed from the OHI for

secondary schools (Hoy, Tarter, et al., 1991; Hoy & Tarter, 1997). The survey contained 37 questions in which teachers were asked to describe their school. A Likert scale with four points using anchors from Rarely Occurs, Sometimes Occurs, Often Occurs, and Very Frequently Occurs was used. In pilot studies a revised OHI for elementary schools with five factors of organizational health was produced. In reliability studies of the elementary instrument, Initiating Structure and Consideration, two factors in the high school instrument, merged into a factor named Collegial Leadership. Also, Principal Influence and Resource Support used in the OHI- S merged to form the factor named Resource Influence in the elementary instrument (Hoy, Tarter, et al., 1991; Hoy & Tarter, 1997). After two pilot studies, a final test of the OHI-E was performed to confirm the stability and reliability of the factor structure. Alpha coefficients of

Table 4

Factor Structure for Organizational Health Inventory – Elementary

Factor	Items
Institutional Integrity (II)	8, 14, 19, 25, 29, 30
Collegial Leadership (CL)	1, 3, 4, 10, 11, 15, 17, 21, 26, 34
Resource Influence (RI)	2, 5, 9, 12, 16, 20, 22
Teacher Affiliation (TA)	13, 23, 27, 28, 32, 33, 35, 36, 37
Academic Emphasis (AE)	6, 7, 18, 24, 31

reliability were as follows: teacher affiliation (.94), collegial leadership (.95), resource influence (.89), institutional integrity (.90), and academic emphasis (.87) (Hoy, Tarter, et al., 1991; Hoy &

Tarter, 1997). The stable factor structure supported the construct validity of the five dimensions of school health (Hoy, Tarter, et al., 1991; Hoy & Tarter, 1997). Table 4 shows the factor structure for the Organizational Health Inventory for elementary schools.

The health of middle schools was measured using the Organizational Health Inventory for Middle Schools (OHI-M). Hoy and Sabo (1998) used items from the Organizational health inventory for elementary schools (OHI-E) and secondary schools (OHI-S) to develop the organizational health inventory for middle schools (OHI-M). Empirical testing was done to see which items worked best for middle schools (Hoy & Sabo, 1998).

Table 5

Factor Structure for Organizational Health Inventory – Middle

Factor	Items
Institutional Integrity (II)	8, 13, 18, 23, 25, 26, 33
Collegial Leadership (CL)	1, 4, 5, 10, 14, 24, 30, 35, 39
Principal Influence (PI)	3, 9, 19, 34, 41, 43
Resource Support (RS)	6, 11, 15, 20, 36, 40
Teacher Affiliation (TA)	12, 21, 28, 31, 32, 37, 42, 45
Academic Emphasis (AE)	2, 7, 16, 17, 22, 27, 29, 38, 44

The OHI-M contained 45 items that defined six dimensions of school health: institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation and

academic emphasis. The instrument contained items with a four point Likert scale with anchors ranging from: Rarely Occurs, Sometimes Occurs, Often Occurs, and Very Frequently Occurs.

The alpha coefficients of reliability for the six subtests were: academic emphasis (.94), teacher affiliation (.94), principal influence (.94), collegial leadership (.94), resource support (.96), and institutional integrity (.93). Six hypothetical dimensions of school health were predicted and empirically demonstrated (Hoy & Sabo, 1998). The strong loadings on the predicted factors and the high reliability of the subtests suggested an instrument with high reliability and substantial validity (Hoy & Sabo, 1998). Table 5 shows the factor structure for the Organizational Health Inventory for middle schools.

Null Hypotheses

The following null hypotheses were tested in this study.

Elementary school

H₀1: Efficacy in student engagement (Y₁) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).

H₀2: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).

H₀3: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).

Middle school

- H₀ 4: Efficacy in student engagement (Y₁) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).
- H₀ 5: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).
- H₀ 6: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).

High school

- H₀ 7: Efficacy in student engagement (Y₁) is not a function of institutional integrity (X₁), initiating structure (X₂), consideration (X₃), principal influence (X₄), resource support (X₅), morale (X₆), and academic emphasis (X₇).
- H₀ 8: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), initiating structure (X₂), consideration (X₃), principal influence (X₄), resource support (X₅), morale (X₆), and academic emphasis (X₇).
- H₀ 9: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), initiating structure (X₂), consideration (X₃), principal influence (X₄), resource support (X₅), morale (X₆), and academic emphasis (X₇).

Data Collection Procedures

Permission to conduct the study was obtained from The Institutional Review Board (IRB) at the University of Texas – Pan American. A copy of the Notice for Approval is included in Appendix C. Permission from the district superintendent was obtained to collect data from beginning teachers in the district. The superintendent’s letter for data collection permission is included in Appendix D. The first step in the data collection process was a meeting with district principals to provide information on the study, review survey content, and to explain data collection procedures at each school. Each principal was given a roster of the teachers from their school that would be invited to participate in the study. Teachers who agreed to participate in the study were administered the survey at a date and time agreed upon by the school principal. The teachers were grouped in one location in the school. The survey was administered during the fall 2012 semester according to the schedule for each school. The surveys were administered by the researcher to all teachers who volunteered to participate in the study. The Anonymous Self-Report Survey Consent Form that was given to each teacher is included in Appendix E. The researcher verified that all teachers present were the identified beginning teachers from the particular schools. The researcher explained the purpose of the study and provided assurance for the anonymity of the survey information. The format of the instrument and instructions for completing the survey were provided. Time for questions and answers were provided for clarification purposes. Sufficient time was provided for all participants to complete the survey. The survey process was completed in a ten week period.

Data Analyses Procedures

Exploratory data analyses and confirmatory data analyses were conducted side by side (Tukey, 1977). Exploratory data analyses included box and whisker plots, stem and leaf displays, and descriptive statistics. Factor analyses was conducted to identify the constructs from participants' responses to the survey items, and to obtain the most parsimonious factors.

To determine if the dependent or criterion variables (Y_1, Y_2, Y_3) were a function of the independent or predictor variables (X) multiple linear regression analyses were used to analyze the data collected using SPSS version 19.0. The relationship between variables may be an accidental consequence of their relationship with other variables. Therefore, a series of regression analyses were performed to determine the combined and independent effect of the independent variables on efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. A full model regression analysis of all subtests was used to derive the total variance of efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management that was accounted for and explained by the organizational health of schools. If the null hypothesis for the full model procedure was rejected the follow-up analysis was the all possible regression procedure. The null hypotheses for the present study were tested with an F distribution at the .05 level of significance.

Summary

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. This

chapter explained the research design, population and sample, instrumentation, and data collection and analyses procedures used in the study of the relationship between self-efficacy beliefs of beginning Hispanic teachers and school organizational health factors.

CHAPTER IV

FINDINGS

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. Teaching efficacy beliefs of beginning Hispanic teachers in elementary, middle, and high school were studied using three subscales: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. School organizational health was studied using individual teacher perceptions of the health of their school using multiple subscales of school health.

This chapter will present the research findings from analyses of data conducted in this study. Data were analyzed to determine if significant relationships existed between the variables of teaching efficacy and the organizational health of schools in one school district. In this study, exploratory and confirmatory data analyses were conducted side by side (Tukey, 1977).

This chapter is divided into four sections. The first section will provide demographic information about the district and a demographic profile of the survey participants. The second section contains results of exploratory data analyses, and the third section includes results of confirmatory data analyses. The final section is a summary of the chapter.

Demographic Information

Student and teacher demographic data were obtained from the state's *Academic Excellence Indicator System Report* (Texas Education Agency, 2011- 2012).

School District Demographic Information

The present study was conducted in a school district in South Texas that served 29,500 students in twenty three elementary schools, eight middle schools, and five high schools. The student population was 99% Hispanic, and 96% were identified as economically disadvantaged. Furthermore, 46% were identified as English Language Learners. Seventy one percent were identified as being at risk for failure. The professional teaching staff was comprised of 1, 967 teachers. The ethnicity categories of the teaching staff were 94% Hispanic, 4% white, and 1.4% Asian. African American and other races made up .6% of the teaching staff. In the district, 5% of teachers were first year teachers, 35% of teachers had between one to five years teaching experience, 26% had between 6 and 10 years teaching experience, and 34% had more than 10 years teaching experience. The average number of years of teaching experience was 10.1 years, and the average number of years in the district was 7.9 years. The teacher turnover rate was 8.5%.

Profile of the Participants

The first section of the beginning teacher survey was a demographic section that was comprised of seven questions. These items asked teachers to provide the following information about themselves and their job: gender, age, race/ethnicity, completed education level, school level of current assignment, number of completed years as a teacher, and number of completed

Table 6

Demographic Information for Elementary School Participants: Gender, Age, Completed Education Level, Number of Completed Years as a Teacher, Number of Completed Years as a Teacher in the Current School

Category	Descriptor	N	%
Gender	Male	34	13
	Female	221	87
Age Group	< 26	31	12
	26 to 35	143	56
	36 to 45	60	24
	46 to 55	7	3
	56 to 65	5	2
	66 or older	0	0
Completed Education Level	Bachelors	237	93
	Masters	15	6
	Masters +	1	.4
Number of Completed Years as a Teacher	1	28	11
	2	39	15
	3	57	22
	4	58	23
	5	73	29
Number of Completed Years as a Teacher In this School	0	16	6
	1	37	15
	2	55	22
	3	58	23
	4	43	17
	5	44	17

Note: Percentages were rounded; therefore they may not total 100

years as a teacher in the current school. Tables 6, 7, and 8 show the results of responses to these survey items. Survey item number three asked teachers to indicate their race/ethnicity. If the

response to this question was other than “Hispanic”, survey data were not included in the data analyses, as this study was designed to include only Hispanic teachers with one to five years of completed teaching experience.

Table 7

Demographic Information for Middle School Participants: Gender, Age, Completed Education Level, Number of Completed Years as a Teacher, Number of Completed Years as a Teacher in the Current School

Category	Descriptor	N	%
Gender	Male	52	41
	Female	74	59
Age Group	< 26	10	8
	26 to 35	84	67
	36 to 45	26	21
	46 to 55	5	4
	56 to 65	0	0
	66 or older	0	0
Completed Education Level	Bachelors	110	87
	Masters	13	10
	Masters +	1	.4
Number of Completed Years as a Teacher	1	25	20
	2	23	18
	3	26	21
	4	25	20
	5	27	21
Number of Completed Years as a Teacher In this School	0	10	8
	1	32	25
	2	34	27
	3	24	19
	4	10	8
	5	16	13

Note: Percentages were rounded; therefore they may not total 100%.

Table 8

Demographic Information for High School Participants: Gender, Age, Completed Education Level, Number of Completed Years as a Teacher, Number of Completed Years as a Teacher in the Current School

Category	Descriptor	N	%
Gender	Male	65	56
	Female	52	44
Age Group	< 26	19	16
	26 to 35	73	62
	36 to 45	17	15
	46 to 55	6	5
	56 to 65	2	2
	66 or older	0	0
Completed Education Level	Bachelors	95	81
	Masters	11	9
	Masters +	2	2
Number of Completed Years as a Teacher	1	12	10
	2	25	21
	3	19	16
	4	33	28
	5	28	24
Number of Completed Years as a Teacher In this School	0	6	5
	1	21	18
	2	35	30
	3	19	16
	4	24	21
	5	12	10

Note: Percentages were rounded; therefore they may not total 100%

Elementary schools had the lowest percent of male teachers among the different school levels; 13%, compared to 52% in middle school, and 65 % in high school. The largest age category was 26 to 35 which was 56%. Only 16 teachers, or 6.4 % had a master's level of

education or higher. In middle schools, 67% of teachers were between 26 and 35 years old. Fourteen teachers, or 10.4 % had a master's level of education or higher. In high schools, there were more males than females among the teachers with one to five years teaching experience. The largest age category was 26 to 35 years, which was 62%. Only two teachers had a master's level of education or higher.

Exploratory Data Analyses

Exploratory data analyses were conducted to detect atypical data distributions in the study (Tukey, 1977). Exploratory analyses included box and whisker plots, stem and leaf displays, and descriptive statistics. Box and whisker plots are used to identify unusual scores, or outliers in the data distribution. Outliers are unusual scores in the data that may be considered extreme and require special consideration (Hinkle, Wiersma & Jurs, 2003). The outliers in the present study did not require special consideration and no non-linear transformations were used. Box and whisker plots and stem and leaf displays are included in Appendix F.

Tables 9, 10, and 11 contain descriptive statistics including the mean, variance, skewness, and kurtosis for the dependent and independent variables for elementary, middle school, and high school data sets. In elementary schools the highest mean score for teaching efficacy was Efficacy in Instructional Strategies (67.65). The highest mean score for organizational health was Teacher Affiliation (24.35).

In middle schools, the highest mean score for teaching efficacy was Efficacy in Instructional Strategies (50.55). The highest mean score for organizational health was Collegial Leadership (22.97). In high schools, the highest mean score for teaching efficacy was Efficacy

Table 9

Descriptive Statistics for Variables (Elementary Schools)

Variables	Mean	Std Error	Variance	Skewness	Std. Error	Kurtosis	Std. Error
Dependent Variables							
Efficacy in Instructional Strategies (E-EIS)	67.65	.58	84.10	-.70	.15	.34	.30
Efficacy in Classroom Management (E-ECM)	37.22	.36	33.68	-.73	.15	-.07	.30
Efficacy in Student Engagement (E-ESE)	37.48	.34	28.92	-.54	.15	-.32	.30
Independent Variables							
Institutional Integrity (E-II)	14.72	.23	14.00	-.13	.15	.35	.30
Teacher Affiliation (E-TA)	24.35	.32	25.28	-.59	.15	-.05	.30
Resource Influence (E-RI)	11.33	.21	10.82	-.35	.15	-.71	.30
Collegial Leadership (E-CL)	23.60	.38	36.36	-.57	.15	-.52	.30
Academic Emphasis (E-AE)	4.56	.10	2.33	.01	.15	-.72	.30

in Instructional Strategies (66.51). The highest mean score for organizational health was Consideration and Initiating Structure (30.76).

Confirmatory Data Analyses

This section includes factor analyses of the instruments used in the study. Factor

Table 10

Descriptive Statistics for Variables (Middle Schools)

Variables	Mean	Std Error	Variance	Skewness	Std. Error	Kurtosis	Std. Error
Dependent Variables							
Efficacy in Instructional Strategies (M-EIS)	50.55	.67	56.87	-.79	.22	.95	.43
Efficacy in Classroom Management (M-ECM)	43.61	.58	41.67	-.66	.22	1.41	.43
Efficacy in Student Engagement (M-ESE)	27.87	.40	19.79	-.21	.22	-.63	.43
Independent Variables							
Principal Influence (M-PI)	13.87	.31	11.95	-.58	.22	.14	.43
Institutional Integrity (M-II)	12.96	.31	12.21	-.50	.22	.19	.43
Teacher Affiliation (M-TA)	17.78	.26	8.61	-.36	.22	.59	.43
Resource Support (M-RS)	16.78	.45	26.00	-.30	.22	-.90	.43
Collegial Leadership (M-CL)	22.97	.58	41.73	-.41	.22	-.99	.43
Academic Emphasis (M-AE)	14.18	.30	11.09	-.05	.22	.23	.43

analyses was conducted to identify underlying constructs in the data. Principal Component Factor Analysis with Varimax Rotation was used to identify the constructs from participants' responses to the survey items. Eigenvalues were set at 1 or 1.5. Based on the results of extraction of factors from principal component analyses, variables were created by combining

each survey item with factor loadings exceeding .40 into their corresponding construct. Items with correlations failing to meet this standard were determined to be weak, and were not

Table 11

Descriptive Statistics for Variables (High Schools)

Variables	Mean	Std Error	Variance	Skewness	Std. Error	Kurtosis	Std. Error
Dependent Variables							
Efficacy in Instructional Strategies (H-EIS)	66.51	.91	95.68	-.75	.23	.88	.45
Efficacy in Classroom Management (H-ECM)	49.90	.81	75.90	-.43	.23	-.66	.45
Independent Variables							
Morale (H-M)	9.56	.17	3.54	-.36	.23	-.76	.45
Principal Influence (H-PI)	8.80	.23	6.00	-1.17	.23	1.94	.45
Institutional Integrity (H-II)	11.47	.30	10.23	.13	.23	.43	.45
Resource Support (H-RS)	15.03	.35	13.83	-.57	.23	-.30	.45
Academic Emphasis (H-AE)	18.05	.30	10.62	-.29	.23	-.37	.45
Consideration and Initiating Structure (H-CIS)	30.76	.46	24.43	-1.26	.23	2.07	.45

included in the computation of the variable. After the variables were computed, reliability analyses were conducted on items that best defined the newly computed variables using

Cronbach's alpha coefficients of reliability. A Cronbach's alpha coefficient is obtained through the correlation of every item with every other item.

Factor Analyses for Teachers' Sense of Efficacy Scale

Eigenvalues for Principal Component Factor Analyses with Varimax Rotation for the Teachers' Sense of Efficacy Scale were set at 1. As shown in Table 12, responses from the 255 elementary teachers on the Teachers' Sense of Efficacy Scale extracted three independent factors consistent with the theoretical model. These factors accounted for 56% of the total variance in the data set. The first factor was labeled Efficacy in Instructional Strategies (E-EIS), the second factor was labeled Efficacy in Classroom Management (E-ECM), and the third factor was labeled Efficacy in Student Engagement (E-ESE). Five items were excluded from the factor structure. Item #3 cross loaded on factors two and three and was excluded. Item #7 did not load on any factor. In addition, three other items were eliminated because they loaded on factors which were not consistent with theory as determined by examining themes and content of survey items. Using middle school data, the Teachers' Sense of Efficacy Scale revealed three independent factors which accounted for 50% of the total variance. The three factors were labeled as Efficacy in Instructional Strategies (M-EIS), Efficacy in Classroom Management (M-ECM), and Efficacy in Student Engagement (M-ESE). Seven items were eliminated due to cross loadings or due to loadings which were inconsistent with theory.

Two factors were extracted from the Teachers' Sense of Efficacy Scale using high school data. These two factors accounted for 60% of the total variance. The two factors were labeled as Efficacy in Instructional Strategies (H-EIS), and Efficacy in Classroom Management

Table 12

Factors for Teachers' Sense of Efficacy Scale (TSES) for Elementary (E), Middle School (M), and High School (H)

Elementary, Middle, and High School Variables	Percent of Variance	Percent of Cumulative Variance
<u>Elementary Variables</u>		
Efficacy in Instructional Strategies (E-EIS)	26.60	26.60
Efficacy in Classroom Management (E-ECM)	15.35	41.94
Efficacy in Student Engagement (E-ESE)	14.03	56.00
<u>Middle School Variables</u>		
Efficacy in Instructional Strategies (M-EIS)	22.62	22.62
Efficacy in Classroom Management (M-ECM)	16.59	39.21
Efficacy in Student Engagement (M-ESE)	10.72	49.93
<u>High School Variables</u>		
Efficacy in Instructional Strategies (H-EIS)	53.39	53.39
Efficacy in Classroom Management (H-ECM)	6.83	60.22

(H-ECM). Eight items were eliminated due to cross loadings or due to loadings which were not consistent with theory. The data did not extract a discreet factor for Efficacy in Student Engagement, and was eliminated as a factor to be considered in the data analyses. Table 13 shows the Cronbach's alpha coefficients for the final factors for Teachers' Sense of Efficacy Scale for elementary, middle, and high school. The Cronbach's alpha coefficients range from

.74 to .91.

Table 13

Final Factors for Teachers' Sense of Efficacy Scale (TSES), Items, and Reliability Coefficients

Factors	Items	Cronbach's Alpha
E-EIS	10, 11, 12, 14, 17, 18, 20, 23, 24	.91
E-ECM	13, 15, 16, 19, 21	.84
E-ESE	1, 2, 4, 6, 9	.80
M-EIS	12, 14, 17, 18, 20, 23, 24	.89
M-ECM	3, 13, 15, 16, 19, 21	.88
M-ESE	1, 2, 4, 6	.74
H-EIS	2, 7, 10, 11, 12, 17, 18 20, 24	.91
H-ECM	1, 3, 5, 13, 15, 16, 19	.90

Factor Analyses for Organizational Health Inventory

Table 14 shows the factors extracted from the Organizational Health Inventory for Elementary Schools using Principal Component Factor Analysis with Varimax Rotation. The Eigenvalue was set at 1. Five independent factors were extracted which accounted for 48% of the total variance. The five factors were consistent with the theoretical model. The factors were labeled as Collegial Leadership (OH-E-CL), Teacher Affiliation (OH-E-TA), Resource Influence (OH-E-RI), Institutional Integrity (OH-E-II), and Academic Emphasis (OH-E-AE). Table 15

shows the final factors and the Cronbach's alpha coefficients for the Organizational Health Inventory for Elementary schools which range from .59 to .89.

The Eigenvalue for Principal Component Factor Analysis with Varimax Rotation for the Organizational Health Inventory for Middle Schools was set at 1.5. Table 16 shows the factors extracted from the Organizational Health Inventory for Middle Schools using middle school data. Six independent factors were extracted which accounted for 51% of the total variance. These factors were consistent with the theoretical model. The factors were labeled as Collegial Leadership (OH-M-CL), Resource Support (OH-M-RS), Teacher Affiliation (OH-M-TA), Institutional Integrity (OH-M-II), Academic Emphasis (OH-M-AE), and Principal Influence (OH-M-PI).

Table 14

Factors for Organizational Health Inventory for Elementary Schools (OH-E)

Factors	Percent of Variance	Percent of Cumulative Variance
OH-E-CL	26.49	26.49
OH-E-TA	7.18	33.67
OH-E-RI	6.23	39.90
OH-E-II	4.24	44.14
OH-E-AE	3.50	47.64

Table 17 shows the final factors for the Organizational Health Inventory for Middle Schools and the Cronbach's alpha coefficients. Alpha coefficients range from .57 to .92.

Table 15

Final Factors for Organizational Health Inventory for Elementary Schools (OH-E), Items, and Reliabilities

Factors	Items	Cronbach's Alpha
OH-E-CL	1, 3, 4, 10, 11, 17, 26, 34	.89
OH-E-TA	13, 23, 27, 28 32, 33, 35, 36	.86
OH-E-RI	5, 12, 16, 22	.86
OH-E-II	8, 14, 19, 25, 29, 30	.63
OH-E-AE	24, 31	.59

Table 16

Factors for Organizational Health Inventory for Middle Schools (OH-M)

Factors Variance	Percent of Variance	Percent of Cumulative
OH-M-CL	21.80	21.80
OH-M-RS	7.22	29.03
OH-M-TA	6.45	35.47
OH-M-II	6.08	41.55
OH-M-AE	4.80	46.35
OH-M-PI	4.27	50.61

Table 17

Final Factors for Organizational Health Inventory for Middle Schools (OH-M), Items, and Reliabilities

Factors	Items	Cronbach's Alpha
OH-M-CL	1, 4, 5, 10, 24, 30, 35, 39	.90
OH-M-RS	6, 11, 15, 20, 36, 40	.92
OH-M-TA	12, 21, 31, 37, 42, 45	.57
OH-M-II	13, 18, 23, 25, 26	.67
OH-M-AE	7, 16, 17, 22, 27, 29	.71
OH-M-PI	3, 9, 19, 34, 43	.71

Table 18

Factors for Organizational Health Inventory for High Schools (OH-H)

Factors	Percent of Variance	Percent of Cumulative Variance
OH-H-AE	27.01	27.01
OH-H-CIS	7.52	34.53
OH-H-RS	6.87	41.40
OH-H-II	6.18	47.58
OH-H-PI	3.76	51.33
OH-H-M	3.69	55.02

Table 18 contains the factors extracted from the Organizational Health Inventory for Secondary Schools. The Eigenvalue for the Principal Component Factor Analysis with Varimax

Rotation for the Organizational Health Inventory for Secondary Schools was set at 1.5. Six independent factors were extracted accounting for 55% of the total variance. The theoretical model for the Organizational Health Inventory for Secondary Schools contained seven independent factors. Two of the seven factors in the theoretical model were labeled Consideration and Initiating Structure. In the factor analysis conducted in this study, survey items from these two factors loaded onto one single factor. After examining themes and content of survey items the researcher derived one factor from items that loaded to the factor. This factor was labeled as Consideration and Initiating Structure (OH-H-CIS). The other five factors were consistent with the theoretical model and were labeled as Academic Emphasis (OH- H- AE),

Table 19

Final Factors for Organizational Health Inventory for High Schools (OH-H), Items, and Reliabilities

Factors	Items	Cronbach's Alpha
OH-H-AE	14, 28, 35, 38, 41, 43	.76
OH-H-CIS	3, 10, 17, 24, 31, 4, 11, 18, 25	.89
OH-H-RS	5, 12, 19, 26, 33	.89
OH-H-II	8, 15, 22, 29, 36	.67
OH-H-PI	2, 9, 16	.79
OH-H-M	6, 13, 27	.76

Resource Support (OH-H-RS), Initiating Structure (OH-H-II), Principal Influence (OH-H-PI), and Morale (OH-H-M). Table 19 shows the final factors for Organizational Health for Secondary Schools and the Cronbach's alpha coefficient for each factor. Cronbach's alpha coefficients range from .67 to .89.

Multiple Linear Regression Analyses

Multiple linear regression analyses were used to answer the research questions. The null hypotheses for the present study were tested with an F distribution at the .05 level of significance. The first research question that guided the present study and the null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in elementary schools?

H_0 1: Efficacy in student engagement (Y_1) is not a function of institutional integrity (X_1), collegial leadership (X_2), resource influence (X_3), teacher affiliation (X_4), and academic emphasis (X_5).

The obtained multiple regression coefficient between Efficacy in Student Engagement and Organizational Health ($R = .50$), shown in Table 20 is statistically significant ($df = 5, 248; P < .05$). The data reject null hypothesis number one. The data indicates that Efficacy in Student Engagement is a function of the organizational health of elementary schools. The R square obtained in the analysis indicates that organizational health dimensions of collegial leadership, teacher affiliation, resource influence, institutional integrity, and academic emphasis account for 25% of the variance in Efficacy in Student Engagement.

Table 20

Regression Analysis of Full Model Between Efficacy in Student Engagement and Organizational Health of Elementary Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	df	<i>F</i>	<i>P</i>
Efficacy in Student Engagement	.50	.25	.23	5, 248	16.35	.00

Predictor Variables: academic emphasis, institutional integrity, collegial leadership, resource influence, teacher affiliation

Dependent Variable: efficacy in student engagement

P < .05

Table 21

Standardized Beta Coefficients Between Efficacy in Student Engagement and Organizational Health of Elementary Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Collegial Leadership	.05	.76	.45
Teacher Affiliation	.03	.39	.69
Resource Influence	.16	2.26	.03
Institutional Integrity	-.02	-.44	.66
Academic Emphasis	.38	6.01	.00

Dependent Variable: efficacy in student engagement

P < .05

The standardized regression coefficients between Efficacy in Student Engagement and the predictor variables of organizational health of elementary schools are shown in Table 21.

The following variables were statistically significant: resource influence (*P* = .05), and academic emphasis (*P* = .05). As a result of an all possible regression procedure between

Efficacy in Student Engagement and the predictor variables of organizational health in elementary schools found to be statistically significant, the model of best fit was obtained as

Table 22

Regression Analysis of Model of Best Fit Between Efficacy in Student Engagement and Organizational Health of Elementary Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	df	<i>P</i>
Efficacy in Student Engagement	.45	.21	.20	65.12	1,253	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in student engagement
 $P < .05$

shown in Table 22. The obtained multiple regression coefficient between the model of best fit and Efficacy in Student Engagement ($R = .45$) is statistically significant ($df = 1, 253; P < .05$). Academic emphasis is found to be the most parsimonious model and that which explains the greatest amount of variance. Academic emphasis explains 21% of the variance. The other predictor variables: collegial leadership, teacher affiliation, resource influence, and institutional integrity account for 4% of the variance.

The second research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in elementary schools?

H₀2: Efficacy in instructional strategies (Y_2) is not a function of institutional integrity (X_1), collegial leadership (X_2), resource influence (X_3), teacher affiliation (X_4), and

academic emphasis (X_5).

The obtained multiple regression coefficient between Efficacy in Instructional Strategies and Organizational Health ($R = .55$), shown in Table 23 is statistically significant ($df = 5, 248$; $P < .05$). The data reject null hypothesis number two. The data indicates that Efficacy in Instructional Strategies is a function of the organizational health of elementary schools. The R square obtained in the analysis indicates that organizational health dimensions of collegial leadership, teacher affiliation, resource influence, institutional integrity, and academic emphasis account for 30% of the variance in Efficacy in Instructional Strategies.

The standardized regression coefficients between Efficacy in Instructional Strategies and the predictor variables of organizational health of elementary schools are shown in Table 24. The following variables were statistically significant: resource influence ($P = .05$), and academic emphasis ($P = .05$). As a result of an all possible regression procedure between Efficacy in Instructional Strategies and the predictor variables of organizational health in Table 23

Regression Analysis of Full Model Between Efficacy in Instructional Strategies and Organizational Health of Elementary Schools

Model	R	R^2	Adjusted R^2	F	df	P
Efficacy in Instructional Strategies	.55	.30	.28	20.92	5,248	.00

Predictor Variables: academic emphasis, institutional integrity, collegial leadership, resource influence, teacher affiliation

Dependent Variable: efficacy in instructional strategies

$P < .05$

elementary schools found to be statistically significant, the model of best fit was obtained as

shown in Table 25.

Table 24

Standardized Beta Coefficients Between Efficacy in Instructional Strategies and Organizational Health of Elementary Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Collegial Leadership	.043	.63	.53
Teacher Affiliation	.10	1.49	.14
Resource Influence	.13	1.97	.05
Institutional Integrity	-.04	-.71	.48
Academic Emphasis	.40	6.53	.00

Dependent Variable: efficacy in instructional strategies
P < .05

Table 25

Regression Analysis of Model of Best Fit Between Efficacy in Instructional Strategies and Organizational Health of Elementary Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Instructional Strategies	.49	.24	.24	80.94	1,253	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in instructional strategies
P < .05

The obtained multiple regression coefficient between the model of best fit and Efficacy in Instructional Strategies (*R* = .49) is statistically significant (*df* = 1, 253; *P* < .05). Academic emphasis is found to be the most parsimonious model and that which explains the greatest amount of variance. Academic emphasis explains 24% of the variance. The other predictor

variables: collegial leadership, teacher affiliation, resource influence, and institutional integrity account for 6% of the variance.

The third research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in elementary schools?

H₀₃: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).

The obtained multiple regression coefficient between Efficacy in Classroom Management and Organizational Health ($R = .42$), shown in Table 26 is statistically significant ($df = 5, 248$; $P < .05$). The data reject null hypothesis number three. The data indicates that Efficacy in Classroom Management is a function of the organizational health of elementary schools.

Table 26

Regression Analysis of Full Model Between Efficacy in Classroom Management and Organizational Health of Elementary Schools

Model	R	R^2	Adjusted R^2	F	df	P
Efficacy in Classroom Management	.42	.18	.16	10.58	5,248	.00

Predictor Variables: academic emphasis, institutional integrity, collegial leadership, resource influence, teacher affiliation

Dependent Variable: efficacy in classroom management

$P < .05$

The R square obtained in the analysis indicates that organizational health dimensions of

collegial leadership, teacher affiliation, resource influence, institutional integrity, and academic emphasis account for 18% of the variance in Efficacy in Classroom Management.

The standardized regression coefficients between Efficacy in Classroom Management and the predictor variables of organizational health of elementary schools are shown in Table 27. The following variables were statistically significant: resource influence ($P = .05$), and academic emphasis ($P = .05$). As a result of an all possible regression procedure between Efficacy in Classroom Management and the predictor variables of organizational health in elementary schools found to be statistically significant, the model of best fit was obtained as shown in Table 28.

The obtained multiple regression coefficient between the model of best fit and Efficacy in Classroom Management ($R = .36$) is found to be statistically significant ($df = 1, 253; P < .05$). Academic emphasis is found to be the most parsimonious model and that which explains the greatest amount of variance. Academic emphasis explains 13% of the variance. The other predictor variables: collegial leadership, teacher affiliation, resource influence, and institutional integrity account for 5% of the variance.

The fourth research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in middle schools?

H₀4: Efficacy in student engagement (Y_1) is not a function of institutional integrity (X_1), collegial leadership (X_2), principal influence (X_3), resource support (X_4), teacher affiliation (X_5), and academic emphasis (X_6).

Table 27

Standardized Beta Coefficients Between Efficacy in Classroom Management and Organizational Health of Elementary Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Collegial Leadership	-.06	-.78	.44
Teacher Affiliation	.11	1.49	.14
Resource Influence	.17	2.34	.02
Institutional Integrity	.07	1.16	.25
Academic Emphasis	.29	4.38	.00

Dependent Variable: efficacy in classroom management
P < .05

Table 28

Regression Analysis of Model of Best Fit Between Efficacy in Classroom Management and Organizational Health of Elementary Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	df	<i>P</i>
Efficacy in Classroom Management	.36	.13	.13	37.13	1,253	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in classroom management
P < .05

The derived multiple regression coefficient between Efficacy in Student Engagement and Organizational Health of Middle Schools (*R* = .38), shown in Table 29 is statistically significant (*df* = 6, 119; *P* < .05). The data reject null hypothesis number four. The data indicates that Efficacy in Student Engagement is a function of the organizational health of middle schools.

Table 29

Regression Analysis of Full Model Between Efficacy in Student Engagement and Organizational Health of Middle Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Student Engagement	.38	.15	.10	3.41	6, 119	.00

Predictor Variables: institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation, academic emphasis

Dependent Variable: efficacy in student engagement

P < .05

Table 30

Standardized Beta Coefficients Between Efficacy in Student Engagement and Organizational Health of Middle Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Institutional Integrity	.06	.64	.52
Collegial Leadership	.14	1.30	.20
Principal Influence	- .15	-1.51	.13
Resource Support	-.13	-1.30	.20
Teacher Affiliation	.04	.41	.68
Academic Emphasis	.37	3.91	.00

Dependent Variable: efficacy in student engagement

P < .05

The *R* square derived in the analysis indicates that organizational health dimensions of institutional integrity, collegial leadership, principal influence, resource support, teacher

affiliation, and academic emphasis account for 15% of the variance in Efficacy in Student Engagement.

Table 30 summarizes the standardized regression coefficients between Efficacy in Student Engagement and the predictor variables of organizational health of middle schools. Academic emphasis ($P = .05$) was statistically significant. As a result of an all possible regression procedure between Efficacy in Student Engagement and the predictor variables of organizational health in middle schools found to be statistically significant, the model of best fit was obtained as shown in Table 31.

The derived multiple regression coefficient between the model of best fit and Efficacy in Student Engagement ($R = .33$) is found to be statistically significant ($df = 1, 124; P < .05$).

Table 31

Regression Analysis of Model of Best Fit Between Efficacy in Student Engagement and Organizational Health of Middle Schools

Model	R	R^2	Adjusted R^2	F	df	P
Efficacy in Student Engagement	.33	.11	.10	15.36	1, 124	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in student engagement
 $P < .05$

Academic emphasis is found to be the most parsimonious model and that which explains the greatest amount of variance. Academic emphasis explains 11% of the variance. The other predictor variables: institutional integrity, collegial leadership, principal influence, resource support, and teacher affiliation account for 3% of the variance.

The fifth research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in middle schools?

H₀₅: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).

Table 32

Regression Analysis of Full Model Between Efficacy in Instructional Strategies and Organizational Health of Middle Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Instructional Strategies	.39	.15	.11	3.61	6, 119	.00

Predictor Variables: institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation, academic emphasis

Dependent Variable: efficacy in instructional strategies

P < .05

The derived multiple regression coefficient between Efficacy in Instructional Strategies and Organizational Health of Middle Schools (*R* = .39), shown in Table 32 is statistically significant (*df* = 6, 119; *P* < .05). The data reject null hypothesis number five. The data indicates that Efficacy in Instructional Strategies is a function of the organizational health of middle schools. The *R* square derived in the analysis indicates that organizational health dimensions of institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation, and academic emphasis account for 15% of the variance in Efficacy in

Instructional Strategies.

Table 33 summarizes the standardized regression coefficients between Efficacy in Instructional Strategies and the predictor variables of organizational health of middle schools. Academic emphasis ($P = .05$) was statistically significant. As a result of an all possible regression procedure between Efficacy in Instructional Strategies and the predictor variables of organizational health in middle schools found to be statistically significant, the model of best fit was obtained as shown in Table 34.

The derived multiple regression coefficient between the model of best fit and Efficacy in Instructional Strategies ($R = .35$) is found to be statistically significant ($df = 1, 124; P < .05$).

Academic emphasis is found to be the most parsimonious model and that which explains the Table 33

Standardized Beta Coefficients Between Efficacy in Instructional Strategies and Organizational Health of Middle Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Institutional Integrity	-.04	-.46	.65
Collegial Leadership	.12	1.16	.25
Principal Influence	-.08	-.81	.42
Resource Support	-.05	-.50	.62
Teacher Affiliation	.12	1.30	.20
Academic Emphasis	.31	3.28	.00

Dependent Variable: efficacy in instructional strategies
 $P < .05$

Table 34

Regression Analysis of Model of Best Fit Between Efficacy in Instructional Strategies and Organizational Health of Middle Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Instructional Strategies	.35	.12	.12	17.33	1, 124	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in instructional strategies
P < .05

greatest amount of variance. Academic emphasis explains 12% of the variance. The other predictor variables: institutional integrity, collegial leadership, principal influence, resource support, and teacher affiliation account for 3% of the variance.

The sixth research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in middle schools?

H₀6: Efficacy in classroom management (*Y*₃) is not a function of institutional integrity (*X*₁), collegial leadership (*X*₂), principal influence (*X*₃), resource support (*X*₄), teacher affiliation (*X*₅), and academic emphasis (*X*₆).

The derived multiple regression coefficient between Efficacy in Classroom Management and Organizational Health of Middle Schools (*R* = .42), shown in Table 35 is statistically significant (*df* = 6, 119; *P* < .05). The data reject null hypothesis number six. The data indicates that Efficacy in Classroom Management is a function of the organizational health of middle

schools.

Table 35

Regression Analysis of Full Model Between Efficacy in Classroom Management and Organizational Health of Middle Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Student Engagement	.42	.17	.13	4.13	6, 119	.00

Predictor Variables: institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation, academic emphasis

Dependent Variable: efficacy in classroom management

P < .05

The *R* square derived in the analysis indicates that organizational health dimensions of institutional integrity, collegial leadership, principal influence, resource support, teacher affiliation, and academic emphasis account for 17% of the variance in Efficacy in Classroom Management.

The standardized regression coefficients between Efficacy in Classroom Management and the predictor variables of organizational health of middle schools are shown in Table 36. Academic emphasis (*P* = .05) was statistically significant. As a result of an all possible regression procedure between Efficacy in Classroom Management and the predictor variables of organizational health in middle schools found to be statistically significant, the model of best fit was obtained as shown in Table 37.

The derived multiple regression coefficient between the model of best fit and Efficacy in Classroom Management (*R* = .39) is found to be statistically significant (*df* = 1, 124; *P* < .05).

Academic emphasis is found to be the most parsimonious model and that which explains the

Table 36

Standardized Beta Coefficients Between Efficacy in Classroom Management and Organizational Health of Middle Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Institutional Integrity	.00	- .03	1.00
Collegial Leadership	.02	.22	.83
Principal Influence	- .02	-.21	.84
Resource Support	-.07	-.71	.48
Teacher Affiliation	-.12	-1.32	.19
Academic Emphasis	.45	4.82	.00

Dependent Variable: efficacy in classroom management
P < .05

greatest amount of variance. Academic emphasis explains 15% of the variance. The other predictor variables: institutional integrity, collegial leadership, principal influence, resource

Table 37

Regression Analysis of Model of Best Fit Between Efficacy in Classroom Management and Organizational Health of Middle Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Classroom Management	.39	.15	.15	22.19	1, 124	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in classroom management
P < .05

support, and teacher affiliation account for 2% of the variance.

The seventh research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in high schools?

H₀ 7: Efficacy in student engagement (Y_1) is not a function of institutional integrity (X_1), consideration and initiating structure (X_2), principal influence (X_3), resource support (X_4), morale (X_5), academic emphasis (X_6).

The empirical data from the sample population of high school teachers did not produce a factor for efficacy in student engagement. Therefore, this hypothesis was not tested.

The eighth research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in high schools?

H₀8: Efficacy in instructional strategies (Y_2) is not a function of institutional integrity (X_1), consideration and initiating structure (X_2), principal influence (X_3), resource support (X_4), morale (X_5), academic emphasis (X_6).

The obtained multiple regression coefficient between Efficacy in Instructional Strategies and Organizational Health of High Schools ($R = .42$), shown in Table 38 is statistically significant ($df = 6, 109; P < .05$). The data reject null hypothesis number eight. The data indicates that Efficacy in Instructional Strategies is a function of the organizational health of high schools. The R square obtained in the analysis indicates that organizational health dimensions of

institutional integrity, consideration and initiating structure, principal influence, resource support, morale, and academic emphasis account for 18% of the variance in Efficacy in Instructional Strategies.

Table 39 contains the standardized regression coefficients between Efficacy in Instructional Strategies and the predictor variables of organizational health of high schools. Academic emphasis ($P = .05$) was statistically significant. As a result of an all possible regression procedure between Efficacy in Instructional Strategies and the predictor variables of organizational health in high schools found to be statistically significant, the model of best fit was obtained as shown in Table 40.

Table 38

Regression Analysis of Full Model Between Efficacy in Instructional Strategies and Organizational Health of High Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Instructional Strategies	.42	.18	.13	3.92	6, 109	.00

Predictor Variables: institutional integrity, consideration and initiating structure, principal influence, resource support, morale, academic emphasis

Dependent Variable: efficacy in instructional strategies

$P < .05$

The obtained multiple regression coefficient between the model of best fit and Efficacy in Instructional Strategies ($R = .37$) is found to be statistically significant ($df = 1, 114; P < .05$). Academic emphasis is found to be the most parsimonious model and that which explains the greatest amount of variance. Academic emphasis explains 14% of the variance. The other

Table 39

Standardized Beta Coefficients Between Efficacy in Instructional Strategies and Organizational Health of High Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Institutional Integrity	-.05	-.57	.57
Consideration and Initiating Structure	.17	1.45	.15
Principal Influence	.02	.17	.86
Resource Support	-.19	-1.65	.10
Morale	.12	1.15	.25
Academic Emphasis	.35	3.06	.00

Dependent Variable: efficacy in instructional strategies
P < .05

Table 40

Regression Analysis of Model of Best Fit Between Efficacy in Instructional Strategies and Organizational Health of High Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Instructional Strategies	.37	.14	.13	18.31	1, 114	.00

Predictor: (Constant), academic emphasis
 Dependent Variable: efficacy in instructional strategies
P < .05

predictor variables: institutional integrity, consideration and initiating structure, principal influence, resource support, and morale account for 4% of the variance.

The ninth research question that guided the present study and null hypothesis tested were as follows:

How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in high schools?

H₀9: Efficacy in classroom management (Y_3) is not a function of institutional integrity (X_1), consideration and initiating structure (X_2), principal influence (X_3), resource support (X_4), morale (X_5), academic emphasis (X_6).

The obtained multiple regression coefficient between Efficacy in Classroom Management and Organizational Health of High Schools ($R = .48$), shown in Table 41 is statistically significant ($df = 6, 109; P < .05$). The data reject null hypothesis number nine. The data indicates that Efficacy in Classroom Management is a function of the organizational health of high schools. The R square obtained in the analysis indicates that organizational health dimensions of institutional integrity, consideration and initiating structure, principal influence, resource support, morale, and academic emphasis account for 23% of the variance in Efficacy in Classroom Management.

Table 42 contains the standardized regression coefficients between Efficacy in Classroom Management and the predictor variables of organizational health of high schools. Academic emphasis ($P = .05$) was statistically significant. As a result of an all possible regression procedure between Efficacy in Classroom Management and the predictor variables of organizational health in high schools found to be statistically significant, the model of best fit was obtained as shown in Table 43.

Table 41

Regression Analysis of Full Model Between Efficacy in Classroom Management and Organizational Health of High Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Classroom Management	.48	.23	.19	5.39	6, 109	.00

Predictor Variables: institutional integrity, consideration and initiating structure, principal influence, resource support, morale, academic emphasis
 Dependent Variable: efficacy in classroom management
P < .05

Table 42

Standardized Beta Coefficients Between Efficacy in Classroom Management and Organizational Health of High Schools

Model	Standardized Beta Coefficients	<i>t</i>	<i>P</i>
Institutional Integrity	.03	.31	.76
Consideration and Initiating Structure	.11	1.01	.31
Principal Influence	.04	.40	.69
Resource Support	-.14	-1.23	.22
Morale	-.04	-.42	.67
Academic Emphasis	.47	4.28	.00

Dependent Variable: efficacy in classroom management
P < .05

Table 43

Regression Analysis of Model of Best Fit Between Efficacy in Classroom Management and Organizational Health of High Schools

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>	<i>df</i>	<i>P</i>
Efficacy in Classroom Management	.45	.21	.20	29.60	1,114	.00

Predictor Variable: academic emphasis
 Dependent Variable: efficacy in classroom management
P < .05

The obtained multiple regression coefficient between the model of best fit and Efficacy in Classroom Management (*R* = .45) is found to be statistically significant (*df* = 1, 114; *P* < .05). Academic emphasis is found to be the most parsimonious model and that which explains the greatest amount of variance. Academic emphasis explains 21% of the variance. The other predictor variables: institutional integrity, consideration and initiating structure, principal influence, resource support, and morale account for 2% of the variance.

Summary

The present study used descriptive statistics, exploratory, and confirmatory data analyses to test the null hypotheses and answer the research questions. Table 44 summarizes the research questions and hypotheses that guided this study, and decisions concluded from the analyses of the data. Seven null hypotheses tested in this study were rejected by the data. One null hypothesis was not tested. The empirical data from the sample population of high school teachers did not produce a factor for the dependent variable, Efficacy in Student Engagement. Therefore, hypothesis number seven was not tested. Chapter V will provide a discussion of the findings, conclusions, implications, and recommendations from the study.

Table 44

Summary of Research Questions and Null Hypotheses Tested and Decisions

Questions and Null Hypotheses	Decisions
Elementary school	
<p>Research Question 1: How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in elementary schools?</p>	
<p>H₀1: Efficacy in student engagement (Y₁) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).</p>	Reject H ₀ 1
<p>Research Question 2: How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in elementary schools?</p>	
<p>H₀2: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).</p>	Reject H ₀ 2
<p>Research Question 3: How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in elementary schools?</p>	
<p>H₀3: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), collegial leadership (X₂), resource influence (X₃), teacher affiliation (X₄), and academic emphasis (X₅).</p>	Reject H ₀ 3

Table 44 (Continued)

Summary of Research Questions and Null Hypotheses Tested and Decisions

Questions and Null Hypotheses	Decisions
Middle school	
<p>Research Question 4: How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in middle schools?</p> <p>H₀4: Efficacy in student engagement (Y₁) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).</p>	Reject H ₀ 4
<p>Research Question 5: How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in middle schools?</p> <p>H₀5: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).</p>	Reject H ₀ 5
<p>Research Question 6: How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in middle schools?</p> <p>H₀6: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), collegial leadership (X₂), principal influence (X₃), resource support (X₄), teacher affiliation (X₅), and academic emphasis (X₆).</p>	Reject H ₀ 6

Table 44 (Continued)

Summary of Research Questions and Null Hypotheses Tested and Decisions

Questions and Null Hypotheses	Decisions
High school	
<p>Research Question 7: How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in high schools?</p> <p>H₀7: Efficacy in student engagement (Y₁) is not a function of institutional integrity (X₁), initiating structure (X₂), consideration (X₃), principal influence (X₄), resource support (X₅), morale (X₆), and academic emphasis (X₇).</p>	Not Tested
<p>Research Question 8: How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in high schools?</p> <p>H₀8: Efficacy in instructional strategies (Y₂) is not a function of institutional integrity (X₁), initiating structure and consideration (X₂), principal influence (X₃), resource support (X₄), morale (X₅), and academic emphasis (X₆).</p>	Reject H ₀ 8
<p>Research Question 9: How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in high schools?</p> <p>H₀9: Efficacy in classroom management (Y₃) is not a function of institutional integrity (X₁), initiating structure and consideration (X₂), principal influence (X₃), resource support (X₄), morale (X₅), and academic emphasis (X₆).</p>	Reject H ₀ 9

CHAPTER V

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter includes a summary of the problem, discussion of findings for the research questions, conclusion, and implications and recommendations. Information provided in this chapter will promote further understanding of the influence of organizational health factors of elementary, middle and high schools on beginning Hispanic teachers' sense of efficacy in student engagement, sense of efficacy in instructional strategies, and sense of efficacy in classroom management.

Summary of the Problem

Research shows high turnover rates for teachers and higher rates for beginning teachers (Ingersoll & Merrill, 2010). In addition, recent data showed that turnover rates among minority teachers were significantly higher than for white teachers (Ingersoll & May, 2011). Specifically, 45% of all public school teacher turnover took place in just one fourth of public schools. The highest rates of turnover were in high poverty, minority, urban, and rural schools (Ingersoll & May, 2011).

Beginning teachers face many obstacles in their first years of teaching. Romano (2008) found that beginning teachers identified more struggles than successes. Veenman (1984) conducted a review of the international literature on studies on the perceived problems

experienced by beginning teachers. In this report the two most serious problems reported by beginning teachers were classroom discipline and motivating students.

In order to examine the turnover rate of teachers, researchers have investigated factors that influence beginning teachers' decisions to stay or leave the profession. The relationship between teachers' sense of efficacy and commitment to the profession has been widely studied. Findings have shown that teachers with a high sense of efficacy demonstrated a higher commitment to teaching (Coladarci, 1992; Rosenholtz, 1989; Ebmeier, 2003; Ware & Kitsantas, 2011; Evans & Tribble, 1986), and to job satisfaction (Perrachione et al., 2008).

Research on beginning teachers shows similar positive links between teacher efficacy and positive teacher outcomes. Beginning teachers who had a high sense of efficacy found greater satisfaction in teaching, had a more positive reaction to teaching, and experienced less stress (Tschannen-Moran et al., 1998). Efficacious beginning teachers rated the difficulties of teaching lower than beginning teachers with a low sense of self-efficacy (Tschannen-Moran et al., 1998). Novice teachers with a high sense of efficacy were more likely to stay in the teaching profession (Knobloch & Whittington, 2002). Researchers have focused on factors that increase teacher efficacy. Hoy and Woolfolk (1993) found that a healthy school climate was conducive to the development of high teacher efficacy beliefs where teachers believed that they could influence student learning.

A review of the literature for this study identified research studies that examined the relation of teacher efficacy and organizational health of schools. However, no research studies were found on beginning Hispanic teachers that teach students identified as economically disadvantaged and the organizational health of schools. In light of the high turnover rate of

minority teachers, this study investigated the efficacy beliefs of beginning Hispanic teachers and the organizational health of schools that serve students identified as economically disadvantaged.

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. Nine research questions were developed to guide the study. The findings for the research questions are discussed in the following sections.

Discussion of Findings for Research Questions

The discussion of the findings for the research questions is organized by the three dependent variables in the study; efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management.

Efficacy in Student Engagement

This section includes discussion of the findings for efficacy in student engagement in elementary, middle, and high schools. The following research questions guided the study of efficacy in student engagement.

How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in elementary schools?

How much of the total variance of teaching efficacy in student engagement is accounted for or explained by the school health dimensions in middle schools?

This study found a significant relationship between efficacy in student engagement and the organizational health of elementary schools. Efficacy in student engagement is defined by teacher beliefs that they can get through to the most difficult students, help students think

critically, motivate students who show low interest in school, and get students to believe they can do well in school work. Twenty five percent of the variance in efficacy in student engagement was explained by the organizational health of elementary schools. In elementary schools where teachers are protected from unreasonable community demands, the principal's behavior is friendly, supportive, and open, where teachers are given adequate classroom supplies, where there is a sense of friendliness and strong affiliation among teachers, and where there is a strong press for achievement, beginning Hispanic teachers feel efficacious. Academic emphasis and resource influence were the most significant organizational health factors in predicting teacher efficacy in student engagement in elementary school teachers. However, academic emphasis was found to account for the greatest amount of variance in student engagement. Academic emphasis alone, accounted for 21% of the variance for efficacy in student engagement in elementary teachers. When students meet expectations for high achievement by working hard, seeking extra work, and respecting other students who get good grades, beginning Hispanic elementary teachers feel efficacious in student engagement.

A significant relationship between sense of efficacy in student engagement and the organizational health of middle schools was also found, although lower than that found in elementary schools. Fourteen percent of the variance in efficacy in student engagement was explained by the organizational health of middle schools. In middle schools where teachers are protected from unreasonable community and parental demands, where the principal behavior is friendly, supportive, and open, where the principal is able to influence the actions of supervisors, where teaching supplies are readily available, where teachers are friendly and feel a strong sense of affiliation with each other and the school, and where the school is driven by a

quest for academic excellence, beginning middle school Hispanic teachers feel efficacious in student engagement. Academic emphasis was also the strongest predictor of efficacy in student engagement in middle school teachers, accounting for 11% of the variance. Academic emphasis in middle schools is evident in schools with high yet achievable academic goals, an orderly and serious learning environment, teachers believe that students can achieve, and students work hard and respect other students who do well in school.

The present study adds to the body of knowledge of teacher efficacy by using the Teachers' Sense of Efficacy Scale with a different population than has previously been done, specifically with beginning Hispanic teachers that serve students identified as economically disadvantaged. Tschannen-Moran and Woolfolk Hoy's (2001) model of teaching efficacy contains three factors: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. In this study with high school data, teachers did not recognize three separate roles of teachers in the classroom. Data from high school teachers resulted in two factors that explained 60% of the total variance; efficacy in instructional strategies, and efficacy in classroom management. High school teachers' responses to the Teachers' Sense of Efficacy Scale did not produce a factor for efficacy in student engagement. However, many of the questions on student engagement loaded on to the factors for efficacy in instructional strategies and efficacy in classroom management. For example the question, "*How much can you do to get students to believe they can do well in school work?*" cross loaded on efficacy in instructional strategies and efficacy in classroom management. Similarly the question, "*How much can you do to motivate students who show low interest in school?*" loaded on efficacy in classroom management. The question, "*How much can you do to help your*

students value learning?” cross loaded on efficacy in instructional strategies and efficacy in classroom management. From examining the themes of these questions the researcher concluded that high school teachers did not distinguish between instructional and classroom management strategies and strategies to engage students or to instill a value of learning in students. In this study, high school teachers perceived efficacy in instructional strategies to include motivating students and engaging students as a way of maintaining classroom management.

Veenman (1984), in a review of the international literature on the problems faced by beginning teachers found that motivating students was the second most frequently identified problem. This problem was reported more frequently by secondary teachers than elementary teachers. More recently, Romano (2008) identified areas of struggles and successes for beginning teachers. Techniques to gain participation in classroom activities, and to increase student motivation for learning which were categorized under classroom management were the categories with the most reported successes or struggles. This indicates the importance that beginning teachers place on engaging students in learning. This study contributed to the literature on beginning teachers by identifying school organizational health factors that contribute to efficacy in student engagement in beginning Hispanic teachers. Results from this study show that in schools with student populations identified as economically disadvantaged, where achievable goals are set, where there is an orderly environment, and where students respect other students who achieve academically, beginning Hispanic teachers feel efficacious in student engagement.

Results of this study support a finding by Hoy and Woolfolk (1993) that there is a relationship between organizational health of elementary schools and personal teaching efficacy.

In the Hoy and Woolfolk (1993) study principal influence and academic emphasis were found to have significant effects on personal teaching efficacy. In the present study, academic emphasis accounted for the greatest amount of the total variance in efficacy in student engagement for elementary and middle school teachers. Results of this study also support findings by Newmann (1989) that organizational factors such as students' orderly behavior, the encouragement of innovation, responsiveness of administrators, teachers helping one another, and teachers' knowledge of one another's courses had a major influence on teachers' sense of efficacy. The two strongest predictors of teaching efficacy in the Newmann (1989) study were students' orderly behavior and encouragement for innovation. In the present study, academic emphasis, which accounted for the greatest amount of variance in efficacy for student engagement for elementary and middle school teachers was defined by an orderly and serious learning environment. Newmann(1989) also found that organizational factors produced more powerful relationships to efficacy than background variables. Background variables were school size, urbanicity, percentage of white students, percentage of disadvantaged students, and students' abilities on entering school. Newmann (1989) found that the percentage of disadvantaged students had no relationship to efficacy when other background variables were controlled. Data indicated that when schools were similar in other background features, teachers in schools with high minority enrollments may make special efforts that pay off in a greater sense of efficacy and higher expectations for students (Newmann, 1989).

Results of this study differ from Tobin et al. (2006) that organizational climate was not a strong predictor of teaching efficacy. Although statistically significant, organizational climate was not as strong a predictor of teaching efficacy as other predictor variables. Tobin et al.

(2006) however, did find that organizational learning predicted teaching efficacy.

Organizational learning was defined as an employee's perception of the degree of organizational support towards learning and developmental activities (Tobin et al., 2006). Tobin et al. (2006) suggested that moving beyond organizational climate to organizational learning might be a solution to improve the organizational climate of schools in order to enhance teaching efficacy.

Descriptive statistics from this study were consistent with findings from Martin et al. (2012) that elementary teachers scored higher than middle school teachers on student engagement. Martin et al. (2012) wrote that teachers who doubt their ability to engage students are likely to increase efforts to control instruction which leads to greater stress from student behavior and a lessened sense of personal accomplishment which in turn drains emotional energy and decreases job satisfaction. Results from this study showed that the mean score for student engagement for elementary teachers was higher than for middle school teachers.

Efficacy in Instructional Strategies

This section includes discussion of the findings for efficacy in instructional strategies in elementary, middle, and high schools. The following research questions guided the study on efficacy in instructional strategies.

How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in elementary schools?

How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in middle schools?

How much of the total variance of teaching efficacy in instructional strategies is accounted for or explained by the school health dimensions in high schools?

Veenman (1984) found that dealing with individual differences among students was the third largest problem identified by beginning teachers. Varying curricular and instructional practices to meet the needs of individual students was a difficult task for beginning teachers. Findings of the present study show that organizational health factors in elementary, middle, and high schools contribute to teachers' efficacy beliefs that they can adjust their lessons to the proper level for individual students, use a variety of assessment strategies, provide an alternate explanation when students are confused, implement alternative strategies in the classroom, and provide appropriate challenges for very capable students. Organizational health factors in elementary schools accounted for 30% of the total variance in teachers' sense of efficacy for instructional strategies. The organizational health factors that were the most significant in predicting efficacy in instructional strategies were academic emphasis and resource influence. In elementary schools where teachers perceive that the principal has the ability to affect the actions of supervisors to the benefit of teachers, teachers are given adequate classroom supplies, and extra instructional materials are easily obtained, elementary beginning Hispanic teachers feel efficacious in instructional strategies. However, academic emphasis was the strongest predictor of efficacy in instructional strategies. This finding indicates that in elementary schools with a high press for achievement, and students who meet expectations for achievement and respect other students who do well in school, beginning Hispanic elementary teachers feel efficacious in instructional strategies.

Organizational health factors in middle schools and high schools accounted for 15% and 18% of the total variance in efficacy in instructional strategies, respectively. In middle schools and high schools, academic emphasis was the most significant factor in predicting efficacy in

instructional strategies. In middle schools and high schools that are driven by a quest for academic excellence, high but achievable goals are set, the learning environment is orderly and serious, teachers believe in students' ability to achieve, and students work hard and respect other students who do well academically, beginning Hispanic teachers feel efficacious in instructional strategies.

This study added to the body of knowledge of high school teachers' perceptions of the role of the principal. The theoretical model for the Organizational Health Inventory for Secondary Schools contains two separate factors that describe the role of the principal. One of these is Consideration which is defined as principal behavior that is friendly, supportive and collegial. The other is Initiating Structure which is defined as the principal's task and achievement oriented behavior. The principal makes his or her attitudes and expectations clear and maintains standards for performance. In this study, beginning Hispanic high school teachers' responses for these two items loaded onto a single factor. High school teachers in this sample did not distinguish between the two separate roles of the principal. High school teachers in this study perceived the principal's tasks of setting standards for performance and supportive, friendly and collegial behavior as one role. However, a separate factor that described the principals' role in affecting the actions of supervisors was extracted from the responses. Given that the sample population in this study, beginning Hispanic high school teachers, is different from previous empirical research on teacher efficacy and school organizational health, this finding suggests the need for additional research regarding the measure of organizational health in high schools.

Results from this study support empirical research findings previously reported. Findings from this study are consistent with Taylor and Tashakkori (1995) that school climate was a predictor of teachers' sense of efficacy. The organization climate factors that were identified by Taylor and Tashakkori (1995) as the best predictors of teachers' sense of efficacy were faculty communication and lack of obstacles to teaching. Obstacles to teaching as described by Taylor and Tashakkori (1995) were: students that are incapable of learning material, student attitudes that reduce academic success, drug and alcohol abuse that interferes with teaching, student misbehavior that interferes with teaching, and routine duties that interfere with teaching. The lack of these obstacles to teaching is similar to academic emphasis in this study, specifically, a school environment that is orderly and serious, students who work hard and respect other students who do well academically, and goals for student achievement that are high but achievable.

Results, from the elementary data in this study support the research findings reported by Tschannen-Moran and Woolfolk Hoy (2007) that the contextual variable of teaching resources was strongly related to beginning teachers' sense of efficacy which included efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management. In the present study resource influence was a significant variable in elementary teachers' sense of efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. In this study resource influence in elementary schools was defined as adequate classroom supplies and easily obtainable instructional resources, but also included the principal's ability to affect the actions of supervisors for the benefit of teachers. The similar variable for middle and high schools, labeled as resource support did not include the principal's role with

supervisors; it was defined as having adequate classroom supplies and instructional materials, and extra materials easily obtainable. This may be a reason why this factor was not significant in predicting teaching efficacy using middle and high school data.

Efficacy in Classroom Management

This section includes discussion of the findings for efficacy in classroom management in elementary, middle, and high schools. The following research questions guided the study of efficacy in classroom management.

How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in elementary schools?

How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in middle schools?

How much of the total variance of teaching efficacy in classroom management is accounted for or explained by the school health dimensions in high schools?

Findings for this study show that organizational health factors in elementary, middle, and high schools contribute to teachers' efficacy beliefs that they can control disruptive behavior in the classroom, get children to follow classroom rules, calm a student who is disruptive or noisy, establish a classroom management system with each group of students, and keep a few problem students from ruining an entire lesson.

Organizational health factors in elementary schools accounted for 18% of the total variance in teachers' sense of efficacy for classroom management. The organizational health factors that were the most significant in predicting efficacy in classroom management were academic emphasis and resource influence. In elementary schools where teachers perceive that

the principal has the ability to affect the actions of supervisors to the benefit of teachers, teachers are given adequate classroom supplies, and extra instructional materials are easily obtained, beginning Hispanic elementary teachers feel efficacious in classroom management. However, academic emphasis was the strongest predictor of efficacy in classroom management. This finding indicates that in elementary schools with a high press for achievement, and students who meet expectations for achievement and respect other students who do well in school, beginning Hispanic elementary teachers feel efficacious in classroom management.

Organizational health factors in middle schools and high schools accounted for 17% and 23% of the total variance in efficacy in classroom management, respectively. In middle schools and high schools academic emphasis was the most significant factor in predicting efficacy in classroom management. In middle schools and high schools that are driven by a quest for academic excellence, high but achievable goals are set, the learning environment is orderly and serious, teachers believe in students' ability to achieve, and students work hard and respect other students who do well academically, beginning Hispanic teachers feel efficacious in classroom management.

Results of this study support findings from Lee et al. (1991) that school organization substantially impacts teachers' efficacy. Specifically, Lee et al. (1991) found that schools with much less orderly environments are less likely to have efficacious teachers. This study also supports findings from Pas et al. (2012) that academic emphasis was significantly related to teacher efficacy. Pas et al. (2012) also found that teacher affiliation and collegial leadership were significantly related to teacher efficacy. In the present study teacher affiliation and collegial leadership were not significant factors in predicting efficacy in classroom management.

Only academic emphasis was a significant factor contributing to the variance in teacher efficacy in classroom management for middle and high school teachers. Elementary data showed that academic emphasis and resource influence were both significant organizational health factors that predicted efficacy in classroom management in elementary teachers.

Results from this study are consistent with the research findings of Ware and Kitsantas (2011) that teachers' sense of efficacy for classroom management was not impacted by any principal – level variables. In the present study the organizational health factors for principal behavior were not significant in predicting teachers' sense of efficacy, including efficacy in classroom management. The principal variables in the Ware and Kitsantas (2011) study included curriculum and influence standards, policy and spending influence, source of professional development, and the principal's engagement in the operations of the school. In the present study the principal's role was defined by collegial leadership that is friendly supportive, and open, setting the tone for performance by letting people know what is expected of them, maintaining definite standards of performance, and having the ability to affect the actions of supervisors.

Conclusions

The purpose of this study was to examine how much of the total variance of teaching efficacy beliefs of beginning Hispanic teachers was accounted for or explained by the organizational health of schools as perceived by teachers in a South Texas School District. The construct of teaching efficacy was measured using three subscales in the Teacher's Sense of Efficacy Scale. The three subscales are: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. Teaching efficacy beliefs of beginning

Hispanic teachers in elementary, middle, and high school were studied. The conclusions of this study, based on the data analyses and discussion of findings are summarized below.

First, there is a significant relationship between sense of efficacy in student engagement of beginning Hispanic teachers and the organizational health of elementary, middle, and high schools. Academic emphasis was found to account for the greatest amount of variance in efficacy in student engagement for elementary, middle, and high school beginning Hispanic teachers. When students meet expectations for high achievement by working hard, seeking extra work, and respecting other students who get good grades, beginning Hispanic teachers feel efficacious in student engagement. In elementary schools resource influence was also significant in predicting teacher efficacy in student engagement.

Secondly, organizational health factors in elementary, middle, and high schools are related to teacher's sense of efficacy in instructional strategies. The organizational health of elementary, middle, and high schools contribute to teacher beliefs that they can adjust their lessons to the proper level for individual students, use a variety of assessment strategies, provide an alternate explanation when students are confused, implement alternative strategies in the classroom, and provide appropriate challenges for very capable students. Academic emphasis was the most significant factor in predicting efficacy in instructional strategies. In schools that are driven by a quest for academic excellence, high but achievable goals are set, the learning environment is orderly and serious, teachers believe in students' ability to achieve, and students work hard and respect other students who do well academically, beginning Hispanic teachers feel efficacious in instructional strategies.

Thirdly, organizational health factors in elementary, middle, and high schools contribute to teachers' beliefs that they can control disruptive behavior in the classroom, get children to follow classroom rules, calm a student who is disruptive or noisy, establish a classroom management system with each group of students, and keep a few problem students from ruining an entire lesson. Academic emphasis was the most significant factor in predicting efficacy in classroom management. In schools that are driven by a quest for academic excellence, high but achievable goals are set, the learning environment is orderly and serious, teachers believe in students' ability to achieve, and students work hard and respect other students who do well academically, beginning Hispanic teachers feel efficacious in classroom management.

Implications and Recommendations

High rates of teacher turnover have financial implications that drain schools resources in recruitment, selection, induction, and training. Beginning teachers who leave the teaching profession sacrifice the time, effort and financial resources they invested in obtaining their teaching credentials. Furthermore, the time that experienced teachers spend mentoring new teachers who will ultimately leave puts a strain on their own time, energy, and most importantly takes their time away from their students. It is critical that beginning Hispanic teachers be supported in the first years of teaching so that they develop a strong sense of efficacy.

This study will advance educational leaders' understanding of the importance of teachers' sense of efficacy to school outcomes. A strong sense of teaching efficacy is related to school outcomes such as student achievement (Ashton, Webb & Doda, 1983; Wheatly, 2005; Gibson & Dembo, 1984; Ashton & Webb, 1986), successful school change efforts (Guskey, 1988), and teacher commitment to the profession (Coladarci, 1992; Rosenholtz, 1989; Ebmeier, 2003; Ware

& Kitsantas, 2011; Evans & Tribble, 1986). Understanding the relationship between teachers' sense of efficacy to school organizational factors is important in school improvement efforts. Findings of this study underscore the positive effect that organizational health of schools can have on teachers' sense of efficacy. The findings of this study further point to the significance that a school's academic press can have on the development of efficacy beliefs of beginning Hispanic teachers. This study has implications for improving academic emphasis in schools to improve teachers' sense of efficacy. These efforts should include improving students' work ethic, persistence, and effort in completing school work. Academic emphasis as defined in the present study includes having students who work hard, and who respect other students who do well academically. Programs that promote high academic achievement among students are necessary to change student attitudes about their school performance. Also, programs that help build positive relationships between students and teachers are also necessary to increase academic emphasis.

Results of this study have implications for teacher preparation programs. Teacher education programs need to prepare teachers to seek and create support for themselves in the early years of teaching. The goal of teacher preparation programs should be to help pre-service teachers develop skills that will help them accomplish the day to day tasks of teaching, including theory for student motivation, and practice and experience with classroom management. Preparation programs also need to provide activities for reflection on theory and practice of instructional strategies and student engagement. Student teaching experiences should be planned in school environments with a strong academic emphasis that includes principal and teacher

press for academic achievement, and students who work hard and respect other students who perform well academically.

This study also has implications for educational leaders on the importance of supporting the development of strong efficacy beliefs of beginning teachers early in their careers. Novice teachers with a high sense of efficacy were more likely to stay in the teaching profession (Knobloch & Whittington, 2002). Research has shown that efficacy is most malleable early in teaching, and that it is resistant to change once it is formed. Educational leaders' understanding of how efficacy beliefs are formed and sustained throughout a teaching career can be valuable to the development of teachers with a strong sense of teaching efficacy. Beginning teachers often underestimate the complexity of teaching, and the demands that will be placed on them by administrators, parents, and students. Opportunities should be provided so that beginning teachers learn about their personal capabilities for teaching in the student teaching and induction year. Induction practices can include group meetings with other beginning teachers for emotional support, consultations with experienced teachers in their classrooms, opportunities to observe other teachers, and team teaching opportunities.

Additionally, this study presents implications for schools that serve low socio economic students. Educational leaders need to find ways to support beginning teachers that work with students in schools with low socio economic students. Woolfolk Hoy and Spero (2005) found that the socio economic status of students in class was related to teacher perceptions of the support they received. Teachers who taught students with higher socio economic status felt more supported and found their teaching assignment less difficult than teachers in low socio economic status classrooms. Woolfolk and Spero (2005) also found that

the levels of support teachers received during the first year of teaching correlated to teacher efficacy levels.

The results of this study are limited by the sample size for middle and high school teachers, and the study was conducted in one school district; thus, generalization of results is limited. Future research should consider collecting data from different locations with larger samples of beginning Hispanic teachers in middle and high schools that serve economic disadvantaged students.

Findings from this study indicate that teachers' sense of efficacy and organizational health of schools are important factors to consider in the school improvement process. This study points to the need for longitudinal studies that allow researchers to examine efficacy beliefs of beginning Hispanic teachers throughout different stages of their careers. Studies have shown different levels of efficacy during preservice, first year, and subsequent years of teaching. Studies that track levels of teaching efficacy for a period of years related to perceptions of the health of schools would provide valuable information for teacher preparation programs and for educational leaders.

Mixed research methods such as interviews and focus group interviews should be conducted with beginning Hispanic teachers to understand variables that influence teacher efficacy. Knowing which school factors contribute to positive growth in performance would help instructional leaders plan for beginning teacher development. A mixed methods study would provide a more in-depth understanding of teachers' efficacy beliefs in relation to school organizational health factors.

REFERENCES

- Algozzine, B., Gretes, J., Queen, A., & Cowan-Hathcock, M. (2007). Beginning teacher's perceptions of their induction program experiences. *Clearing House* 80(3), 137-143.
- Anhorn, R. (2008). The profession that eats its young. *Kappa Gamma Bulletin*, 74(3), 15-21.
- Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, A., Pauly, E., & Zellman, G. (1976). *Analysis of the school preferred reading programs in selected Los Angeles minority schools* (Rep. No. R-2007-LAUDS). Santa Monica, CA: RAND. (ERIC Document Reproduction Service No. ED 130 243)
- Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York: Longman.
- Ashton, P. T., Webb, R. B., & Doda, N. (1983). *A study of teacher's sense of efficacy* (Final Report, National Institute of Education Contract No. 400-79-0075). Gainesville: University of Florida. (ERIC Document Reproduction Service No. ED 231 834)
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1986). *Social Foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117-148.
- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science, 9*(3), 75-78.
- Berman, P., McLaughlin, M., Bass, G., Pauly, E., & Zellman, G. (1977). *Federal programs supporting educational change: Vol. VII. Factors affecting implementation and continuation*. (Rep. No. R-1589/7-HEW). Santa Monica, CA: RAND. (ERIC Document Preproduction Service No. ED140 432)
- Bevans, K., Bradshaw, C., Miech, R., & Leaf, P. (2007). Staff- and school-level predictors of school organizational health: A multilevel analysis. *Journal of School Health, 77*(6), 294-302.
- Bidwell, C. E. (1965). The school as a formal organization. In J. G. March (Ed.), *Handbook of organizations* (pp. 972-1022). Chicago: Rand McNally.
- Blasé, J., & Kirby, P. C. (2009). *Bringing out the best in teachers: What effective principals do*. Thousand Oaks, CA: Corwin Press.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education, 16*, 239-253.
- Bruce, C. D., & Ross, J. A. (2008). A model for increasing reform implementation and teacher efficacy: Teacher peer coaching in grades 3 and 6 mathematics. *Canadian Journal of Education, 31*, 346-370.
- Cantrell, S. C., & Callaway, P. (2008). High and low implementers of content literacy

- instruction: Portraits of teacher efficacy. *Teaching and Teacher Education*, 24, 1739-1750
- Caprara, G. V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy beliefs as determinants of teachers' job satisfaction. *Journal of Educational Psychology*, 95(4), 821-832.
- Cherubini, L. (2007). Speaking up and speaking freely: Beginning teacher's critical perceptions of their professional induction. *Professional Educator*, 29(2), 1-12.
- Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education*, 60(4), 323-337.
- D'Amato Andrews, B., & Quinn, R. J. (2005). The effects of mentoring on first-year teachers' perceptions of support received. *The Clearinghouse*, 78(3), 110-116.
- Ebmeier, H. (2003). How supervision influences teacher efficacy and commitment: An investigation of a path model. *Journal of Curriculum and Supervision*, 18, 110-141.
- Evans, E. D., & Tribble, M. (1986). Perceived teaching problems, self-efficacy, and commitment to teaching among preservice teachers. *Journal of Educational Research*, 80(2), 81-85.
- Feiman-Nemser, S., & Floden, R. E. (1986). The cultures of teaching. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching*, Third Edition (pp. 505-526). New York: Macmillan Publishing Co.
- Fry, S. W. (2009). Characteristics and experiences that contribute to novice elementary teachers' success and efficacy. *Teacher Education Quarterly*, 36(2), 95-110.
- Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational research competencies for analysis*

- and applications*. Upper Saddle River, New Jersey: Pearson Education, Inc.
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*, 569-583.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *The Academy of Management Review, 17*(2), 183-211.
- Glickman, C. D., & Tamashiro, R. T. (1982). A comparison of first-year, fifth year, and former teachers on efficacy, ego development, and problem solving. *Psychology in the Schools, 19*, 558-595.
- Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher, 33*(3), 3-13.
- Good, T. L., & Brophy, J. E. (1987). *Looking in classrooms*. New York: Harper & Row.
- Guskey, T. R. (1981). Measurement of responsibility teachers assume for academic successes and failures in the classroom. *Journal of Teacher Education, 32*(3), 44-51.
- Guskey, T. R. (1982). Differences in teachers' perceptions of personal control of positive versus negative student learning outcomes. *Contemporary Educational Psychology, 7*, 70-80.
- Guskey, T. R. (1987). Context variables that affect teacher efficacy. *Journal of Educational Research, 81*(1), 41-47.
- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 4*(1), 63-69.
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal, 31*(3), 627-643.

- Halpin, A. W., & Croft, D. P. (1963). *The organizational climate of schools*. Chicago, University of Chicago, Midwest Administration Center.
- Henson, R. K. (2002). From adolescent angst to adulthood: Substantive implications and measurement dilemmas in the development of teacher efficacy research. *Educational Psychologist, 37*(3), 137-150.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied statistics for the behavioral sciences* (5th. ed.). Boston: Houghton Mifflin Co.
- Hoy, W. K., & Feldman, J. A. (1987). Organizational health: The concept and its measure. *Journal of Research and Development in Education, 20*, 30-38.
- Hoy, W. K., & Sabo, D. J. (1998). *Quality middle schools: Open and healthy*. Thousand Oaks, CA: Corwin Press, Inc.
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal, 86*(2), 38-49.
- Hoy, W. K., & Tarter, C. J. (1997). *The road to open and healthy schools: A handbook for change, Secondary Edition*. Thousand Oaks, CA: Corwin Press.
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. (1991). *Open schools/healthy schools: Measuring organizational climate*. Beverly Hills, CA: Sage.
- Hoy, W. K., & Woolfolk, A. E. (1990). Socialization of student teachers. *American Educational Research Journal, 27*(2), 279-300.
- Hoy, W. K., & Woolfolk, A. E. (1993). Teacher's sense of efficacy and the organizational health of schools. *The Elementary School Journal, 93*(4), 355-372.

- Ingersoll, R. M. (2003). *Is there really a teacher shortage?* A research report sponsored by the Center for the Study of Teaching and Policy and The Consortium for Policy and Research in Education, University of Washington.
- Ingersoll, R. M., & May, H. (2011). The minority teacher shortage: Fact or fable? *Phi Delta Kappan*, 93(1), 62-65.
- Ingersoll, R. M., & Merrill, L. (2010). Who's teaching our children? *Educational Leadership*, 67(8), 14-20.
- Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research from 1998-2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, 23, 21-43.
- Knobloch, N.A., & Whittington, M. S. (2002). Novice teachers' perceptions of support, teacher preparation quality, and student teaching experience related to teacher efficacy. *Journal of Vocational Education Research*, 27(3), 331-341.
- Labone, E. (2002). Teacher efficacy: Maturing the construct through research in alternative paradigms. *Teaching and Teacher Education*, 20, 341-359.
- Lee, V. E., Dedrick, R. F., & Smith, J. B. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64 (July), 190-208.
- Liu, X. S. (2007). The effect of teacher influence at school on first-year teacher attrition: A multilevel analysis of the schools and staffing survey for 1999-2000. *Educational Research Evaluation*, 13(1), 1-16.
- Lortie, D. C. (1975a). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.

- Lortie, D. C. (1975b). The teacher and team teaching: Suggestions for long-range research. In J. V. Baldridge, & T. E. Deal (Eds.), *Managing change in educational organizations* (pp. 250-278). Berkeley, CA: McCutchen Publishing Corporation.
- Marable, M. A., & Raimondi, S. L. (2007). Teachers' perceptions of what was most (and least) supportive during their first year of teaching. *Mentoring & Tutoring, 15*(1), 25-37.
- Martin, N. K., Sass, D. A., & Schmitt, T. A. (2012). Teacher efficacy in student engagement, instructional management, student stressors, and burnout: A theoretical model using in-class variables to predict teachers' intent-to-leave. *Teaching and Teacher Education, 28*, 546-559.
- Meyer, J. W., & Rowan, B. (1978). The structure of organizational organizations. In M. W. Meyer (Ed.), *Environments and Organizations* (pp. 78-109). San Francisco, CA: Jossey-Bass Publishers.
- Miles, M. B. (1969). Planned change and organizational health: Figure and ground. In F. D. Carver & T. J. Sergiovanni (Eds.), *Organizations and human behavior* (pp. 375-391). New York: McGraw-Hill.
- Milner, H. R., & Woolfolk Hoy, A. (2003). A case study of an African American teacher's self-efficacy, stereotype threat, and persistence. *Teaching and Teacher Education, 19*, 263-276.
- National Education Association. *Status of the American Public School Teacher, 2005-2006*, (March 2010), Item No. 3259-200.
- No Child Left Behind Act of 2001, P.L. 107-110, 20 U.S.C. 6301 (2002).
- Newmann, F. M., Rutter, R. A., & Smith, M. S. (1989). Organizational factors that affect school

- sense of efficacy, community, and expectations. *Sociology of Education*, 62, 221-238.
- Onafowora, L. L. (2004). Teacher efficacy issues in the practice of novice teachers. *Educational Research Quarterly*, 28(4), 34-43.
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543-578).
- Parsons, T. (1951). *The social system*. New York: The Free Press.
- Parsons, T. (1967). Some ingredients of a general theory of formal organization. In A. W. Halpin (Ed.), *Administrative theory in education* (pp. 40-72). New York: Macmillan.
- Parsons, T., Bales, R. F., & Shils, E. A. (1953). *Working papers in the theory of action*. Glencoe, IL: Free Press.
- Pas, E. T., Bradshaw, C. P., & Hershfeldt, P. A. (2012). Teacher-and school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. *Journal of School Psychology*, 50, 129-145.
- Perrachione, B. A., Petersen, G. J., & Rosser, V. J. (2008). Why do they stay? Elementary teachers' perceptions of job satisfaction and retention. *The Professional Educator*, 32(2), 25-41.
- Puchner, L. D., & Taylor, A. R. (2006). Lesson study, collaboration and teacher efficacy: Stories from two school based math lesson study groups. *Teaching and Teacher Education*, 22, 922-934.
- Quinn, R. J., & D'Amato Andrews, B. (2004). The struggles of first-year teachers: Investigating support mechanisms. *The Clearinghouse*, 77(4), 164-168.
- Rimm-Kaufman, S. E., & Sawyer, B. E. (2004). Primary-grade teachers' self-efficacy beliefs,

- attitudes toward teaching, and discipline and teaching practice priorities in relation to the “Responsive Classroom” approach. *The Elementary School Journal*, 104(4), 321-341.
- Romano, M. (2008). Successes and struggles of the beginning teacher: Widening the sample. *The Educational Forum*, 72(1), 63-78.
- Ross, J. & Bruce, C. (2007). Professional development effects on teacher efficacy: Results of a randomized field trial. *The Journal of Educational Research*, 101(1), 50-60.
- Rose, J. S., & Medway, F. J. (1981). Measurement of teachers’ beliefs in their control over student outcome. *Journal of Educational Research*, 74, 185-190.
- Rosenholtz, S. J. (1989). *Teachers’ workplace: The social organization of schools*. NY: Teachers College Press.
- Rotter, J. B. (1960). Some implications of a social learning theory for the prediction of goal directed behavior from testing procedures. *Psychological Review*, 67, 301-316.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28.
- Rotter, J. B. (1982). Social learning and clinical psychology (1954). In J. B. Rotter (Ed.), *The Development and Application of Social Learning Theory: Selected Papers* (pp. 47- 143). NY: Praeger Publishers.
- Rutter, M., Maughan, B., Mortimore, P., Ouston, J., & Smith, A. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. Cambridge, MA: Harvard University Press.
- Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied Psychology: An International Review*, 57, 152-

171.

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99*(3), 611-625.

Smethem, S. (2007). Retention and intention in teaching careers: Will the new generation stay? *Teachers and Teaching: Theory and Practice, 13*(5), 465-480.

Smylie, M. A. (1988). The enhancement function of staff development: Organizational and psychological antecedents to individual teacher change. *American Educational Research Journal, 25*(1), 1-30.

Smylie, M. A. (1992). Teacher participation in school decision making: Assessing willingness to participate. *Educational Evaluation and Policy Analysis, 14*(1), 53-67.

Soodak, L. C., & Podell, D. M. (1994). Teachers' thinking about difficult-to-teach students. *The Journal of Educational Research, 88*(1), 44-51.

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. (1988). The context of trust: Teachers and the principal. *The High School Journal, 72*(1), 17-24.

Taylor, D. L. & Tashakkori, A. (1995). Decision participation and school climate as predictors of job satisfaction and teachers' sense of efficacy. *The Journal of Experimental Education, 63*(2), 217-230.

Texas Education Agency, *Texas Academic Indicator System Report* (2011-2013). www.tea.state.tx.us/

The National Commission on Teaching & America's Future. (2007, June). *Policy brief: The high cost of teacher turnover*. Retrieved from http://nctaf.org/zeus.silvertech.net/resources/research_and_reports/nctaf_research_reports/documents/CTTPolicyBrief-FINAL_000.pdf

Tobin, T. J., Muller, R. O., & Turner, L. M. (2006). Organizational learning and climate as predictors of self-efficacy. *Social Psychology of Education*, (9 3), 301-319.

Tournaki, N. E., & Podell, D. M. (2005). The impact of student characteristics and teacher efficacy on teachers' predictions of student success. *Teaching and Teacher Education*, 21, 299-314.

Tschannen-Moran, M., & McMaster, P. (2009). Sources of self-efficacy: Four professional development formats and their relationship to self-efficacy and implementation of a new teaching strategy. *The Elementary School Journal*, 110(2), 228-245.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23, 944-956.

Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.

Tukey, J. W. (1977). *Exploratory data analysis*. Reading, MA: Addison-Wesley Publishing Co.

- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54*(2), 143-178.
- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques*. Los Angeles, CA: Sage.
- Ware, H., & Kitsantas, A. (2011). Predicting teacher commitment using principal and teacher efficacy variables: An HLM approach. *The Journal of Educational Research, 104*, 183-193.
- Wheatley, K. F. (2005). The case for reconceptualizing teacher efficacy research. *Teaching and Teacher Education, 21*, 747-766.
- Woolfolk Hoy, A. (2000, April). *Changes in teacher efficacy during the early years of teaching*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA. Session 43:22, *Qualitative and Quantitative Approaches to Examining Efficacy in Teaching and Learning*, April 28, 2000.
- Woolfolk, A., E., & Hoy, W., K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*, 81-91.
- Woolfolk, A. E., Rosoff, B., & Hoy, W. K. (1990). Teachers' sense of efficacy and their beliefs about managing students. *Teaching and Teacher Education, 6*(2), 137-148.
- Woolfolk Hoy, A., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21*, 343-356.
- Yost, D. S. (2006). Reflection and self-efficacy: Enhancing retention of qualified teachers from a teacher education perspective. *Teacher Education Quarterly, 33*(4), 59-76.

APPENDICES

APPENDIX A

PERMISSION LETTER TO USE THE TEACHERS' SENSE OF EFFICACY SCALE



ANITA WOOLFOLK HOY, PH.D.

PROFESSOR
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:

<http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm>

Best wishes in your work,

Anita Woolfolk Hoy, Ph.D.
Professor

COLLEGE OF EDUCATION
29 WEST WOODRUFF AVENUE
COLUMBUS, OHIO 43210-1177

WWW.COE.OHIO-STATE.EDU/AHOY

PHONE 614-292-3774
FAX 614-292-7900
HOY.17@OSU.EDU

From: Wayne Hoy [whoy@mac.com]
Sent: Saturday, May 26, 2012 4:19 PM
To: Gisela Saenz
Subject: Re: Use of the OHI

Hi Gisela--

You have my permission to use the OHI in your research. The instrument and instructions can be found on my web page [www.waynehoy.com].

APPENDIX B

PERMISSION LETTER TO USE THE ORGANIZATIONAL HEALTH INVENTORIES

Monday, August 13, 2012 8:45 PM Wayne Hoy [whoy@mac.com]

Actions

To:

Gisela Saenz [gssaenz@broncs.utpa.edu]

Hi Gisela--

You have my permission to use any of my scales posted on my web site [www.waynehoy.com] for your research, including the OHI for secondary schools.

Good luck.

Wayne

Wayne K. Hoy

Fawcett Professor of

Education Administration

hoy.16@osu.edu

www.waynehoy.com

APPENDIX C

NOTICE OF APPROVAL - INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS

(IRB)



INSTITUTIONAL REVIEW BOARD FOR HUMAN SUBJECTS IN RESEARCH
THE UNIVERSITY OF TEXAS - PAN AMERICAN

uTpa 1201 West University Drive •• Edinburg, Texas 78539-2999 • (956) 381-3002 Office • (956) 381-2940 Fax

NOTICE OF APPROVAL

**Institutional Review Board for Human Subjects (IRB)
FWA#00000805**

TO: Gisela Saenz

FROM: Institutional Review Board for Human Subjects in Research

DATE: October 30, 2012

**RE: IRB# 2012-089-09; "Efficacy Beliefs of Beginning Hispanic Teachers and the
Organizational Health of Schools in a South Texas School District"**

The IRB protocol referenced above has been reviewed and APPROVED. Basis for approval: Expedited, Category #7

Approval expiration date: October 18, 2013

Recruitment and Informed Consent: You must follow the recruitment and consent procedures that were approved. If your study uses an informed consent form or study information handout, you will receive an IRB-approval stamped PDF of the document(s) for distribution to subjects.

Modifications to the approved protocol: Modifications to the approved protocol (including recruitment methods, study procedures, survey/interview questions, personnel, consent form, or subject population), must be submitted in writing to the IRB at irb@utpa.edu for review. Changes must not be implemented until approved by the IRB.

Approval expiration and renewal: Your study approval expires on the date noted above. You will receive a continuing review (renewal) form from the IRB approximately 2-4 weeks before approval expiration, which should be completed and returned immediately. If you will be interacting with subjects or working with individually identifiable private information, you need to have active IRB approval. Failure to return the form will result in your study file being closed on the approval expiration date.

Data retention: All research data and signed informed consent documents should be retained for a *minimum* of 3 years after *completion* of the study.

Approved by: Date: 10/30/2012 Dr. Patricia Gon

Chair, Institutional Review Board

cc: Dr. Sayed Sadiq Shah, Vice Provost for Research and Sponsored Projects

APPENDIX D

SUPERINTENDET'S LETTER FOR DATA COLLECTION APPROVAL

September 21, 2012

Dear Superintendent of Schools,

I am conducting a study on, "Efficacy Beliefs of Beginning Hispanic Teachers and the Organizational Health of Schools in a South Texas School District." The purpose of this study is to examine the teaching efficacy beliefs of beginning Hispanic teachers in relation to the organizational health of schools as perceived by teachers. Teaching efficacy beliefs of beginning Hispanic teachers in elementary, middle, and high schools will be studied using three subscales: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. School organizational health will be studied using individual teacher perceptions of the health of their school using multiple subscales of school health.

This study is being conducted as partial fulfillment for my doctorate in educational leadership at the University of Texas-Pan American in Edinburg, Texas. I am requesting permission to collect data from beginning Hispanic teachers in your district. Beginning teachers are those with one to five years of completed teaching experience. Data will be collected using an anonymous self-report survey. The survey should take approximately twenty minutes to complete. I have developed a protocol for administering the survey that includes informing principals about the study, and all the steps in the data collection process. Any information that is obtained from the surveys for this study will remain confidential. The results that are published will not reference any individuals, schools, or district. Participation for this study is voluntary, and participants may discontinue their participation at any time during the survey.

I anticipate that this research study will provide an opportunity for school districts to gain knowledge of the efficacy beliefs of beginning Hispanic teachers in relation to their perception of the health of their school that will contribute to increased student performance. Upon concluding my study, I will be glad to share the results with leaders in the district.

Sincerely,

Gisela S. Saenz
Doctoral Student
The University of Texas-Pan American in Edinburg, Texas

APPENDIX E

ANONYMOUS SELF-REPORT SURVEY CONSENT FORM

ANONYMOUS SELF-REPORT SURVEY
CONSENT FORM

Approved by:
UTPA IRB

Study title: EFFICACY BELIEFS OF BEGINNING HISPANIC TEACHERS AND THE ORGANIZATIONAL HEALTH OF SCHOOLS IN ASOUTH TEXAS SCHOOL DISTRICT

This research survey is being conducted by Gisela S. Saenz from the University of Texas – Pan American/UTPA. I am conducting a research study about the efficacy beliefs of beginning Hispanic teachers. The following survey should take about twenty minutes to complete.

If you would prefer not to participate, simply return the blank survey. Your responses are anonymous; you should not include any identifying information on this survey. I ask that you try to answer all questions. However, if there are any questions that you would prefer to skip, simply leave the answer blank. You must be at least 18 years old to participate. *If you are not 18 or older, please inform the researcher and do not complete the survey.*

Researcher contact information: Name: Gisela S. Saenz Title: Doctoral Student

Dept: Educational Leadership

The University of Texas-Pan American

Phone: 956-225-3809

[Email: gssaenz@broncs.upta.edu](mailto:gssaenz@broncs.upta.edu)

This research has been reviewed and approved by the Institutional Review Board for Human Subjects Protection (IRB). If you have any questions about your rights as a participant, or if you feel that your rights as a participant were not adequately met by the researcher, please contact the IRB at 956.665.2889 [or irb@utpa.edu](mailto:irb@utpa.edu). You are also invited to provide anonymous feedback to the IRB by visiting www.utpa.edu/IRBfeedback.

Please keep this sheet for your reference.

APPENDIX F

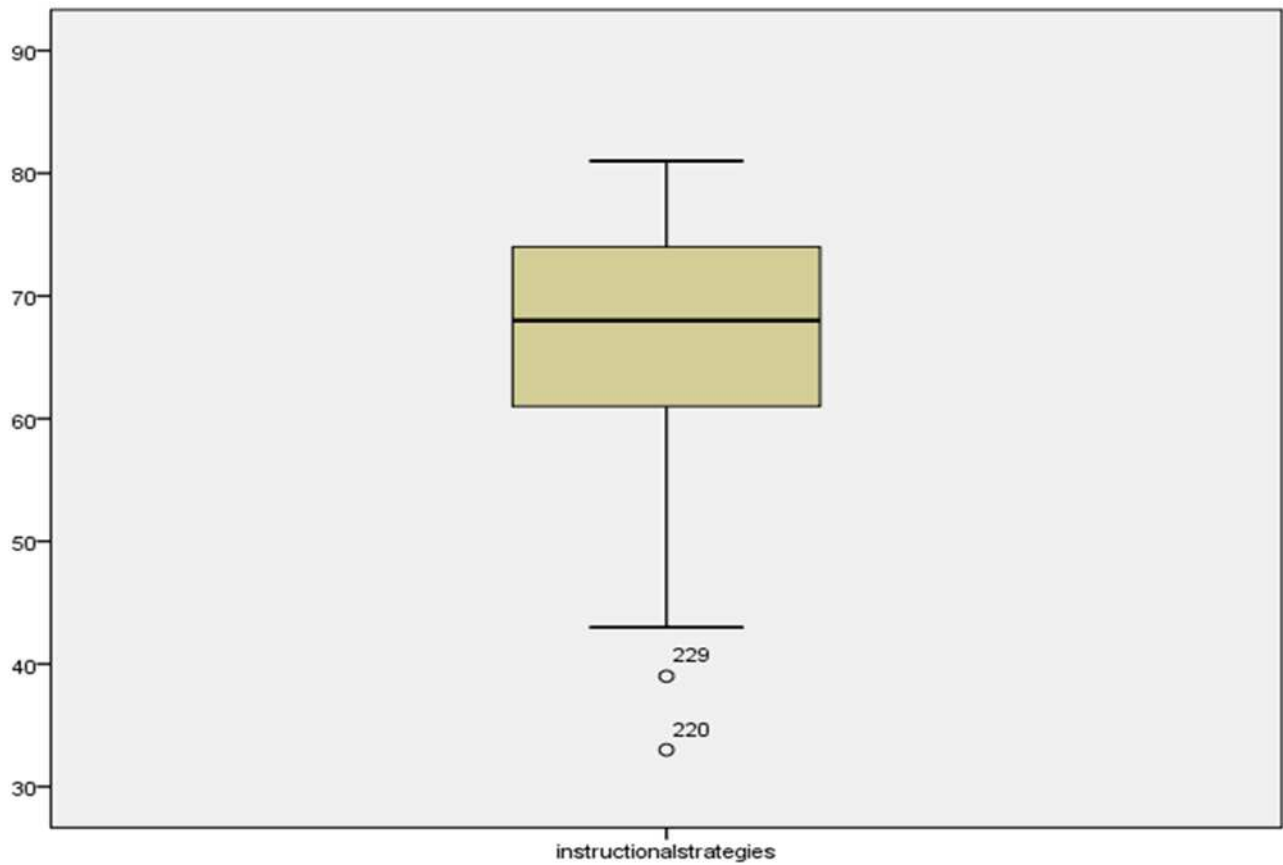
STEM – AND – LEAF PLOTS AND BOX – AND – WHISKER PLOTS

Instructional Strategies (Elementary) Stem-and-Leaf Plot

Frequency	Stem & Leaf
2.00	Extremes (= < 39)
2.00	4 . 34
4.00	4 . 5679
19.00	5 . 0111222223333444444
18.00	5 . 556667778888999999
39.00	6 . 000000000111111111122222333344444444444
48.00	6 . 55555555556666667777777777778888888888889999
60.00	000000000111111111112222222222223333333333334444444444444
40.00	7 . 55555556666666677777778888889999999
22.00	8 . 00000011111111111111

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

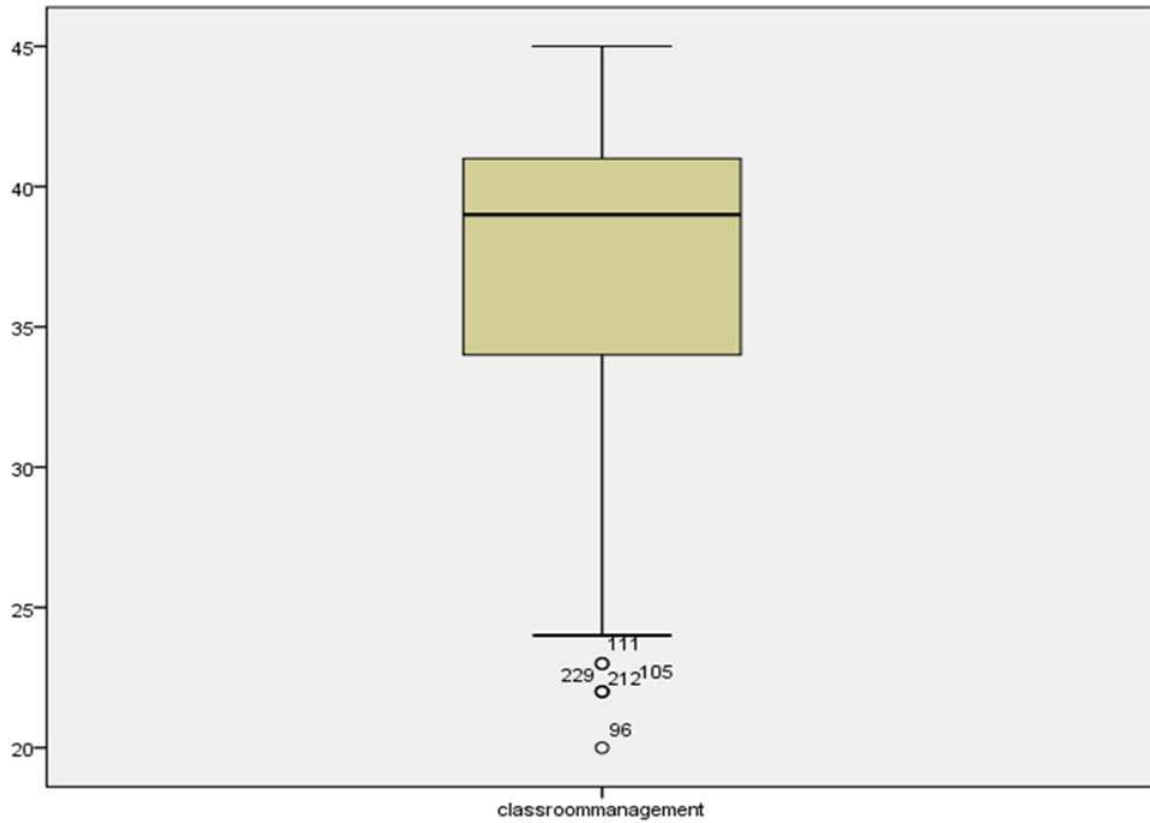


Classroom Management (Elementary) Stem-and-Leaf Plot

Frequency	Stem & Leaf
6.00	Extremes (= < 23)
.00	2 .
8.00	2 . 45555555
8.00	2 . 66777777
8.00	2 . 88999999
13.00	3 . 00011111111111
16.00	3 . 2222222333333333
31.00	3 . 44444444444444445555555555555555
24.00	3 . 666666666677777777777777
34.00	3 . 88888888888899999999999999999999
43.00	4 . 000000000000000000000000000000001111111111111111111
25.00	4 . 222222222222222233333333333333
38.00	4 . 444444444444444444445555555555555555555555555555

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

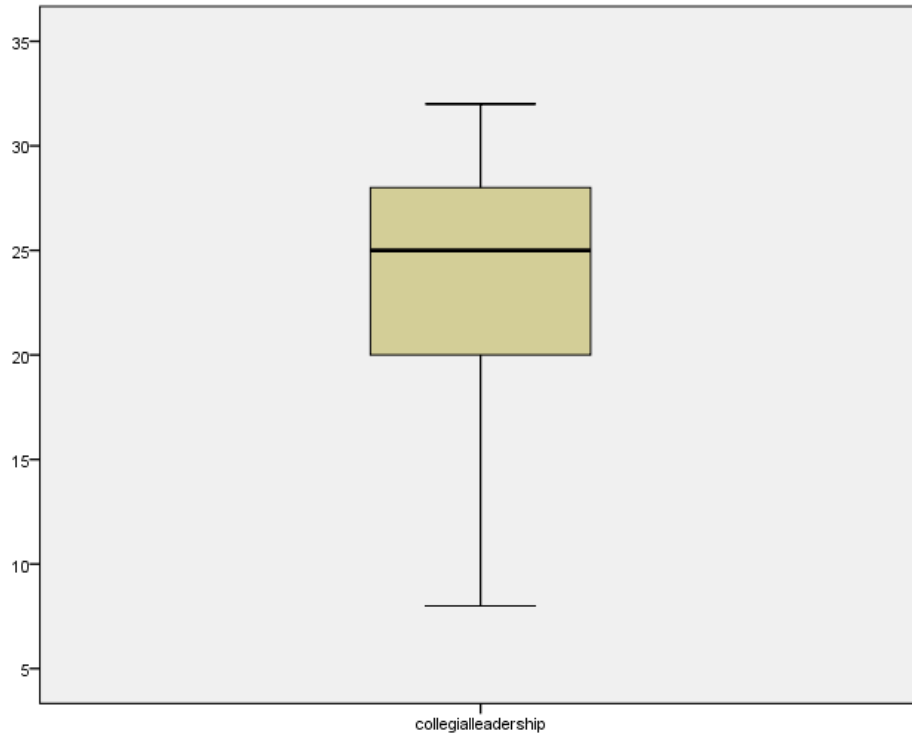


Collegial Leadership (Elementary) Stem-and-Leaf Plot

Frequency	Stem & Leaf
.00	0 .
4.00	0 . 8889
5.00	1 . 11111
9.00	1 . 222222233
13.00	1 . 444444555555
15.00	1 . 6666666777777
17.00	1 . 888888899999999
24.00	2 . 0000000000011111111111
25.00	2 . 2222222223333333333333
26.00	2 . 44444444444444455555555
35.00	2 . 66666666666666677777777
37.00	2 . 88888888888888899999999
26.00	3 . 0000000000001111111111
18.00	3 . 2222222222222222

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display



Teacher Affiliation (Elementary) Stem-and-Leaf Plot

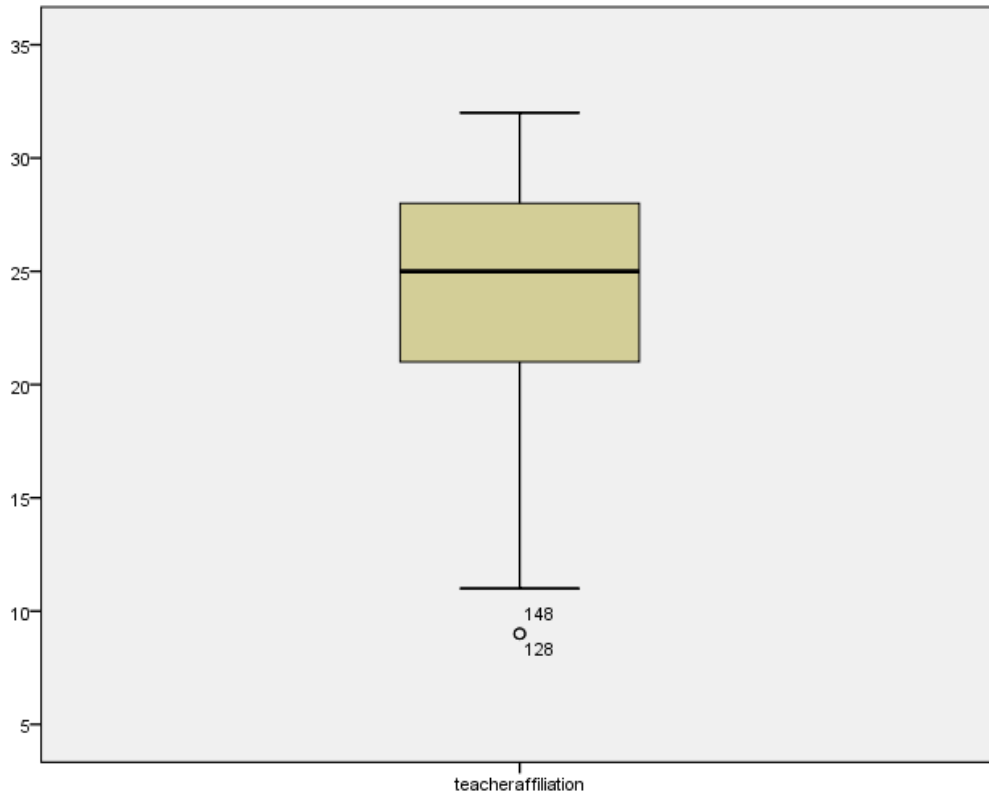
Frequency Stem & Leaf

```

2.00 Extremes  (= <9)
3.00  1 . 111
2.00  1 . 23
7.00  1 . 555555
13.00 1 . 666667777777
16.00 1 . 88888899999999
27.00 2 . 000000000111111111111111
34.00 2 . 22222222222222223333333333333333
34.00 2 . 4444444444444444444444555555555555
37.00 2 . 66666666666666667777777777777777
38.00 2 . 8888888888888888889999999999999999
28.00 3 . 0000000000000001111111111111
13.00 3 . 222222222222
    
```

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

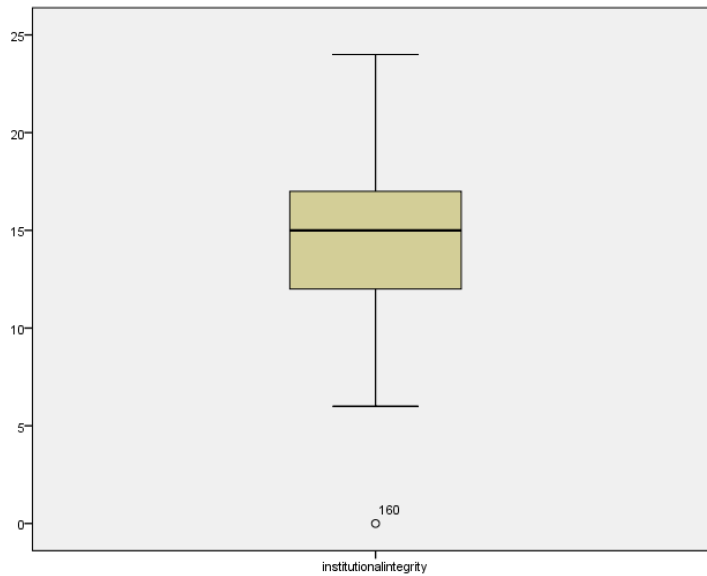


Institutional Integrity (Elementary) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (= < .0)
3.00	6 . 000
2.00	7 . 00
4.00	8 . 0000
10.00	9 . 0000000000
7.00	10 . 0000000
22.00	11 . 000000000000000000000000
21.00	12 . 000000000000000000000000
32.00	13 . 00000000000000000000000000000000
20.00	14 . 000000000000000000000000
26.00	15 . 000000000000000000000000000000
21.00	16 . 000000000000000000000000000000
29.00	17 . 00000000000000000000000000000000
18.00	18 . 000000000000000000000000
10.00	19 . 0000000000
12.00	20 . 000000000000
7.00	21 . 00000000
5.00	22 . 00000
2.00	23 . 00
2.00	24 . 00

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display



Instructional Strategies (Middle School) Stem-and-Leaf Plot

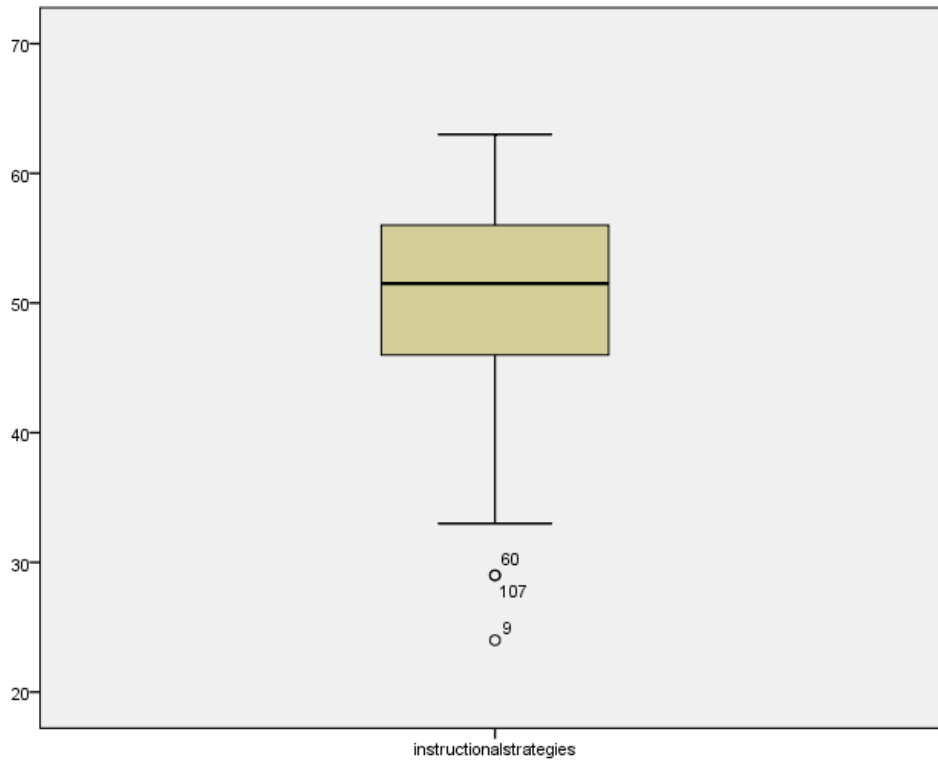
Frequency Stem & Leaf

```

3.00 Extremes  (= < 29)
1.00  3 . 3
2.00  3 . 44
.00  3 .
1.00  3 . 9
7.00  4 . 0001111
8.00  4 . 23333333
4.00  4 . 4555
14.00 4 . 6666666677777
16.00 4 . 888889999999999
7.00  5 . 0011111
11.00 5 . 2222222233
17.00 5 . 4444444455555555
13.00 5 . 666666667777
9.00  5 . 888899999
8.00  6 . 00111111
5.00  6 . 22333
    
```

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

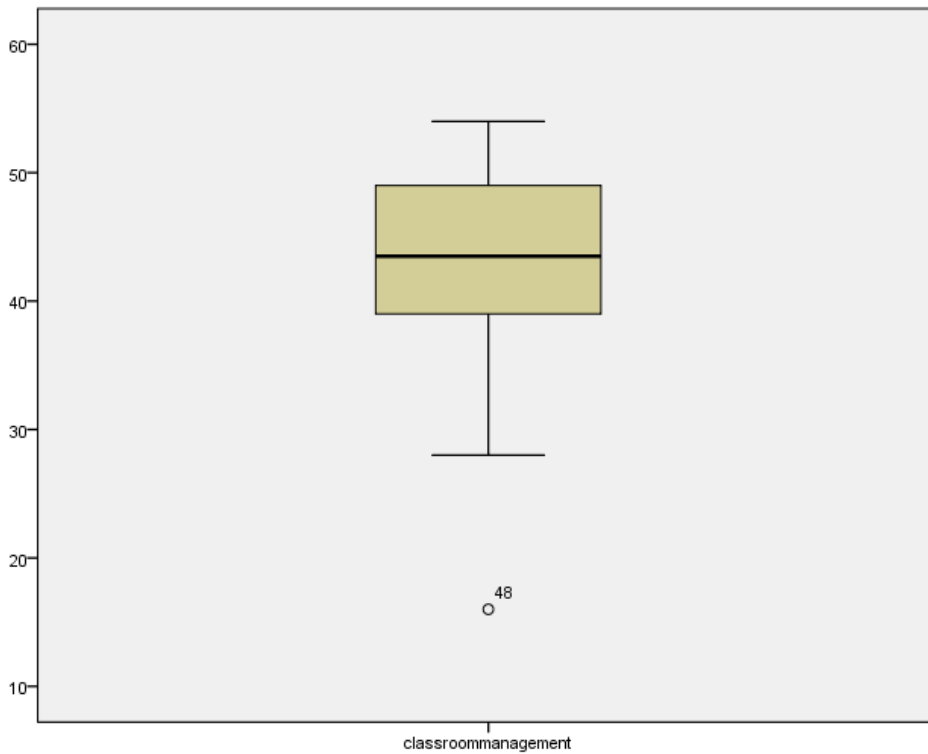


Classroom Management (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (= < 16)
.00	2 .
1.00	2 . 8
1.00	3 . 1
1.00	3 . 3
9.00	3 . 444445555
8.00	3 . 66677777
11.00	3 . 88888999999
15.00	4 . 000000000001111
16.00	4 . 2222222222233333
9.00	4 . 444445555
14.00	4 . 66666677777777
14.00	4 . 88888889999999
13.00	5 . 0000011111111
7.00	5 . 2222333
6.00	5 . 444444

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

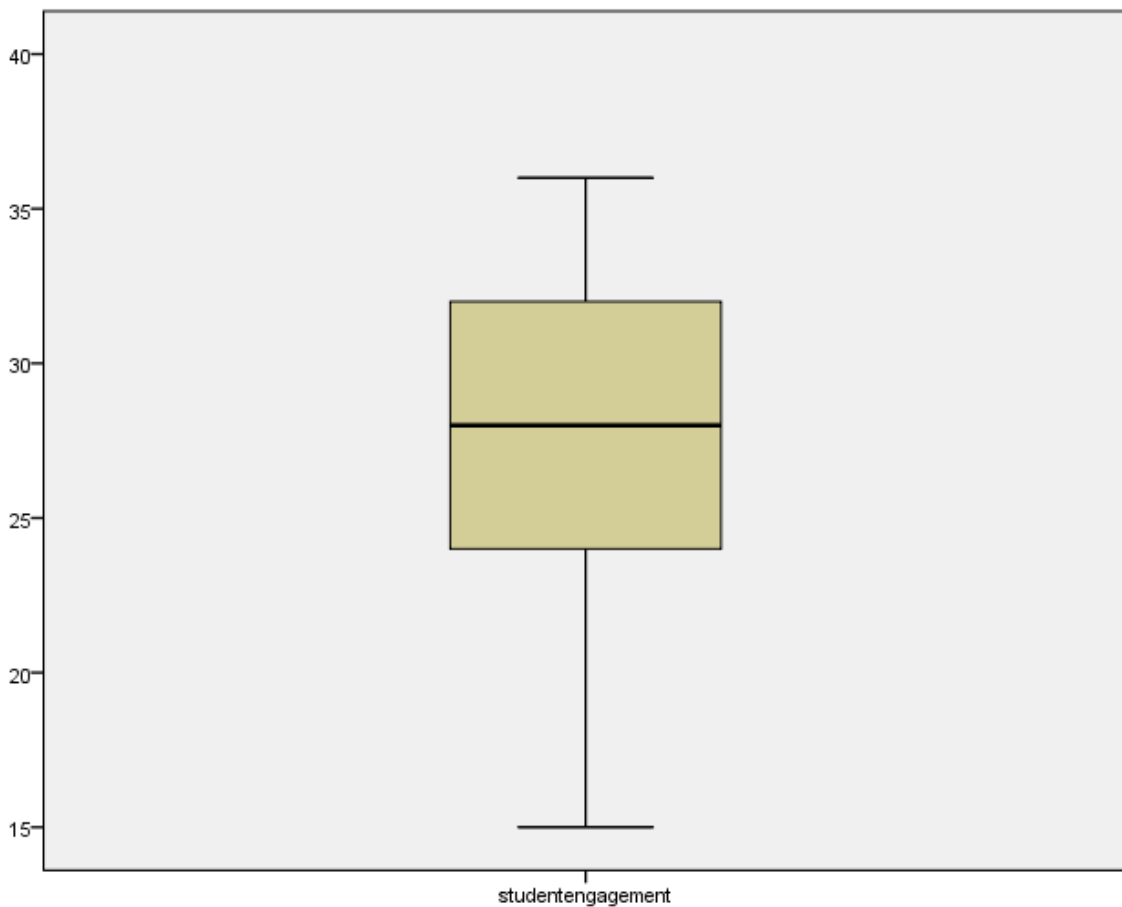


Student Engagement (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	1 . 5
.00	1 .
1.00	1 . 8
7.00	2 . 0111111
16.00	2 . 222222223333333
15.00	2 . 44444444445555
20.00	2 . 66666677777777777
11.00	2 . 8888889999
22.00	3 . 000000000000001111111
20.00	3 . 2222222222222223333
8.00	3 . 44444445
5.00	3 . 66666

Stem width: 10.00
Each leaf: 1 case(s)

Box and Whisker Display

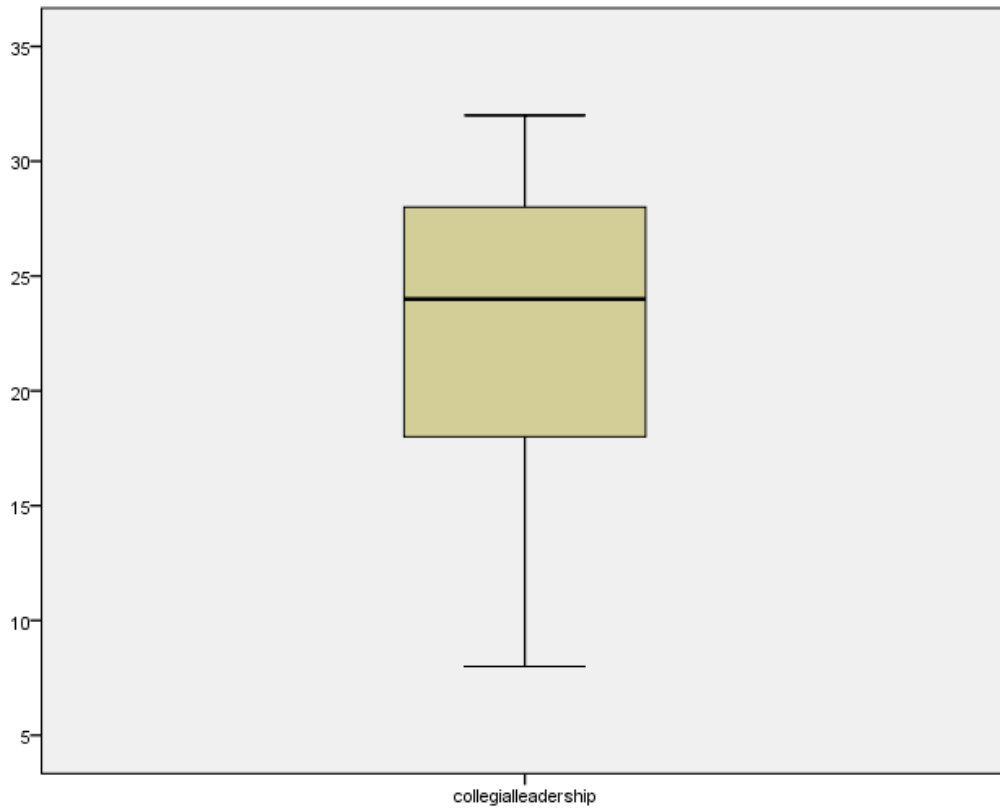


Collegial Leadership (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
.00	0 .
2.00	0 . 89
4.00	1 . 1111
8.00	1 . 22233333
6.00	1 . 445555
10.00	1 . 6666777777
12.00	1 . 888888999999
9.00	2 . 000001111
8.00	2 . 22223333
9.00	2 . 444444555
17.00	2 . 6666666777777777
21.00	2 . 88888888889999999999
11.00	3 . 00000001111
9.00	3 . 222222222

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

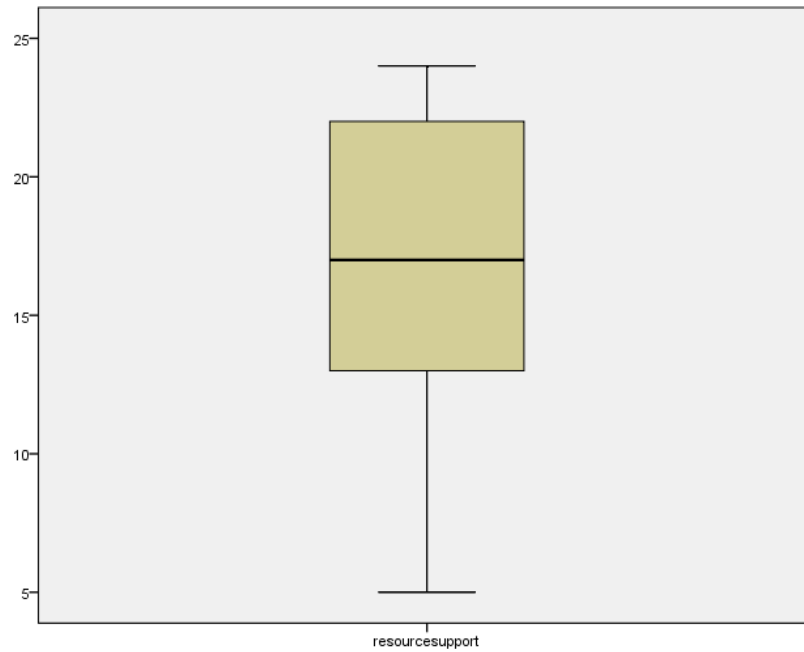


Resource Support (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	5 . 0
2.00	6 . 00
2.00	7 . 00
3.00	8 . 000
4.00	9 . 0000
5.00	10 . 00000
5.00	11 . 00000
6.00	12 . 000000
8.00	13 . 00000000
10.00	14 . 0000000000
4.00	15 . 0000
5.00	16 . 00000
9.00	17 . 000000000
12.00	18 . 000000000000
11.00	19 . 00000000000
2.00	20 . 00
4.00	21 . 0000
9.00	22 . 000000000
14.00	23 . 00000000000000
10.00	24 . 0000000000

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

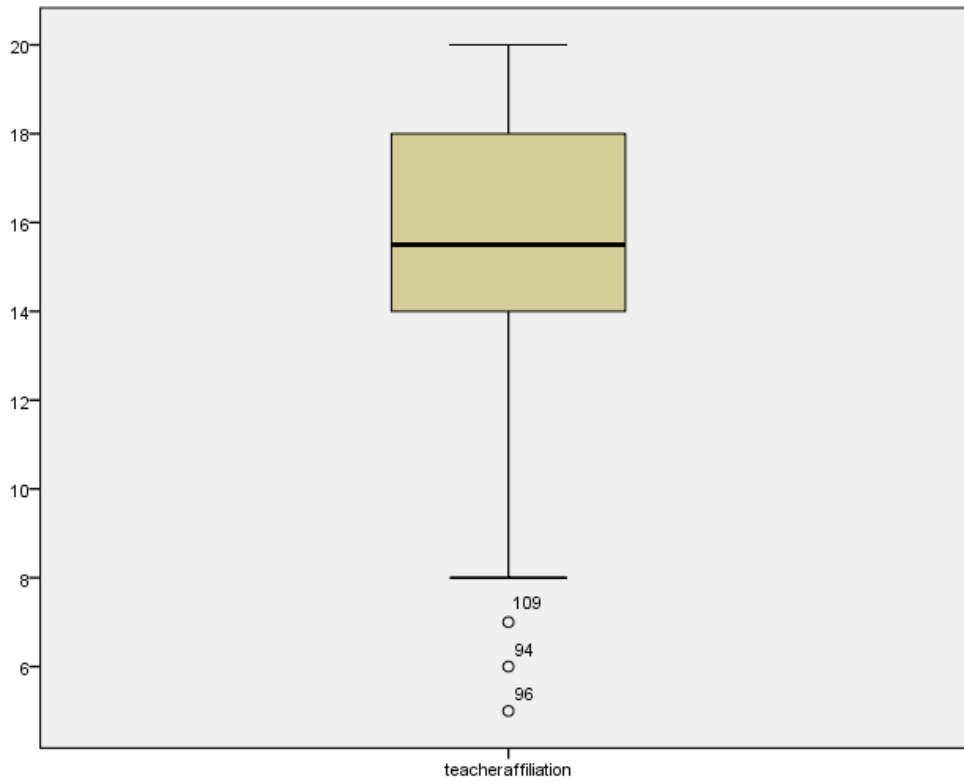


Teacher Affiliation (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
3.00	Extremes (= < 7.0)
2.00	8 . 00
.00	9 .
3.00	10 . 000
5.00	11 . 00000
4.00	12 . 0000
9.00	13 . 000000000
15.00	14 . 0000000000000000
22.00	15 . 000000000000000000000000
15.00	16 . 0000000000000000
9.00	17 . 000000000
13.00	18 . 0000000000000
11.00	19 . 00000000000
15.00	20 . 000000000000000

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

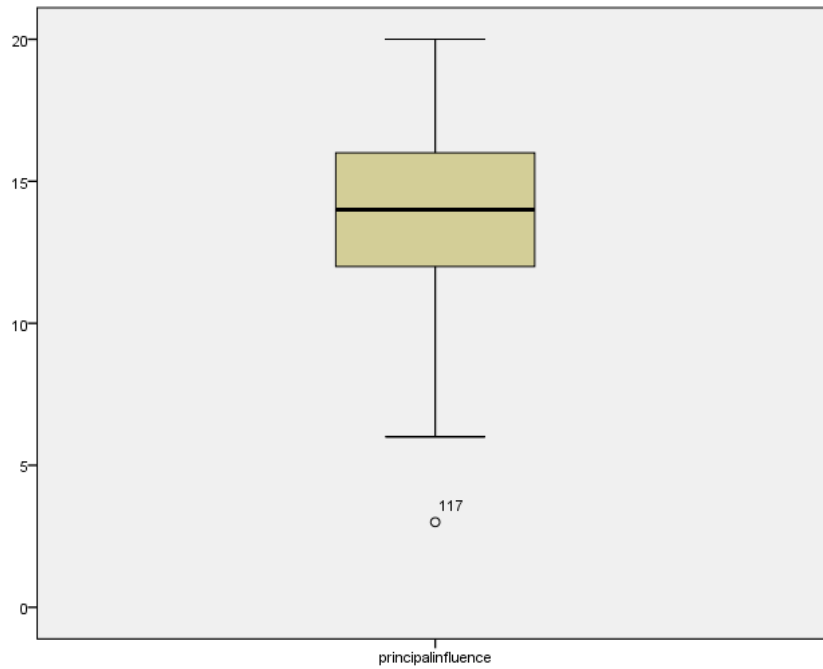


Principal Influence (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (= < 3.0)
4.00	6 . 0000
1.00	7 . 0
5.00	8 . 00000
4.00	9 . 0000
5.00	10 . 00000
10.00	11 . 0000000000
8.00	12 . 00000000
11.00	13 . 00000000000
18.00	14 . 000000000000000000
15.00	15 . 0000000000000000
17.00	16 . 00000000000000000
9.00	17 . 000000000
9.00	18 . 000000000
5.00	19 . 00000
4.00	20 . 0000

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

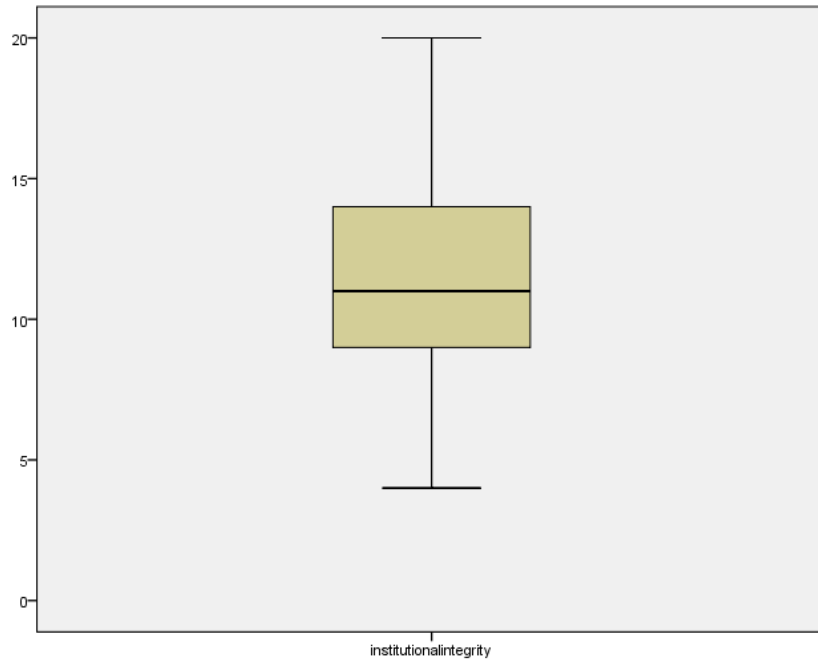


Institutional Integrity (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	4 . 0
3.00	5 . 000
5.00	6 . 00000
5.00	7 . 00000
7.00	8 . 0000000
11.00	9 . 00000000000
19.00	10 . 00000000000000000000
14.00	11 . 000000000000000
13.00	12 . 000000000000000
11.00	13 . 0000000000000
15.00	14 . 00000000000000000
8.00	15 . 00000000
3.00	16 . 000
3.00	17 . 000
4.00	18 . 0000
2.00	19 . 00
2.00	20 . 00

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

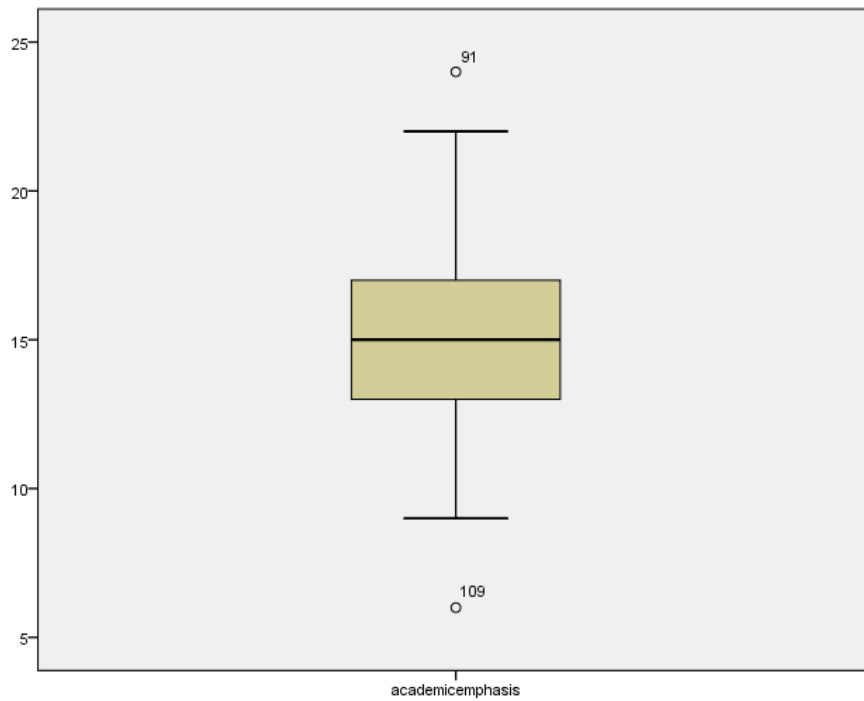


Academic Emphasis (Middle School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (<=6.0)
3.00	9 . 000
3.00	10 . 000
4.00	11 . 0000
9.00	12 . 000000000
16.00	13 . 0000000000000000
12.00	14 . 0000000000000
22.00	15 . 00000000000000000000
20.00	16 . 00000000000000000000
18.00	17 . 00000000000000000000
7.00	18 . 0000000
3.00	19 . 000
1.00	20 . 0
4.00	21 . 0000
2.00	22 . 00
1.00	Extremes (>=24.0)

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

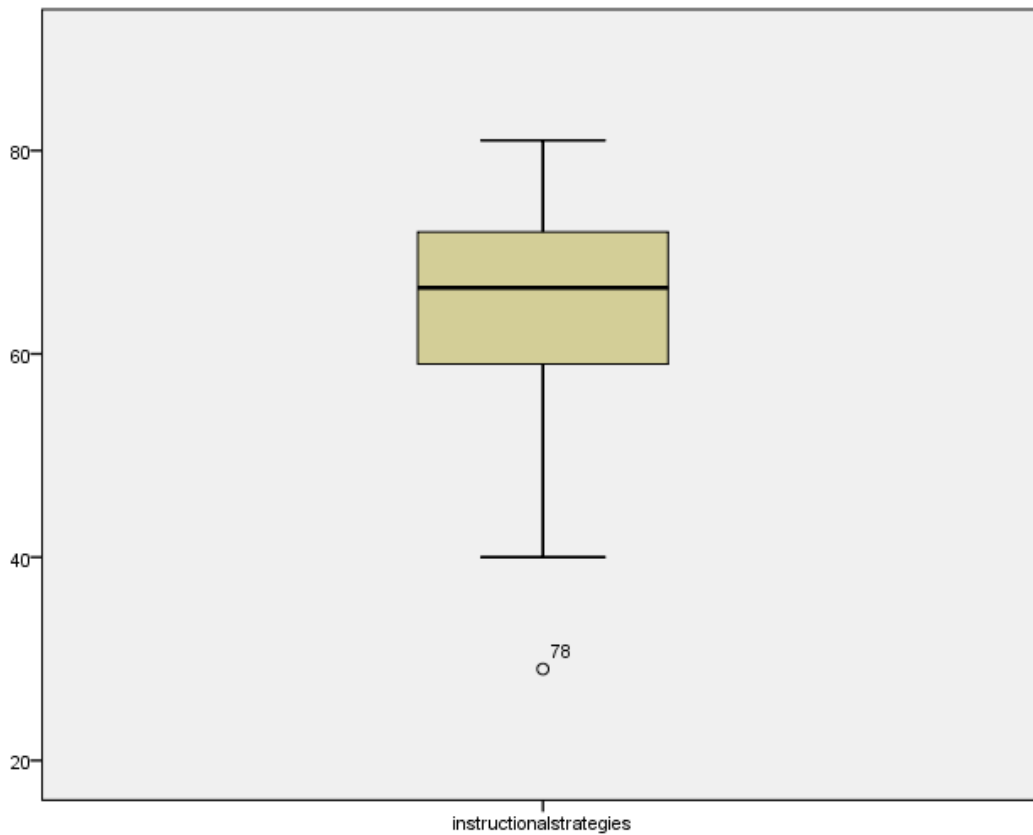


Instructional Strategies (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (= < 29)
2.00	4 . 03
4.00	4 . 5788
7.00	5 . 0112223
16.00	5 . 5666777888888899
19.00	6 . 0111111233333333444
24.00	6 . 55566666677888888999999
20.00	7 . 0000111122222233334
16.00	7 . 5555666667778889
7.00	8 . 0011111

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

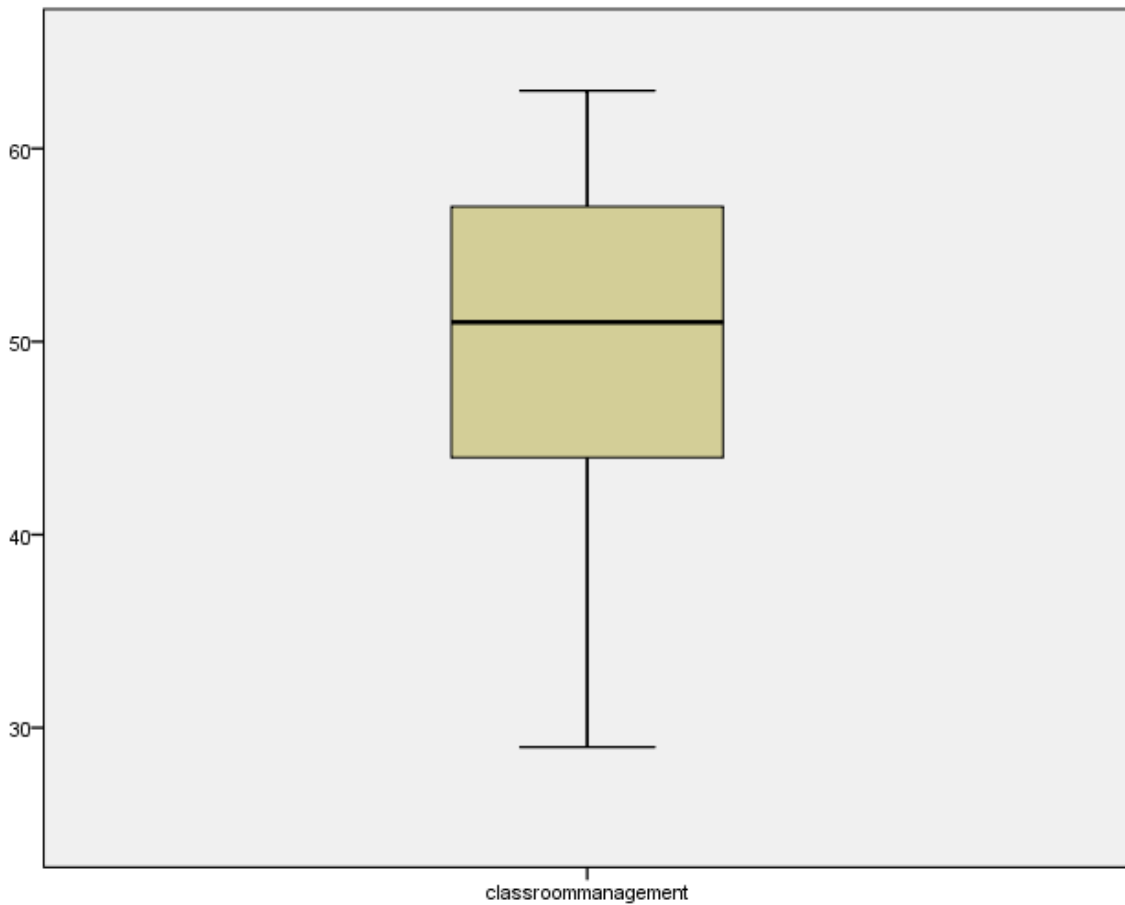


Classroom Management (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	2 . 9
6.00	3 . 112344
9.00	3 . 556677889
18.00	4 . 012222222233444444
17.00	4 . 555666777788899999
26.00	5 . 00000011222222333344444444
22.00	5 . 5556667777777888999999
17.00	6 . 000001112223333333

Stem width: 10.00
 Each leaf: 1 case(s)

Box and Whisker Display

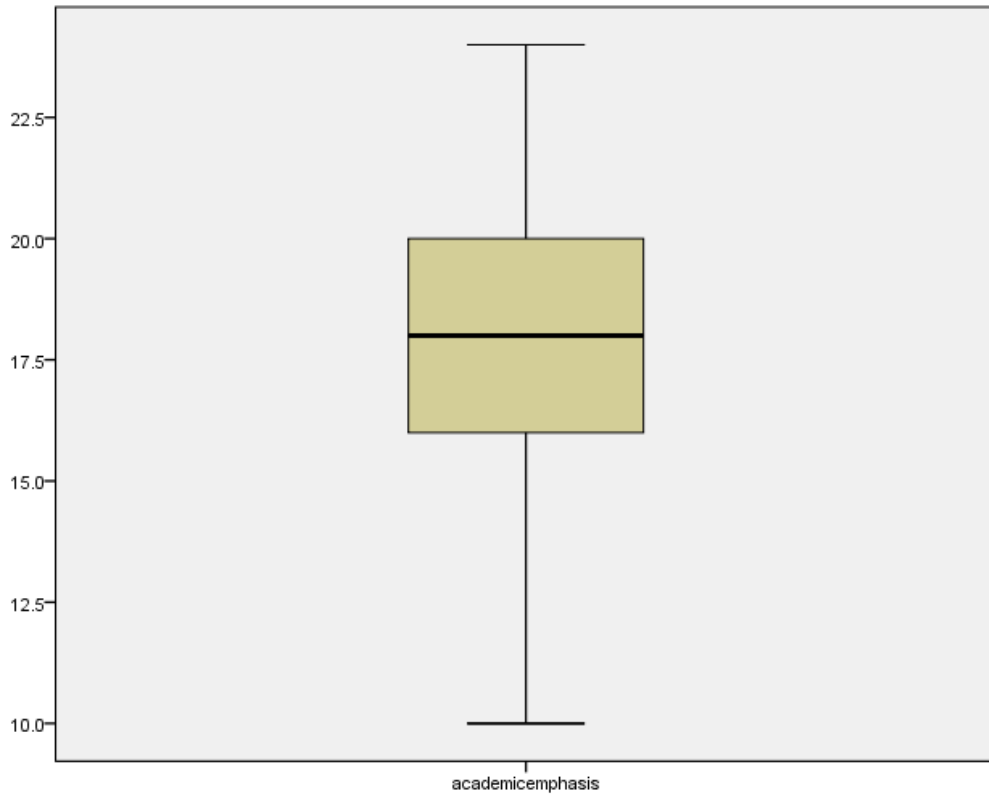


Academic Emphasis (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	10 . 0
4.00	11 . 0000
2.00	12 . 00
3.00	13 . 000
7.00	14 . 0000000
8.00	15 . 00000000
13.00	16 . 00000000000000
7.00	17 . 0000000
16.00	18 . 0000000000000000
15.00	19 . 0000000000000000
12.00	20 . 00000000000000
12.00	21 . 00000000000000
6.00	22 . 000000
5.00	23 . 00000
5.00	24 . 00000

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

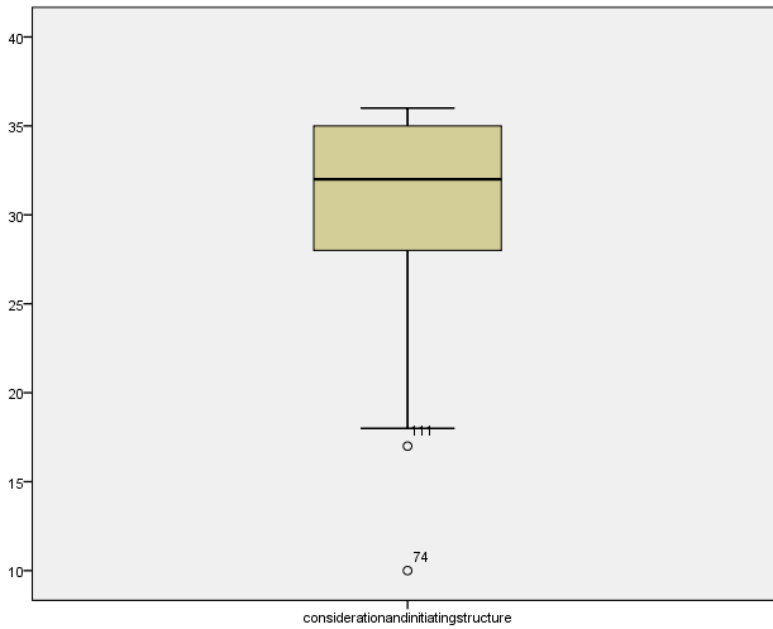


Consideration and Initiating Structure (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
2.00	Extremes (= < 17.0)
1.00	18 . 0
1.00	19 . 0
.00	20 .
2.00	21 . 00
2.00	22 . 00
2.00	23 . 00
.00	24 .
5.00	25 . 00000
7.00	26 . 0000000
5.00	27 . 00000
4.00	28 . 0000
11.00	29 . 00000000000
6.00	30 . 000000
8.00	31 . 00000000
7.00	32 . 0000000
7.00	33 . 0000000
15.00	34 . 000000000000000
10.00	35 . 0000000000
21.00	36 . 00000000000000000000

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

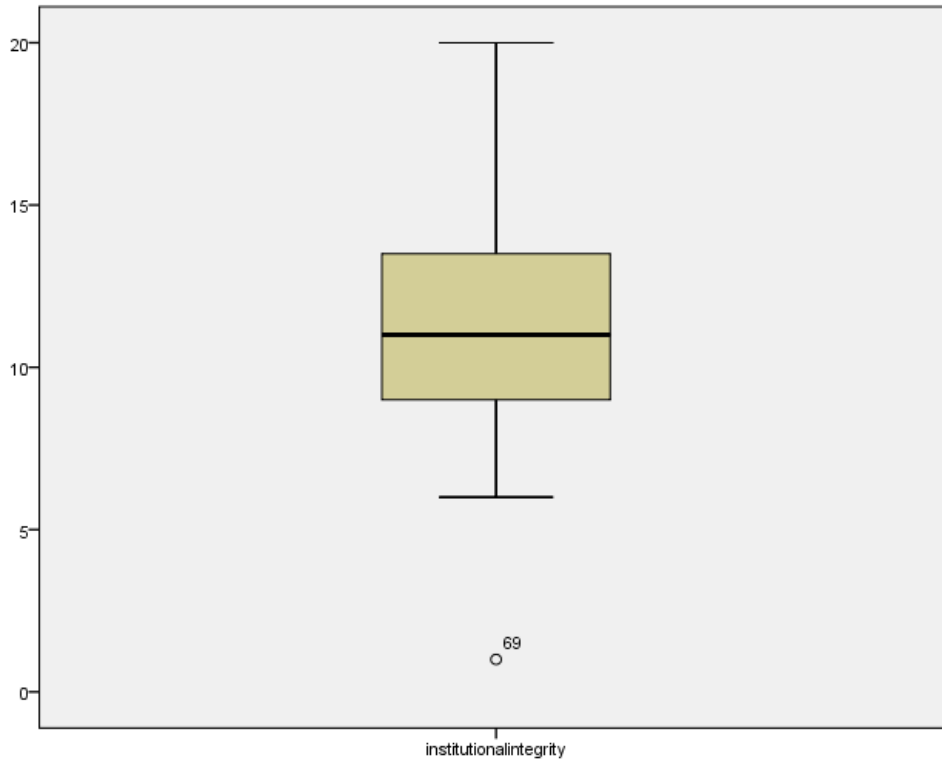


Institutional Integrity (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	Extremes (= < 1.0)
3.00	6 . 000
9.00	7 . 000000000
4.00	8 . 0000
15.00	9 . 0000000000000000
15.00	10 . 0000000000000000
14.00	11 . 0000000000000000
15.00	12 . 0000000000000000
11.00	13 . 000000000000
10.00	14 . 0000000000
6.00	15 . 000000
6.00	16 . 000000
1.00	17 . 0
4.00	18 . 0000
1.00	19 . 0
1.00	20 . 0

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display

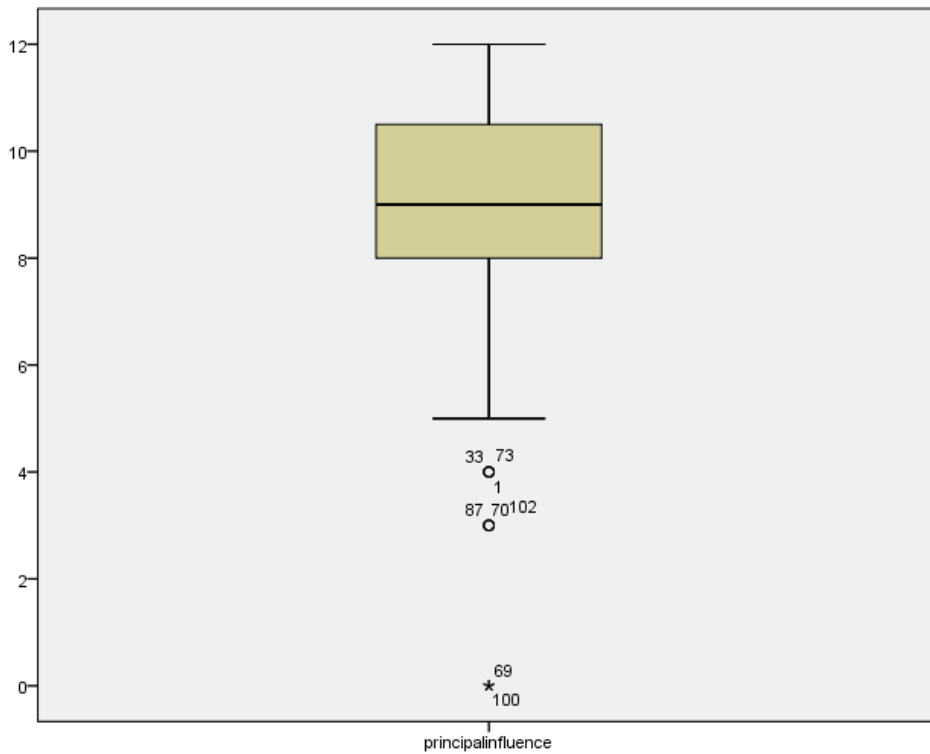


Principal Influence (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
8.00	Extremes (= < 4.0)
2.00	5 . 00
.00	5 .
6.00	6 . 000000
.00	6 .
10.00	7 . 0000000000
.00	7 .
18.00	8 . 000000000000000000
.00	8 .
23.00	9 . 00000000000000000000
.00	9 .
20.00	10 . 00000000000000000000
.00	10 .
15.00	11 . 0000000000000000
.00	11 .
14.00	12 . 00000000000000

Stem width: 1.00
Each leaf: 1 case(s)

Box and Whisker Display

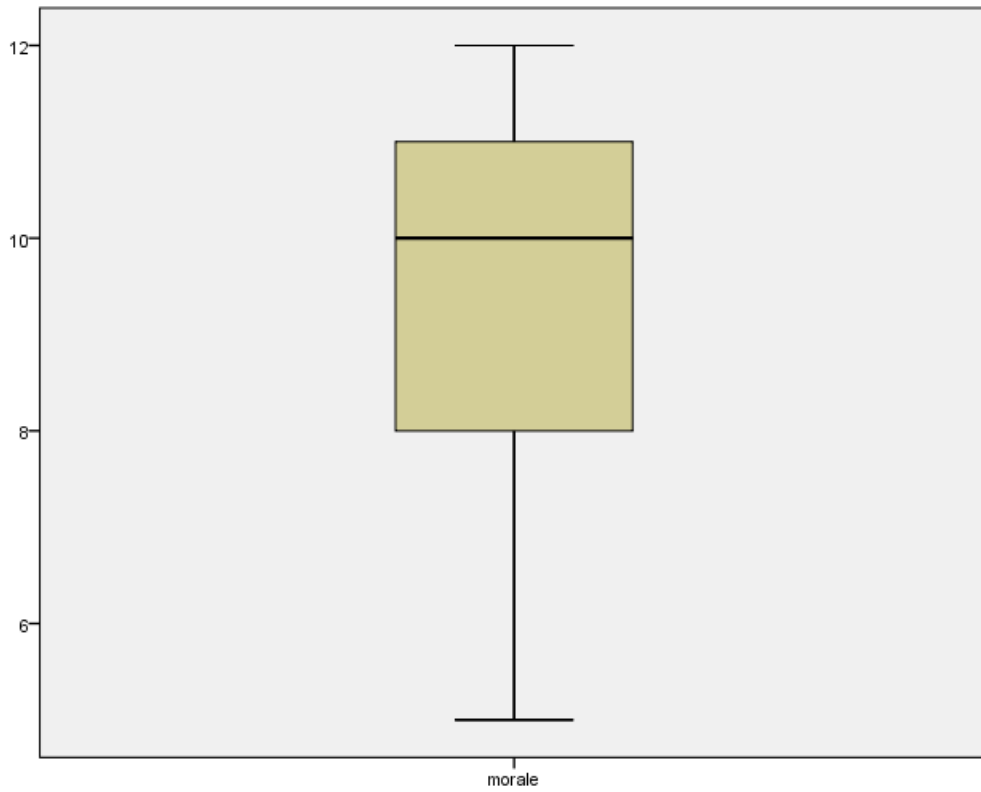


Morale (High School) Stem-and-Leaf Plot

Frequency	Stem & Leaf
1.00	5 . 0
.00	5 .
8.00	6 . 00000000
.00	6 .
10.00	7 . 0000000000
.00	7 .
13.00	8 . 000000000000
.00	8 .
21.00	9 . 00000000000000000000
.00	9 .
25.00	10 . 000000000000000000000000
.00	10 .
13.00	11 . 00000000000000
.00	11 .
25.00	12 . 000000000000000000000000

Stem width: 1.00
 Each leaf: 1 case(s)

Box and Whisker Display



BIOGRAPHICAL SKETCH

Gisela S. Saenz received her bachelor's degree in Business Administration from Pan American University, Edinburg, Texas in May 1983. She worked in the banking industry for several years. She obtained her teaching certificate through the alternative certification program at the University of Texas, Pan American. In August 1987 Gisela began her career in education, teaching kindergarten students. Her love of teaching and students motivated her to earn her Master of Education degree in May, 1995 from the University of Texas, Pan American, Edinburg, Texas. Gisela worked as an assistant principal for four years, and an elementary and middle school principal for ten years. In November, 2006 she became the assistant superintendent for curriculum and instruction in a large school district in South Texas. Her certificates include: elementary self-contained K-6th grade, Mid-Management Certificate, and Superintendent Certificate. Gisela earned the Doctor of Education degree from the University of Texas, Pan American in May, 2013. Gisela resides in Mission, Texas with her husband Michael R. She is the proud mother of Michael R. Saenz Jr. and Brian Alex Saenz.