An Analysis of the Relationship Between Principal Self-Efficacy and Collective Staff Efficacy in a Rural North Carolina School System

Douglas Ray Massengill Jr

Follow this and additional works at: https://digitalcommons.gardner-webb.edu/education_etd

Part of the Educational Leadership Commons
An Analysis of the Relationship Between Principal Self-Efficacy and Collective Staff Efficacy in a Rural North Carolina School System

By
Douglas R. Massengill, Jr.

A Dissertation Submitted to the
Gardner-Webb University School of Education
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

Gardner-Webb University
2018
Approval Page

This dissertation was submitted by Douglas R. Massengill, Jr. under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

____________________________________
Danny Stedman, Ed.D. 
Committee Chair

Date

____________________________________
Stephen Laws, Ed.D. 
Committee Member

Date

____________________________________
Dale Lamb, Ed.D. 
Committee Member

Date

____________________________________
Michael Metcalf, Ed.D. 
Committee Member

Date

____________________________________
Jeffrey Rogers, Ph.D. 
Dean of the Gayle Bolt Price School of Graduate Studies

Date
Acknowledgements

I would be remiss not to offer thanks to my wonderful family, specifically my wife Tiffany, for the support she provided, encouragement to continue to work, and her continual belief in me. Also, I would like to thank my daughters, Carleigh and Cadence, who provided me with the inspiration to finish this process.

I would like to thank my advisor and committee chair, Dr. Danny Stedman, who has provided calm in the storm, patience, coaching, consistent high expectations, and encouragement. Thank you for believing in me throughout this process.

I would like to thank Drs. Dale Lamb, Stephen Laws, and Michael Metcalf for serving on my committee and providing me with feedback that made this project better.

Finally, I would like to dedicate this dissertation to my family who passed on before its completion but inspired me to this point. To my grandparents, Charles and Pauline Barefoot, thank you for planting the seed that education is something that no one can ever take away from you – I have never forgotten those words. To my uncle, Charles G. Barefoot, thank you for picking up the mantle of my grandparents and encouraging me to push on and reminding me how proud you were; you will never know how much those words meant.
Abstract


The purpose of this research was to determine if a statistically significant relationship exists between principal self-efficacy and the collective staff efficacy in the public schools of a rural North Carolina school district. This study focused on overall efficacy beliefs of principals and teachers as well as efficacy beliefs related to the constructs of instructional leadership, instructional practices, school management, and classroom management. This study, conducted during the 2017-2018 academic year, included a population of 22 principals and 1,017 certified staff members in a rural North Carolina school district. The Principal Sense of Efficacy Scale by Tschannen-Moran and Gareis (2004) was used to measure principal sense of efficacy, and the Teacher Sense of Efficacy Scale by Tschannen-Moran and Woolfolk Hoy (2001) was used to measure teacher sense of efficacy.

Overall, one overarching conclusion was made: Those principals with a higher sense of self-efficacy were associated with a teaching staff with high self-efficacy. In other words, the interactions of the school leader and teacher are reciprocal in nature. This confirms the work of Bandura (1986) who theorized that the efficacy of a teacher could influence the efficacy of a principal and vice-versa.

Second, the study found that there was a positive correlation between high principal self-efficacy in instructional leadership and school management and high teacher self-efficacy in instructional practice and classroom management respectively.

Study results suggest that measuring principal and teacher efficacy, particularly in terms of the constructs of instructional leadership and practice and school and classroom management, may be helpful in measuring and leading meaningful school improvement. Additionally, school boards of education and senior district administrative staff should reflect on self-efficacy in their hiring decisions for school principals. Similarly, school principals should consider the efficacy of instructional personnel as part of the school level hiring process.
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Overview</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>3</td>
</tr>
<tr>
<td>Research Question</td>
<td>7</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>7</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>8</td>
</tr>
<tr>
<td>Organization of the Study</td>
<td>8</td>
</tr>
<tr>
<td>Chapter 2: Literature Review</td>
<td>10</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>10</td>
</tr>
<tr>
<td>Social Cognitive Theory</td>
<td>10</td>
</tr>
<tr>
<td>Self-Efficacy Theory</td>
<td>12</td>
</tr>
<tr>
<td>Self-Efficacy Beliefs of Principals and Teachers</td>
<td>17</td>
</tr>
<tr>
<td>The Relationship between Principal and Teacher Self-Efficacy Beliefs</td>
<td>24</td>
</tr>
<tr>
<td>Principal Leadership Behaviors and Teacher Self-efficacy</td>
<td>26</td>
</tr>
<tr>
<td>Summary</td>
<td>31</td>
</tr>
<tr>
<td>Chapter 3: Methodology</td>
<td>33</td>
</tr>
<tr>
<td>Review of Related Literature</td>
<td>34</td>
</tr>
<tr>
<td>Population and Sample</td>
<td>35</td>
</tr>
<tr>
<td>Data Collection</td>
<td>36</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>37</td>
</tr>
<tr>
<td>Chapter 4: Results</td>
<td>39</td>
</tr>
<tr>
<td>Introduction</td>
<td>39</td>
</tr>
<tr>
<td>Response Rate</td>
<td>39</td>
</tr>
<tr>
<td>Results of Data Analysis</td>
<td>39</td>
</tr>
<tr>
<td>Summary</td>
<td>46</td>
</tr>
<tr>
<td>Chapter 5: Discussion</td>
<td>48</td>
</tr>
<tr>
<td>Overview</td>
<td>48</td>
</tr>
<tr>
<td>Background</td>
<td>48</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>51</td>
</tr>
<tr>
<td>Review of Methodology</td>
<td>51</td>
</tr>
<tr>
<td>Research Findings</td>
<td>52</td>
</tr>
<tr>
<td>Conclusions</td>
<td>53</td>
</tr>
<tr>
<td>Discussion</td>
<td>54</td>
</tr>
<tr>
<td>Limitations</td>
<td>55</td>
</tr>
<tr>
<td>Recommendations for Practice</td>
<td>55</td>
</tr>
<tr>
<td>Recommendations for Future Study</td>
<td>58</td>
</tr>
<tr>
<td>References</td>
<td>60</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>A Principal Self-Efficacy Scale</td>
<td>67</td>
</tr>
<tr>
<td>B Instrument Author Permission Letter</td>
<td>69</td>
</tr>
<tr>
<td>C Directions for Scoring PSES</td>
<td>71</td>
</tr>
<tr>
<td>D Teacher Self-Efficacy Scale</td>
<td>73</td>
</tr>
<tr>
<td>E Directions for Scoring TSES</td>
<td>75</td>
</tr>
<tr>
<td>F School District IRB Approval</td>
<td>77</td>
</tr>
<tr>
<td>G Principal Letter of Invitation to Participate</td>
<td>79</td>
</tr>
</tbody>
</table>
H Informed Consent Form .................................................................81
I Teacher Letter of Invitation to Participate ......................................85
J Invitation to Participate Follow-Up Emails ....................................87

Tables
1 Principal Self Efficacy Beliefs Frequency Data ..................................40
2 Teacher Self Efficacy Beliefs Frequency Data ....................................40
3 Principal Self-Efficacy Chi^2 Goodness of Fit ......................................41
4 Teacher Self-Efficacy Chi^2 Goodness of Fit ......................................41
5 Relationship Between Principal Self-Efficacy and Teacher Self-Efficacy Beliefs ..........................................................41
6 Principal Instructional Leadership Self-Efficacy Frequency Data .............42
7 Teacher Instructional Practice Self-Efficacy Frequency Data ..................42
8 Principal Instructional Leadership Self-Efficacy Chi^2 Goodness of Fit .......43
9 Teacher Instructional Practice Self-Efficacy Chi^2 Goodness of Fit ..........43
10 Relationship Between Principal Self-Efficacy for Instructional Leadership and Teacher Self-Efficacy for Instructional Practice Beliefs ..........44
11 Principal Self-Efficacy for School Management Frequency Data ..........44
12 Teacher Self-Efficacy for Classroom Management Frequency Data .......44
13 Principal Self-Efficacy for School Management Chi^2 Goodness of Fit ....45
14 Teacher Self-Efficacy for Classroom Management Chi^2 Goodness of Fit ....45
15 Relationship Between Principal Self-Efficacy for School Management and Teacher Self-Efficacy for Classroom Management Beliefs ........46
Overview

Starting with the No Child Left Behind Act (NCLB, 2006) and now with the newest authorization of the same law, the Every Student Succeeds Act (ESSA, 2015), the terms accountability, adequate yearly progress, growth, proficiency, and subgroups have become pervasive in the field of education. This new era of accountability has transformed the role and expectation of the school principal, transitioning the role from one of primary managerial responsibility to a role where the principal is responsible for leading the effort to raise student achievement and improve school effectiveness (Tschannen-Moran & Gareis, 2004).

As part of this new climate of increased expectations, principals are charged with a myriad of educational leadership roles. They are expected to be instructional and curriculum leaders and assessment experts on top of the sometimes overwhelming roles of being “disciplinarians; community builders; public relations experts; budget analysts; facility managers; special program administrators; and expert overseers of legal, contractual, and policy mandates and initiatives” (National Association of Secondary School Principals, National Association of Elementary School Principals [NASSP, NAESP], 2013, p. 2). This overwhelming job title begins to fully explain the complex role of the principal and provides “overdue recognition to the indispensable role and mounting demands on principals” (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005, p. i).

Camburn, Rowan, and Taylor (2003) pointed out that state and federal demands for transformation in schools have made effective school leadership key to successful schools. Without principal leadership to guide staff, it is doubtful that educators would
be able to navigate the complex demands of the new accountability driven model and effectively meet the academic needs of students (Tschannen-Moran & Gareis, 2004).

Educational research has consistently shown that most variables in a school, when considered separately, have little impact on learning. These variables only have a major affect when smaller, individual variables combine in a way that allows for maximum benefit. Creating the conditions where this optimization can be achieved is the primary responsibility of the principal (Wallace Foundation, 2011).

In terms of the success of individual principals, Bandura and Locke (2003) have found that the self-efficacy beliefs of an individual contribute significantly to the level of motivation and performance of the individual. They stated that an individual’s perceived self-efficacy is the belief of that person about their skills, expertise, and capabilities to produce a desired outcome. Bandura (1977a), in his social cognitive theory, defined efficacy as “beliefs in one’s capability to organize and execute the courses of action required to produce given attainments” (p. 200).

Much research has been conducted to examine the sense of efficacy of teachers as it relates to student achievement (Ashton & Webb, 1986; Darling-Hammond, 1999; Gibson & Dembo, 1984; Hoy & Woolfolk, 1993; Schmoker, 2006; Tschannen-Moran & Wolfolk Hoy, 2001). The majority of this research has demonstrated a relatively clear positive correlation between teacher efficacy and student achievement.

Using Bandura’s (1997) self-efficacy construct, it can be determined that while often working alone in a classroom, teachers are part of a larger social construct and organization. In his social cognitive theory, Bandura (1986) recognized the links between the collective efficacy of an organization and the personal individual efficacy of an organization. Bandura (1997) defined the construct of “collective efficacy” as a
“group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments” (p. 477). In other words, teachers who are working in a school are likely to be influenced by the collective efficacy of the entire faculty. This idea has been supported in the research of others, including Goddard, Hoy, and Woolfolk Hoy (2000), Goddard (2002), and Tschannen-Moran and Barr (2004), who found that a faculty’s sense of collective efficacy is an important variable in explaining variance in student achievement over and above other factors such as socioeconomic status and previous school achievement. It appears that collective efficacy of a school’s faculty, whether negative or positive, is associated with student achievement.

An ever-increasing body of research has shown that principal self-efficacy has a direct correlation to school effectiveness (Lovell, 2009; Walker, 2009). More recently, research is emerging that seeks to determine the impact of principal self-efficacy on collective staff self-efficacy. Research has shown an association between principals with a high sense of self-efficacy and their respective staff members exhibiting a high sense of self-efficacy (Nikolas, 2013). While other examples exist of studies that examine the effect of principal self-efficacy on collective staff-efficacy, these studies are not as abundant as those studies dealing with teacher efficacy or principal efficacy alone.

**Statement of the Problem**

According to Bandura (1986), of all the thoughts that affect human functioning and standing at the very core of social cognitive theory are *self-efficacy* beliefs: “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1997, p. 391). Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment. This is
because unless people believe their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties. This content holds that self-efficacy beliefs touch virtually every aspect of people’s lives—whether they think productively, self-debilitating, pessimistically or optimistically; how well they motivate themselves and persevere in the face of adversities; their vulnerability to stress and depression; and the life choices they make. Self-efficacy is also a critical determinant of self-regulation. Bandura’s (1977a) research would contend that the success of an individual might determine outcomes more accurately than other predictors such as amount of education, training, or experience.

Bandura’s (1997) key contentions in regard to the role of self-efficacy beliefs in human functioning is that “people’s level of motivation, affective states, and actions are based more on what they believe than on what is objectively true” (p. 2). Bandura (1997) contended that it is for this reason that how people behave can often be better predicted by the beliefs they hold about their capabilities than by what they are actually capable of accomplishing, for these self-efficacy perceptions help determine what individuals do with the knowledge and skills they have. This contention helps explain why an individual’s behaviors are sometimes disjoined from their actual capabilities and why their behavior may fluctuate widely even when they have similar experience and skills. For example, many talented individuals undergo frequent (and sometimes devastating) stretches of self-doubt about capabilities they undoubtedly possess, just as many individuals are self-confident about what they can accomplish despite possessing an ordinary repertoire of skills. Belief and reality are infrequently perfectly matched, and individuals are normally guided by their beliefs when they interact with the world. As a consequence, people’s accomplishments are generally better predicted by their self-
efficacy beliefs than by their previous attainments, knowledge, or skills. Of course, no amount of confidence or self-appreciation can produce success when requisite skills and knowledge are absent.

There is currently little research on the principal’s self-efficacy and the relationship that it has with the collective self-efficacy of a school’s faculty. Researchers such as Goddard et al. (2000) have found that elements of a school’s culture and leadership that impact the collective efficacy of teachers include teacher participation in decisions that affect instruction. Additionally, researchers have found that factors such as shared school goals, empowering school leadership, administration support for teachers, teacher opportunity to influence decision-making, and the ability to manage the classroom all impact the collective efficacy of a staff (Ross, Hogaboam, & Gray, 2004; Ware & Kitsantas, 2007). Most, if not all, of these areas can be influenced by the school principal. Furthermore, research studies have shown that principals impact student achievement indirectly through their influence on school culture and the impact of school culture on teacher sense of collective efficacy, which then impacts student learning (Ross & Gray, 2006).

Studies have focused on the principal’s leadership for effecting and sustaining school improvement (Copland, 2003) or the principal’s efforts to raise performance through the betterment of school professional development programs (Youngs & King, 2002). Other studies have explored the ability of the principal to affect the collective efficacy of a staff through the use of a transformational leadership style (Ross & Gray, 2006). In another recent study, Goddard (2002) explored the principal’s implementation of distributed leadership for issues of concern to teachers. None of these studies fully explores the role a principal’s own self-efficacy beliefs have on his/her ability to increase
collective staff efficacy.

Bandura (1997) stated in his work on self-efficacy, “effective functioning requires both skills and the efficacy beliefs to use them well” (p. 37). Based on this construct, one could extrapolate that a principal with a higher sense of self-efficacy is likely to have a greater effect on collective staff efficacy than a principal with a low sense of self-efficacy and, in turn, a greater impact on student achievement results. A principal who has a high sense of efficacy is more likely to persevere when presented with a challenge, show resilience in the face of adversity, and accomplish more at a higher level (Bandura, 1997).

An ever-increasing number of researchers, including Berry, Daughtrey, and Wieder (2010) and Klein and Rice (2012), have shown that the majority of schools in the United States are unprepared to provide students with the necessary skills they need to be lifelong learners who are prepared for 21st century life. Furthermore, they highlight the fact that self-efficacy of public school teachers is measurably lower than that of teachers in other schools in the U.S., and there is a lack of measurable leadership practices by principals. They state that the current paradigm in education is counterproductive in meeting the needs of today’s students. With a gap in achievement and fears about the direction of public schools now being pervasive in the public, alternative forms of education increasingly threaten public schools. Despite these challenges, researchers such as Datnow (2005) and Klein and Rice have explained that quality principals with high self-efficacy have the ability to embolden and strengthen the U.S. public school system.

Goddard (2002) suggested, in the discussion of his research on the organizational influences on teachers, the need for further “research on principal efficacy. To be sure, it
is quite possible that a principal’s efficacy for school leadership has a substantial influence on the principal’s propensity to engage in behaviors that build collective efficacy and foster student achievement” (p. 182). In order to help fill a void in the literature, this study sought to collect further information about the relationship of principal sense of self-efficacy in relation to the collective efficacy of the faculty.

**Purpose of the Study**

The purpose of this study was to analyze the relationship between principal self-efficacy and the collective efficacy of the faculty, over and above other independent and control variables. To help guide and focus this research, the research question that follows was developed.

**Research Question**

To what extent does principal self-efficacy impact collective teacher self-efficacy?

**Limitations of the Study**

All studies have limitations that need to be considered when attempting to generalize results from one population to another. This study has several limitations.

1. These results are not generalizable to schools other than the population. Even within the population used in this study, there are in-school differences that may account for the results other than those variables included in the study.

2. Research based on surveys is limited by the response rate. A low response rate impacts the ability to generalize the data to the population.

3. Information obtained via survey can be subject to overrepresentation or underrepresentation to an unknown degree. Respondents may not fully understand the survey instrument or have the acumen necessary to answer the
questions accurately.

4. There are other control variables that can impact collective efficacy other than those included in the study. Schools, particularly public schools, differ in many ways and all possible variables could not realistically be factored into the study.

**Definition of Terms**

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

**Total collective efficacy of the faculty.** For the purpose of this study, total collective efficacy is the average of scores on the 12 prompts of the Teacher Sense of Efficacy Scale (TSES; Tschannen-Moran & Gareis, 2004) from each teacher respondent. There are three constructs in the survey – Efficacy for Classroom Management, Efficacy for Instructional Practices, and Efficacy for Student Engagement. There are four questions for each construct and each teacher’s average score for each construct will be used.

**Total self-efficacy of the principal.** For the purpose of this study, total self-efficacy of the principal is the average of the 18 items on the Principal Sense of Efficacy Scale (PSES) developed by Tschannen-Moran and Gareis (2004) for all principal participants. There are three constructs embedded in the questions of the PSES – Efficacy for Management, Efficacy for Instructional Leadership, and Efficacy for Moral Leadership. The scores of the six questions for each of the three constructs will be averaged to determine the self-efficacy of each principal in each area.

**Organization of the Study**

This study is organized into five chapters. Chapter 1 contains the background information for the study, purpose, rationale, limitations, and definitions. Chapter 2
reviews the literature on the topics of student achievement, efficacy, leadership, and related areas. Chapter 3 presents the research methods and data collection procedures, a description of the participants, and analysis of the data. Chapter 4 consists of the findings and further data analysis of the research questions. Chapter 5 contains the summary of the findings with the discussion of the implications of the research as well as suggestions for further research.
Chapter 2: Literature Review

Theoretical Framework

This study is based on the theoretical foundation of the self-efficacy theory that is derived from Bandura’s (1986) social cognitive theory. The chapter provides a review of the literature related to social cognitive theory, self-efficacy theory, the relevance of self-efficacy to the field of education, and self-efficacy as it relates to the academic setting to include the constructs of student efficacy, teacher efficacy, collective efficacy, and principal efficacy. This chapter further provides a review of the literature related to the importance of leadership in the academic setting. This review explores the importance of effective leadership and its impact on teacher perceptions of their efficacy.

Chapter 2 is divided into sections that include (a) social cognitive theory, (b) self-efficacy theory, (c) self-efficacy beliefs of principals and teachers, and (d) the relationship between principal and teacher self-efficacy beliefs. The review of literature in these four sections relates directly to the study’s research question.

Social cognitive theory. The core of Bandura’s (1989a) social cognitive model is the concept of triadic reciprocal causation. This is a multi-directional model that suggests that an individual’s actions and choices are affected by environmental, behavioral, and interpersonal factors. The premise of this model suggests that, in effect, individuals take an active role in making things happen. This premise is what Bandura (1986) titled “human agency.” Bandura (1986) held that in addition to other personal factors, individuals possess self-beliefs that enable them to exercise some degree of control over their thoughts, feelings, and actions. According to Bandura (1986), this degree of control allows individuals to affect how others think, believe, and feel, which will in turn affect how they behave.
Bandura’s (1986) theory of triadic reciprocal causation is a relatively new development in behavior theory, emerging during the late 1960s through the early 1970s. Research during this time period has allowed researchers interested in the causality of human behavior to shift their focus from internal determinates to external influences. In fact, Skinner in his review of Bandura held that human behavior is “shaped and controlled by environmental contingencies” (Bandura, 1997, p. 9). Bandura (1986) held that behavior is a specific response to environmental influences or factors. Bandura’s (1986) work led behaviorists to begin to suggest that behavior is influenced by more than just environmental or situational factors. In other words, some began to contend that behavior is not a passive response but is a result of an individual’s reaction to the environment in which they are functioning. Bandura (1977b) came to represent this idea as $B=f(P, E)$. This formula holds that behavior was a result of a function of personal and environmental factors. As behavior theory has continued to develop and evolve, a model that recognized bidirectional influences of personal and environmental factors was developed. This model is represented as $B=f(P \leftrightarrow E)$. In this updated formula, the function acknowledges the personal factors and the environmental factors; however, this model failed to recognize the importance of the behavior in the interaction. Going further, Bandura (1977b) stated that in the model, “persons and situations are depicted as independent causes of behaviors as though it were only a product that does not figure into the casual process” (p. 9).

Bandura (1982) recognized the importance of cognitive and social dimensions to behaviorist positions. To acknowledge behavior factors, personal factors, and environmental factors as determinants of each other, Bandura (1982) developed a theory that took each into account. This led to Bandura’s (1977a) development of triadic
reciprocal causality. In Bandura’s (1977a) theory of what was then known as social learning theory, these three sources had operated differently dependent upon the setting and different behaviors. In other words, Bandura (1977b) held that there exists a dynamic interrelated relationship between these three factors where in one setting environmental factors may exert the most powerful influence but, in another setting, personal factors may exert the most powerful influence. According to Bandura (1986), this interaction can be represented as a triangle with behavior at one vertex, environment at one vertex, and personal at the last. This model became known as triadic reciprocal causation.

The importance of the social cognitive theory to this study’s research question is related to the importance that this model placed on self-regulatory capacity. This theory supports that individuals are able to exercise control over their behavior and over their environments. Furthermore, Bandura (1995) held that individuals strive for control over life circumstances, including environmental ones, as they can give individuals innumerable personal and social benefits.

**Self-efficacy theory.** In his preeminent work on self-efficacy, Bandura (1977a) developed a social cognitive model of behavior that includes self-efficacy as a major construct. Indeed, self-efficacy grows out of Bandura’s (1977a) original social learning theory. Bandura (1986) has defined self-efficacy as a sense of confidence of capability regarding the performance of a specific task. This definition holds that an individual’s sense of their confidence of capability in the completion of a task can have an impact on how well one actually performs, because effective functioning requires competencies, skills, and a strong self-belief. In general, the theory of self-efficacy suggests that “individuals will work hard when they believe that they are capable of being successful,
the task is not too difficult, they have had success at completing similar tasks, and they have good models of success” (Hoy & Miskel, 2008, p. 168).

Bandura (1977a, 1977b, 1986, 1988, 1991, 1993, 1995, 1997) is the foremost researcher regarding self-efficacy. His research has consistently shown the many ways in which one’s self-efficacy will or can influence one’s actual performance. Bandura (1988) stated that one’s expectations about cause and effect result from their experiences and that the most powerful efficacy beliefs are situation specific. It should be noted that self-efficacy does not refer to ability or skill but to what one believes one can do with the skill and competencies that individual possesses. Even further, Bandura (1997) suggested that learning, choice making, and motivation are affected by an individual’s self-efficacy beliefs.

Additionally, it is suggested that individuals with a high degree of self-efficacy often approach tasks differently from individuals with low self-efficacy beliefs. The individuals with high self-efficacy view challenges as opportunities to master rather than dangers to avoid. In turn, individuals with high self-efficacy tend to demonstrate a greater intrinsic interest, set more challenging goals, recover confidence after failure more quickly, and attribute failure to insufficient effort (Bandura, 1988).

Researchers Tschannen-Moran and Gareis (2004) noted that self-efficacy beliefs are often content specific. It is important to note that Bandura (1977a) made important distinctions between self-efficacy and self-esteem. Self-efficacy focuses on one’s judgment of self-capability, whereas self-esteem focuses on one’s self-worth. Bandura (1977a) contended that there is no direct relationship between one’s concept of capability and one’s concept of self-worth. Researchers Pajares and Kranzler (1995) held that self-efficacy is highly predictive of behavior. Conversely, self-esteem has not been found to
be a significant predictor of behavior, particularly when researchers factor out the influence of efficacy.

According to Bandura (1977b), there are four primary sources of individual self-efficacy. These include mastery experience, vicarious experience, verbal persuasion, and physiological states. Mastery experience is the most influential source of efficacy. Past successes and failures have a direct impact on an individual’s self-efficacy. Bandura (1997) held that successful experiences at a specific task are associated with an increase in self-efficacy in future situations. Hoy and Miskel (2008) conversely suggested that recurrent failures and self-doubt will decrease an individual’s self-efficacy.

Similarly, verbal persuasion can be a very powerful source of self-efficacy. The concept of verbal persuasion relates to encouraging or reinforcing the idea that one is capable of completing a task. Bandura (1997) warned that verbal persuasion has limited power unless the verbal acknowledgements are realistic and the task is attainable.

The fourth source of self-efficacy is related to emotional arousal. According to Hoy and Miskel (2008), individuals will make judgments about anticipated performance based on the potential for positive results such as excitement and enthusiasm and on negative factors such as fear, exhaustion, stress, and anxiety. Further, researchers have hypothesized that negative emotions can reduce one’s self-efficacy (Bruning, Schraw, Norby, & Ronning, 2011); however, Bandura (1997) suggested that if an individual is given the correct coping skills, self-efficacy can be improved or enhanced.

Bandura (1995) also stipulated that there are four major processes by which efficacy beliefs regulate human functioning (p. 5). These processes include cognitive, motivational, affective, and selection process. These processes identify ways in which self-efficacy beliefs affect an individual’s psychological well-being and functioning.
With regard to the cognitive processes that affect behavior, Bandura (1995) stated that “most courses of action are initially organized in thought” (p. 6). These thought processes help individuals establish goals by providing a method to evaluate their capabilities or competencies. Research has also indicated that these desires to feel competent or effective are so strong, they can be perceived as a fundamental human need (Deci, 1995). Consequently, the higher an individual perceives these capabilities or competencies, the higher the goals an individual sets and the more committed they are (Bandura, 1989a). Likewise, when confronted with difficult problems, high self-efficacious individuals often devote large amounts of cognitive resources to mastering the situation, whereas individuals with low self-efficacy tend to spend more time and intellectual resources worrying about the negative outcomes. Moreover, individuals who repeatedly visualize successful outcomes may experience enhanced performance in the future (Bandura, 1989b).

Motivational processes involve self-efficacy as a form of regulation. This is witnessed through the processes by which self-efficacy beliefs affect the cognitive approaches that one might use to establish, evaluate, and achieve specific goals. Bandura (1986) identified three theories associated with cognitive motivation. These theories are attribution theory, expectancy-value theory, and goal theory. Self-efficacy is related to attribution in that an individual with high self-efficacy beliefs will attribute their failures to a lack individual effort or factors beyond his or her control (Bandura, 1986); however, individuals with low self-efficacy beliefs internalize the failure and view it as a lack of an individual’s personal ability. With regard to expectancy-value theory, individuals act on what they expect to occur and to the degree they value the outcome. The expectations are based, in part, on the capability beliefs of the individual. As a result, self-efficacy plays
an important role in the goals that an individual sets based on his or her own perceptions of ability. The last theory associated with cognitive motivation is that of goal theory. In goal theory, self-efficacy beliefs play an important role in the regulation of motivation and action. In his research, Bandura (1986) affirmed that motivation is contingent upon one’s interpretation of one’s performance in relation to an internalized standard for the self.

Affective processes relate to the coping strategies that an individual has developed to handle the stress and depression that may be experienced as a result of threatening or difficult situations. Efficacy beliefs influence these coping strategies in a number of ways. One example is related to the manner in which the threat or situation is perceived and cognitively processed. Another way is related to the exercise of control over disturbing thoughts. A further way is related to self-efficacy and how it can help to reduce stress and anxiety by providing behavioral support to change the situation (Bandura, 1997). In summary, individuals with a high sense of efficacy have the capacity to effectively manage stress and anxiety.

Individuals tend to engage in activities they believe they can master. Similarly, individuals tend to avoid activities they believe exceed their ability to master. Specifically, self-efficacy beliefs help one to shape their environments through the career paths they choose, the better they are prepared for their chosen profession, and the more persistent they remain in the face of obstacles (Bandura, 1995).

Researchers are clear that it is important to note that there is a difference between one’s self-concept beliefs and one’s self-efficacy beliefs. Self-efficacy is a context-specific assessment of competence to perform a range of tasks or an assessment of one’s ability to perform specific actions (Schunk, 2011). Self-efficacy leads one to ask the
question “can I,” whereas self-concept beliefs are a cognitive appraisal, integrated across various dimensions that individuals attribute to themselves.

In summation, self-efficacy is a major construct of Bandura’s (1989a) social cognitive theory. According to Bandura (1977a, 1977b), self-efficacy is defined as an individual’s belief in his or her capabilities to perform a specified task. These beliefs influence how people think, feel, motivate themselves, and act (Bandura, 1995, p. 2). Additionally, these beliefs are developed from four main forms of influence: mastery experiences, vicarious experiences, verbal persuasion, and physiological and emotional states. Furthermore, self-efficacy beliefs contribute to the regulations of human behaviors through cognitive, motivational, affective, and selection processes (Bandura, 1989a).

Self-efficacy beliefs of principals and teachers. Researchers have repeatedly noted that improving public education in the United States will require improving one student, one teacher, one school, one district, and one state at a time (Miller, Sen, & Malley, 2007; New Leaders for New Schools, 2009; Tschannen-Moran & Gareis, 2004). Improving schools in the United States will require school personnel, especially those that manage, monitor, and lead the school, to play a major role in facilitating school-level change. Leithwood and Wahlstrom (2008) suggested that school leaders have a major impact on teachers, school improvement, and student achievement, especially those leaders serving as a principal.

Bandura (1997) contended that people are likely to engage in those activities in which they perceive themselves to be competent. Bandura (1997) contended that people with high self-efficacy are healthier, more effective, and generally more successful than those with low self-efficacy. Based on this theory, it would be sound to assume that
higher self-efficacy beliefs in principals and teachers would help create a thriving school environment where school leadership, through shared value systems, can positively contribute to increasing teacher sense of self-efficacy (Shaffer, 2012).

Furthermore, research has contended that teachers will work more responsively and meet their demands more efficiently if they are properly supervised and guided by their principals (Baumgartner, 2003; Berry, 2010). Berry (2010) argued that principal efficacy can be analyzed through their dealings with the staff or faculty. If principals foster effective relationships with their staff, they would likely have a productive and collaborative staff that is able to soundly and rationally communicate issues or needs while appropriately serving students. The myriad of problems and stressors that a teacher endures in the performance of their duties can be resolved by a principal who holds experience and ability to resolve issues in an efficient and effective way (Baumgartner, 2003).

Principals have the unique ability to create an environment where teachers can work better towards helping students achieve their educational objectives (Katzenmeyer & Moller, 2001). Principal and teacher self-efficacy translates into the ability to implement change and increase the performance of a school. Recent research has shown a significant relationship between school leadership and achievement, revealing that effective school leaders impact the teachers who thus impact positive student achievement in the schools they lead (Day, Sammons, Stobart, Kington & Gu, 2007). Furthermore, research has yielded that effective leadership practices comprise setting a clear direction, vision, mission, and goals; improving working conditions and teaching practices of teachers; promoting an increased focus on the instructional program; and redesigning the organization of a school (Day et al., 2007).
Bandura and Locke (2003) identified that much of the success of the person is a reflection of that person’s sense of self-efficacy. They stated that perceived sense of self-efficacy is the belief of an individual about their skills, expertise, and capabilities to produce a desired or suggested level of performance that could significantly influence other events that affect their life. Self-efficacy is the term describing the internal belief, attitude, and behaviors of how a person thinks, feels, and motivates him/herself that influences their choices in responding and dealing with the needs of others (Caprara, Alessandri, & Eisenberg, 2012; Kennedy & Smith, 2012; Kurt, Duyar, & Calik, 2012; McCullers & Bozeman, 2010; Pas, Bradshaw, & Hershfeldt, 2012).

Duke (2004a) determined that principal leadership practices in schools are highly influenced by their level of efficacy. Furthermore, Duke (2004a) asserted that principals have to assume they have an active role in instructional leadership, a term many principals may not have been formerly familiarized with in their individual school settings. He found that conflict and tension can result between the amount of time spent on activities related to management and instructional leadership in the schools. Archer (2004) supported Duke’s (2004a) findings and further explored the gap between management-related activities and instructional leadership of principals in schools. These studies found that principals spend most of their time at school on managerial operations such as those related to security, safety, building operations, and other administrative duties far more than they spend on instructional leadership practices for which they are held accountable to a much higher degree (Archer, 2004).

Self-efficacy is also directly related to a motivation to act on stimuli that influences the perceptions already held by the individual (Guha & Leonard, 2002). Guha and Leonard’s (2002) study on self-efficacy provided a richer insight, expounding that
people self-efficacy beliefs substantially influence choices they make and the actions they pursue. This is likely because when individuals have a belief in their own efficacy, they are better able to complete learning, tasks, and responsibilities successfully and thereby achieve their goals (Federici & Skaalvik, 2012; Hoy, 2012; Kurt et al., 2012; Pas et al., 2012; Thoonen, Sleegers, & Oorta, 2012).

Research has also found that people are much more likely to engage in their particular pursuits when they feel more confident, comfortable, trained, and competent (Guha & Leonard, 2002; Pas et al., 2012); therefore, some people act differently than others with similar responsibilities, power, authority, qualification, and training (Canales, Tejeda-Delgado, & Slate, 2008; Federici & Skaalvik, 2012; Tschannen-Moran & Gareis, 2004). Additionally, researchers have found that individuals with low self-efficacy for the same task act differently when compared to their peers who possess a high sense of self-efficacy and internal belief (Canales et al., 2008; Federici & Skaalvik, 2012; Tschannen-Moran & Gareis, 2004). Many psychologists and personal development trainers also contend that when people are concerned with situations where they do not know how to complete a task, there is a training or development problem; however, when the individual contends they will not do a job or believe they cannot do it, the issue is with attitude, behavior, or self-efficacy, which has crucial implications on an individual’s future success (Canales et al., 2008; Federici & Skaalvik, 2012; Tschannen-Moran & Gareis, 2004; Youngs & King, 2002).

Bandura and Locke (2003) defined those perceptions of teachers in their abilities to achieve the desired level of outcomes as teacher perceptions of self-efficacy. They argued that the sense of self-efficacy of teachers, or their beliefs in their abilities to raise student achievement, are more important than whether the teachers possess those abilities
or not. This is sometimes the power of internal or perceived beliefs that drives a person due to inspiration or desperation to obtain certain achievement (Katzenmeyer & Moller, 2001).

Feelings of low self-efficacy may cause an individual to see their task or responsibilities as threatening, resulting in a hands-off approach or unwillingness to perform needed duties (Canales et al., 2008; Federici & Skaalvik, 2012; Kennedy & Smith, 2012; Kurt et al., 2012; McCullers & Bozeman, 2010). Moreover, Bandura and Locke (2003) and Kurt et al. (2012) determined that when individuals with a low sense of self-efficacy are confronted with difficult tasks or responsibilities, those individuals normally focus on their perceived weaknesses, deficiencies, or obstacles or invent reasons to defer or ignore the tasks. Furthermore, researchers have asserted that people with low self-efficacy are more likely to give up more quickly in the face of adversity and difficult conditions. They lose faith in their strengths and competencies that can allow them to successfully bounce back and encounter the more difficult tasks (Caprara et al., 2012; Federici & Skaalvik, 2012).

As school principals are critical members of a school, they are given the responsibility to control, manage, lead, and monitor schools toward the goal of high achievement for all students, regardless of their socioeconomic status, special learning needs and disabilities, behavioral and discipline problems, English language skills, and ethnicity (Duke, 2004a; Elmore, 2004; Hoy, 2012; Kennedy & Smith, 2012; McCullers & Bozeman, 2010; Pas et al., 2012). Perhaps the most daunting task for school principals who are highly motivated and determined is to bring significant improvement in student levels of achievement in spite of many obstacles and challenges they often confront in the continual school improvement cycle (Hoy, 2012; Kennedy & Smith, 2012; Kurt et al.,
Researchers have consistently shown that leaders with a high sense of self-efficacy are responsible to bring the improvements in the highest standards for their staff as well as those whom they are serving in order to meet increasingly diverse, unique, and challenging expectations. Similarly, it is crucial that school principals with a high sense of self-efficacy play an active role in enhancing teacher efficacy to improve their level of performance. This can be done through collaboration with other teachers and through building effective learning relationships with the students (Thoonen et al., 2012).

Considering the significant challenges of student achievement and quality of schools, many researchers (Pas et al., 2012; Hoy, 2012; Kennedy & Smith, 2012) have argued that it would be difficult to imagine such a focus without efficacy and instructional leadership of school personnel, particularly school leaders.

A sense of self-efficacy in teachers is imperative to school effectiveness. A teacher’s sense of efficacy toward raising the achievement of students is connected to actually being able to raise that achievement (Bandura & Locke, 2003; Kennedy & Smith, 2012; Pas et al., 2012; Thoonen et al., 2012). The teachers are the ones who coach or teach students to reach that achievement; and as such, the accomplishments of the students are due to the responsive attitude and commitment of the teacher’s effectiveness (Kennedy & Smith, 2012; Kurt et al, 2012). Teacher efficacy can be helpful for the student in attaining knowledge and information (Baumgartner, 2003). Additionally, this knowledge and information is beneficial not only for the student’s personal perspective but from the societal perspective as well. Society as a whole benefits when educational leaders and teachers are capable of building strong schools with efficacious practices (Kennedy & Smith, 2012; Knowles, Holton, & Swanson, 2005;
Educational reforms can be developed and implemented because of teacher efficacy (Baumgartner, 2003). Teachers are leaders who are capable of promoting change in the lives of students and greatly influence their positive development (Behrstock & Clifford, 2009). Student achievement is not only based on doing well on exams and attaining a high-class rank or position, but it also highly linked to personal development (Killion & Harrison, 2006). Degrees, diplomas, or certifications provide society with evidence that an individual has mastered educational program requirements; but real achievement and development occur if education professionals, including teachers, have helped the student become a more confident and mature person who shows a positive attitude, appropriate behavior, and pleasing personality (Caprara et al., 2012; Federici & Skaalvik, 2012; Kurt et al., 2012; Thoonen et al., 2012). Teacher efficacy can develop those capabilities and skills in teachers that help them in modeling positive personality development to students (Kennedy & Smith, 2012).

According to Hoy (2000, 2012), teacher efficacy can have a clear impact in student achievement. She noted that academic success is not merely dependent on the students but is also highly dependent on factors such as the school or classroom teachers and the system under which they are studying. Teacher personality should be such that the students are connected to them and follow their instructions accordingly (Caprara et al., 2012; Kurt et al., 2012). Kurt et al. (2012) and Caprara et al. (2012) explained that teachers should serve as leaders and students as followers. In order to achieve this relationship, the efficacy of teacher as leader is required. They further explained that an effective teacher could increase student understanding of educational concepts more successfully than a noneffective teacher who would not be able to get the attention of the
student (Caprara et al., 2012; Kurt et al., 2012).

Research has suggested that teachers require training on maintaining self-efficacy in their job which will make them more comfortable with their job responsibilities and tasks (Behrstock & Clifford, 2009). Researchers have continued to find positive relationships between student achievement and high teacher efficacy (Clifford, Behrstoke-Sherrat, & Fetters, 2012; Killion & Harrison, 2006; Louis, Dreztke, & Wahlstrom, 2010). The most effective teachers have goal-setting abilities, and their thinking is mission oriented which helps fulfill personal and professional objectives (Killion & Harrison, 2006). Teachers with a high degree of self-efficacy can better help students maintain a proper learning attitude and motivate them to follow goal-setting strategies that help in achieving educational objectives.

**The relationship between principal and teacher self-efficacy beliefs.** Research has noted that principal instructional leadership efficacy greatly influences teacher efficacy (Anfara & Mertens, 2012; Autry, 2010 Ross & Gray, 2006). Instructional leadership, widely the role of the principal, plays an important role in improving teacher efficacy and educational outcomes (Wallace Foundation, 2011). Researchers including Miller et al. (2007 and the Wallace Foundation (2011) have found that teachers who work in schools led by principals characterized as instructional leaders have shown more motivation, determination, satisfaction, high morale, and high commitment compared to those schools where principals are not characterized as instructional leaders. These attributes play a role in the efficacy of teachers and can encourage them to put in extra effort and remain committed to the organization for a longer period of time (Anfara & Mertens, 2012).

Research has indicated that principal self-efficacy beliefs are capable of
influencing behavior, which consequently influences student achievement. This research would contend that it is then important to identify those factors that highly influence principal self-efficacy (Aderhold, 2005; Caprara et al., 2012; Killion & Harrison, 2006; Kurt et al., 2012). Federici and Skaalvik (2012) examined the relationship between principal self-efficacy, burnout, job satisfaction, and principal motivation to quit. The researchers noted that principal self-efficacy beliefs were positive related to motivation and job satisfaction, whereas principal self-efficacy belief was negatively related to burnout. This research indicates that when principals are satisfied with their job and motivated, they exhibit more positive behavior in terms of leading schools and influencing their teachers and ultimately student achievement and success. Furthermore, research revealed that burnout is negatively correlated with job satisfaction of principals. On the other hand, burnout indicated a positive relationship with motivation of principals to quit (Federici & Skaalvik, 2012).

Tschannen-Moran and Gareis (2004) found in their research that good principals are assets to developing highly effective schools. They emphasized that leadership behavior of principals has a large effect on the achievements of individual students as well as improvement of the overall school community (Tschannen-Moran & Gareis, 2004). Moreover, a school cannot hope to attain its fundamental mission and vision until there is genuine principal leadership that is focused towards raising achievement. Principals can individually greatly initiate change through leadership in raising the level of expectation for achievement of both students and teachers (Tshannen-Moran & Gareis, 2004). Principal behaviors to initiate this change are largely dependent on principal sense of efficacy. Principal self-efficacy beliefs are highly regarded as the foundational leadership attribute of a highly effective principal (Tschannen-Moran & Gareis, 2004).
In another study, Miller et al. (2007) indicated that there was a significant relationship between principal instructional efficacy and teacher efficacy, which influences student outcomes. They found in their empirical research that an increase in instructional leadership activities raised student learning effectiveness. Miller et al. (2007) also found that principal efficacy related to instructional leadership has a positive effect on the collaboration of teachers, which in turn has a positive effect on achievement scores, thus demonstrating the link between teacher efficacy and student achievement. Miller et al. (2007) also found that the more the principals perform and are perceived by teachers to be knowledgeable instructional leaders in their schools, the more likely teachers were to work frequently, collaboratively, and instructively to raise the performance of students in the schools.

In his research, Bandura (1986) held that an individual’s behavior influences and is influenced by the social world and personal characteristics. The construct of self-efficacy is context specific and is developed in a reciprocal relationship with the individual and the environment. The environment is composed of the physical surroundings of an individual, including people who are present or absent, such as principals and/or teachers. The environment influences the intensity and frequency of the behavior, just as the behavior itself can have an impact on the environment. Teachers and principals act in dynamic and reciprocal interaction (Bandura, 1986). As participants in this reciprocal determinism, the teachers and principals both benefit from the supportive interactions and behaviors.

**Principal leadership behaviors and teacher self-efficacy.** Studies from many different researchers have suggested a very strong relationship between administrative behaviors and teacher self-efficacy and that teachers are directly and disproportionately
linked to student achievement (Bandura & Locke, 2003; Goddard, Goddard, Tschannen-Moran, 2007; Marzano, Waters, & McNulty, 2005; Smith & Hoy, 2007; Tschannen-Moran & Gareis, 2004; Tschannen-Moran & Woolfolk, 2001). The research of Berry et al. (2010) compounded this relationship through the strong suggestion that the self-efficacy of teachers plays a most important role in raising the performance of all students, regardless of a student’s previous experience. Moreover, the researchers found that teachers with a strong sense of self-efficacy are more determined and apt to nurture and uplift students toward academic achievement and accomplishment. Conversely, they found that teachers with a low or weak sense of self-efficacy are more likely to engage in these nurturing behaviors with students or are more likely to surrender their responsibilities and lose trust in their own ability to raise the achievement of students when faced with difficulty.

Researchers Berry et al. (2010) and Tschannen-Moran and Woolfolk Hoy (2001) stated that self-efficacy is the most critical component that drives individual learning and motivation. They contended that enhancing the self-efficacy of an individual strengthens their beliefs about their capacities, knowledge base, and skills to complete tasks. They held that there exists a direct relationship between the administrative behaviors that affect teacher efficacy to raise the student performance or achievement. Often those relationships are divided into three different categories, as suggested by Smith and Hoy (2007). Those categories include self-efficacy of principals, self-efficacy of teachers, and self-efficacy of combined principals and teachers to increase the self-efficacies of students regarding learning.

Principals in the United States play a pivotal role in increasing the efficacy of teachers to improve the achievement of students. U.S. schools have found it extremely
difficult to meet the collective needs of students without the collective efficacy of
teachers, a concept in which teachers of a school perceive their combined efforts as a
whole can have a strong positive effect on the learning of students and their achievements
(Bandura & Locke, 2003; Goddard et al., 2007).

Recent research has suggested that effective principals are the building blocks of
good schools; and without high principal self-efficacy, neither teachers nor students can
move towards the success and achievements necessary (Hoy, 2012; Thoonen, et al.,
2012). Recent research has supported this thought and the idea that principal behaviors
can impact teacher self-efficacy (Miller et al., 2007). In fact, LaPointe and Davis (2006)
contended that principals are the most important school personnel influencing the
teachers to raise the achievement of students. These findings underscore the importance
of today’s principals serving not only as managers but also instructional and visionary
leaders in their schools if they desire to raise the achievement of students.

In a school, the principal is the school personnel member who has direct
responsibility to provide the teachers with a supportive, growing, and productive
atmosphere where they feel valued (LaPointe & Davis, 2006). Principals with supportive
behaviors can have a disproportionate influence on the faculty to increase student
achievement. Kurt et al. (2012) and Caprara et al. (2012) also supported the above
findings that principal supportive leadership behaviors can lead teachers to feel like they
have autonomy and are respected as competent professionals. Research has also found
that when principals have the utmost interest in their teachers’ personal and professional
lives as well as their overall well-being, they contribute to and reinforce their teachers’
self-efficacy beliefs (Federici & Skaalvik, 2012; Hoy, 2012; Kennedy & Smith, 2012;
Marzano et al., 2005; Pas et al., 2012; Wallace Foundation, 2011).
Principals who are supportive and productive have attentive listening skills, praise, and feedback and promote collaboration and shared decision-making (Kennedy & Smith, 2012; Pas et al., 2012). Research to support this view can be found in the research of Kurt et al. (2012) and Caprara et al. (2012) who found that supportive behaviors from principals have a direct correlation to increasing teacher efficacy and raising student achievement.

Kennedy and Smith (2012) supported this view in their findings that school leaders who are effective listen attentively. They further stated that effective listening behaviors significantly promoted the environment that is effective for teacher and student success. Additionally, researchers have found that effective principals provide a supportive learning environment, support good working conditions, listen attentively, and support the professional development goals of teachers (Federici & Skaalvik, 2012; Thoonen et al., 2012).

Research by Hoy (2012) and Thoonen et al. (2012) examined the relationship between principals providing feedback and the academic achievement of students. Hoy (2012) asserted that there are bad schools with good principals, yet no good schools with bad principals. This indicates that there is a correlation between effective principals and effective, high-achieving schools. Thoonen et al. (2012) further suggested that school leadership that fails to support teachers and does not provide attention and feedback will eventually have a negative impact on teacher self-efficacy and self-confidence to positively affect student achievement.

Kennedy and Smith (2012) revealed a significant relationship between the trust of faculty in school leadership and the creation and sustainment of a healthy learning environment. They contended that strengthening the trust among the faculty significantly
factored into teacher performance. Furthermore, they suggested that trust is a pivotal factor in improving teacher efficacy, student achievement, and overall school effectiveness. They suggested that it is the responsibility of the principal to create and promote a supportive environment that could make teachers and staff members feel they can maximize their potential, capabilities, skills, knowledge, and confidence in raising the achievement of students.

Even further, Bandura and Locke (2003) showed that faculty collaboration along with shared values and decision-making play a significant part in enhancing the efficacy of teachers. They further added that principals can foster increased collaboration through instructional leadership practices; and consequently, increased teacher collaboration leads to higher levels of student achievement. This research indicated that principals who believe in collaboration as part of instructional leadership and encourage collaboration among teachers greatly influence the efficacy of teachers to raise the achievement of students (Bandura & Locke, 2003).

Finally, many studies have highlighted that a lack of management and support from principals negatively affects the confidence and self-efficacy of teachers within the school. Duke (2004b) and Datnow (2005) found that a lack of principal leadership support was positively associated with the low performance of the faculty. This research indicated that principals who did not provide adequate support to their teachers would eventually impede teacher confidence to improve the academic performance of students. They also held that many school leadership behaviors that are not directed toward teacher professional needs would stifle the potential and abilities of teachers, rather than purposefully motivate them to strive hard to reach their fullest potential.
Summary

An increasing number of researchers, such as Tschannen-Moran and Gareis (2004) and Duke (2004a), have explained that principal and teacher behaviors are directly linked with students and their achievement. According to studies completed by Dyrlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011) and Dusenbury, Zadrazil, Mart, and Weissberg (2011), principals have the ability and control to mold the culture of the school in a desirous way, despite the external challenges, in order to provide an environment that is conducive for everyone’s learning.

Bandura (1994) suggested that a person’s self-efficacy plays an important role in determining the level of change and goal attainment one can achieve. Bandura (1994) defined perceived self-efficacy as, “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves, and behave” (p. 1). This research held that individuals with high self-efficacy beliefs in context-specific situations tend to set more challenging goals and are more committed to achieving those goals. Instead of roadblocks, difficult tasks are seen as challenges able to be overcome. Bandura (1994) said that when efficacious individuals fail, they are able to bounce back with heightened and sustained efforts.

Duke (2004a) contended that principal leadership practices in schools are highly influenced and, in some cases, determined by their level of efficacy. Principals are the individuals who have the power and ability to create an environment where teachers can work better to help the students achieve their educational objectives (Katzenmeyer & Moller, 2001). School principals are given the responsibility to control, manage, lead, and monitor schools towards the goal of high achievement for all students (Duke, 2004a;
Elmore, 2004; Hoy, 2012; Kennedy & Smith, 2012; McCullers & Bozeman, 2010; Pas et al., 2012). Principal and teacher self-efficacy translates into the ability to enact change, increase student achievement, and increase overall school performance.

Last, there is an important relationship between teacher and principal self-efficacy beliefs. Principals who supported their teachers professionally enhanced teacher sense of efficacy (Azodi, 2006; Barnett & McCormick, 2004). According to Shaffer (2012), teachers with a high sense of self-efficacy had an intrinsic motivation to contribute to and improve the lives of students and provide them with needed skills to succeed; but on the other hand, if teachers lacked these skills, the principal needed to identify the need and provide proper support because having proper support (or not having proper support) critically impacts teacher self-efficacy (Shaffer, 2012). Recent research has also suggested that administrator interaction plays a pivotal role in teacher perceptions of trust, increasing teacher efficacy and a positive, nurturing culture in the school. Personal and school demographic characteristics can make significant differences in principal and teacher sense of self-efficacy.
Chapter 3: Methodology

Chapter 3 presents the methodology and procedures that were used in conducting this study. It is divided into sections including a review of related and relevant past and current literature, details of the population and sample selection, instrumentation, data collection, and data analysis.

According to Bandura (1997), individuals with higher self-efficacy are generally perceived to be and are actually more successful than those with lower self-efficacy. Bandura’s (1997) theory of self-efficacy also emphasized that individuals are more likely to engage in tasks to the extent they perceive themselves to be competent in those same tasks. Teacher efficacy has also been shown to have a direct impact on student achievement, and principal behaviors have been shown to have an effect on teacher efficacy (Barkley, 2006; Ebmeier, 2003; Marzano et al., 2005). While there has been extensive research completed on teacher and student self-efficacy and the impact on achievement, there is a lack of research in the area exploring the impact of principal self-efficacy or the relationship between principal self-efficacy and teacher self-efficacy (Tschannen-Moran & Gareis, 2004). The findings of this research contribute to the slowly increasing body of knowledge on the relationship between principal and teacher self-efficacy beliefs.

In an increasingly accountability driven profession where the achievement expectations for all children are high, teacher efficacy is more important than ever. Research has shown that teachers who believe they can teach all children in a way that allows them to meet accountability standards are likely to exhibit behaviors and practices that support a goal of increased efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). They additionally found that teachers with a high sense of self-efficacy employ strategies
that support positive student engagement and motivation, rather than negative strategies that seek to manage behaviors through negative reinforcement; therefore, principals have a vested interest in ensuring that they hire teachers who have a high sense of self-efficacy and believe they can meet increasingly more rigorous standards for student achievement (Goddard et al., 2000).

The purpose of this research was to investigate the relationship between principal self-efficacy and teacher self-efficacy beliefs. The study focused on the ability of the principal to affect collective staff efficacy through the effect of that individual’s self-efficacy beliefs.

The following research question guided the study: “To what extent does principal self-efficacy impact collective teacher self-efficacy?”

**Review of Related Literature**

The literature search for this study included empirical studies and relevant theoretical research that are related to efficacy beliefs of school executives and teachers. The sources for the literature search included *Educational Resource Information Center, Resources in Education, PsycINFO, Complementary Index, Academic Search Complete,* and *CINAHL Plus with Full Text.* A majority of the research was conducted utilizing resources available through the John R. Dover Memorial Library on the Gardner-Webb University campus. In addition, certain search terms utilized included principal efficacy, school administrator efficacy, teacher efficacy, principal self-efficacy, teacher self-efficacy, instructional leadership, principal success, principal confidence, teacher/principal confidence, school leadership, principal management, teacher confidence, and other similar terms.
Population and Sample

The population used for this research included all schools in a rural North Carolina public school district in the 2017-2018 school year. These schools contained a population of 22 principals and approximately 1,017 certified staff members. All principals and teachers in the population were invited to participate in the study.

Instrumentation

The instrument used to measure principal sense of self-efficacy was the PSES (Appendix A). Tschannen-Moran and Gareis (2004) introduced this instrument in order to examine the self-efficacy of principals and their ability to influence teacher self-efficacy beliefs as well as student achievement. Permission to use the PSES was granted by the author through a permission letter (Appendix B).

In validating the PSES, the original authors used 30 survey items identified from the professional standards that are found in the Interstate School Leaders Licensure Consortium. These items were subject to a field-test procedure, and the survey was completed by 544 principals from public schools in Virginia. A principal axis factor analysis of the 50 items reduced the scale to the 18 items currently included. Three major categories of factors included are (a) efficacy for management, (b) efficacy for instructional leadership, and (c) efficacy for moral leadership (Tschannen-Moran & Gareis, 2004).

In order to aid in the scoring process of the PSES, items were arranged for each individual factor on the PSES. According to the Directions for Scoring the PSES (Appendix C) questions 1, 4, 7, 10, 13, and 16 were included in efficacy for management; questions 2, 5, 8, 11, 14, and 17 were included in efficacy for instructional leadership; and questions 3, 6, 9, 12, 15, and 18 were included in efficacy for moral leadership factor
These questions used a 9-point Likert scale with an objective of collecting perceptions of efficacy in which 1=not at all, 3=very little, 5=some degree, 7=quite a bit, and 9=a great deal (Tschannen-Moran & Gareis, 2004).

For measuring teacher sense of self-efficacy, the researcher used the TSES (Appendix D). Tschannen-Moran and Woolfolk Hoy (2001) created the instrument for teacher self-efficacy to examine the self-efficacy of teachers as it relates to student engagement, instructional strategies, and classroom management. According to the Directions for Scoring the TSES (Appendix E) to determine the efficacy in student engagement, instructional strategies, and classroom management subscale scores, the author computed the unweighted means of the items that load on each factor. Tschannen-Moran and Woolfolk Hoy (2001) identified the groupings for the form to be efficacy in student engagement, items 2, 3, 4, 11; efficacy in instructional strategies, items 5, 9, 10, 12; and efficacy in classroom management, items 1, 6, 7, 8. Permission to use the TSES was granted by the author through a permission letter (Appendix B).

**Data Collection**

The entire population of the district’s schools and principals was obtained after obtaining consent from the district’s Institutional Review Board (Appendix F). Google forms were created for both the PSES and the TSES which enabled participants to answer survey questions online. An Excel spreadsheet was created to include all schools and principals in the sample. Another Excel spreadsheet was created to collect all participant responses.

Principals in the 11 randomly chosen schools were emailed a Letter of Invitation (Appendix G) in early spring 2018, containing a formal request to participate in the study, along with the purpose of the study and directions for participation. To participate in the
study, principals were directed to access the survey by clicking on the hotlink provided in the letter of invitation or by copying the URL into their web browser. Consent to participate was implied by completion of the survey (Appendix H).

Also included in the email to principals was an attached letter of invitation to teachers. A letter of invitation for teachers (Appendix I) was emailed to all teachers to invite them to participate. To participate in the study, teachers were directed to access the survey by clicking on the hotlink provided in the letter of invitation or by copying the URL into their web browser. Consent to participate was implied by completion of the survey.

After 2 weeks, a follow-up email (Appendix J) was sent to both principals and teachers as an expression of gratitude for those who participated in the study. The email also served as a reminder to those who had not completed the surveys. Following a 3-week period for participants to complete the surveys, the data collected were compiled into an excel spreadsheet. Acceptance of data was complete on April 8, 2018.

Data Analysis

The research addresses principal and teacher self-efficacy and the difference between perceived self-efficacy and school and individual demographics. The PSES was used to collect principal perceptions of self-efficacy in three dimensions: Efficacy for Management, Efficacy for Instructional Leadership, and Efficacy for Moral Leadership. According to the author of the instrument and validators Hallinger, Bickman, and Davis (1996), principal leadership “should be considered both an independent and dependent variable and has implications for both research and practice” (p. 544). A Pearson product-moment correlation was then computed to determine the relationship between the dimensions of principal perceptions of their own efficacy and three dimensions of teacher
perceptions of efficacy.

The research question involves the relationship between the three dimensions of principal and teacher self-efficacy. To analyze this relationship, this study used a 9-point Likert scale and used composite means of each of the factors; principal scores for efficacy for all factors of the PSES were reported as a composite mean, representing the scores of all principals participating. Likewise, using a 9-point Likert scale and means of each of the factors, teacher scores for efficacy for all factors of the TSES were reported as a composite mean, representing the scores of all participating teachers. A Pearson product-moment correlation was then computed to determine the relationship between the mean principal self-efficacy score and the mean teacher self-efficacy score of their building.
Chapter 4: Results

Introduction

Chapter 4 contains the results obtained from the survey instruments and analyses of data. Following a discussion of the characteristics of the survey population, descriptive and inferential statistics are presented for the research question. The results were analyzed and presented in a tabular form and are presented with a brief narrative.

The purpose of this research was to investigate the relationship between principal and teacher self-efficacy beliefs. The study compared teacher and principal efficacy in instructional leadership and instruction strategies, school and classroom management, and the overall effect of principal self-efficacy on collective staff efficacy. The research was guided by the following research question: “To what extent does principal self-efficacy impact collective teacher self-efficacy?”

Response Rate

All principals and teachers in a rural North Carolina school district were surveyed. During the 2017-2018 school year, there were 22 schools in the district. These schools contained a population of 22 principals and approximately 1,017 certified staff members at the time of survey administration. A total of 13 principal surveys were returned, for a response rate of 59.09%. A total of 133 teacher surveys were returned, for a response rate of 13.07%. A follow-up email expressing thanks for those who had already participated in the study and encouragement for those who had not was emailed to the sample 2 weeks after the initial email was sent.

Results of Data Analysis

This section presents results of the analysis of the data collected in the study.

Results between principal self-efficacy and teacher self-efficacy beliefs. Prior
to conducting Pearson product-moment correlation tests, frequency data were determined for each response of the Likert scale for survey results from both principal self-efficacy beliefs and teacher self-efficacy beliefs. This frequency data can be found in Table 1 and Table 2 respectively.

Table 1

*Principal Self-Efficacy Beliefs Frequency Data*

<table>
<thead>
<tr>
<th>Likert Response Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None at All</td>
<td>1</td>
</tr>
<tr>
<td>Very Little</td>
<td>4</td>
</tr>
<tr>
<td>Some Degree</td>
<td>37</td>
</tr>
<tr>
<td>Quite a Bit</td>
<td>89</td>
</tr>
<tr>
<td>A Great Deal</td>
<td>43</td>
</tr>
</tbody>
</table>

Table 2

*Teacher Self-Efficacy Beliefs Frequency Data*

<table>
<thead>
<tr>
<th>Likert Response Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None at All</td>
<td>12</td>
</tr>
<tr>
<td>Very Little</td>
<td>118</td>
</tr>
<tr>
<td>Some Degree</td>
<td>600</td>
</tr>
<tr>
<td>Quite a Bit</td>
<td>1644</td>
</tr>
<tr>
<td>A Great Deal</td>
<td>716</td>
</tr>
</tbody>
</table>

The frequency data of both principal self-efficacy and teacher self-efficacy beliefs were used to conduct a Chi Square Goodness of Fit analysis on both principal self-efficacy results and teacher self-efficacy results to determine whether observed sample frequencies differ significantly from expected frequencies. The Chi Square Goodness of Fit test for principal self-efficacy beliefs resulted in a Chi^2 value of 146.57 with a p value of < .001. The result is significant at p = ≤0.05. The Chi Square Goodness of Fit test for teacher self-efficacy resulted in a Chi^2 value of 2717.06 with a p value of < 0.001. The result is significant at p = ≤0.05. There was evidence to conclude that the
frequency distributions were statistically valid. The results of Chi Square Goodness of
Fit analyses can be found in Table 3 and Table 4 respectively.

Table 3

*Principal Self-Efficacy Chi^2 Goodness of Fit*

<table>
<thead>
<tr>
<th>Goodness of Fit Values</th>
<th>Chi^2 Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Self-Efficacy</td>
<td>146.57</td>
<td>&lt;.001*</td>
</tr>
</tbody>
</table>

*Significant at .05.

Table 4

*Teacher Self-Efficacy Chi^2 Goodness of Fit*

<table>
<thead>
<tr>
<th>Goodness of Fit Values</th>
<th>Chi^2 Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Self-Efficacy</td>
<td>2717.06</td>
<td>&lt;.001*</td>
</tr>
</tbody>
</table>

*Significant at .05.

After establishing the validity of the frequencies of the principal and teacher self-
efficacy survey data, a Pearson product-moment correlation was used to measure the
correlation between principal self-efficacy and teacher self-efficacy and are summarized
in Table 5. There was evidence to conclude there was a statistically significant positive
correlation between principal sense of self-efficacy and teacher sense of self-efficacy,
r=99, p=.002. Higher levels of principal sense of self-efficacy are proven to be
statistically associated with high levels of collective staff self-efficacy. Lower levels of
principal sense of self-efficacy are proven to be statistically associated with lower levels
of teacher sense of self-efficacy.

Table 5

*Relationship between Principal Self-Efficacy and Teacher Self-Efficacy Beliefs*

<table>
<thead>
<tr>
<th>Overall Principal &amp; Teacher Efficacy</th>
<th>Correlation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.99</td>
<td>.002</td>
</tr>
</tbody>
</table>

*Significant at .05.
Relationship between principal self-efficacy for instructional leadership and teacher self-efficacy for instructional practices. Frequency distributions were calculated for the survey responses for those questions on the PSES and the TSES that pertained to instructional leadership of the principal and instructional practices of the teacher. These frequency distributions are found in Table 6 and Table 7 respectively.

Table 6

<table>
<thead>
<tr>
<th>Likert Response Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None at All</td>
<td>0</td>
</tr>
<tr>
<td>Very Little</td>
<td>1</td>
</tr>
<tr>
<td>Some Degree</td>
<td>14</td>
</tr>
<tr>
<td>Quite a Bit</td>
<td>34</td>
</tr>
<tr>
<td>A Great Deal</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 7

<table>
<thead>
<tr>
<th>Likert Response Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None at All</td>
<td>0</td>
</tr>
<tr>
<td>Very Little</td>
<td>19</td>
</tr>
<tr>
<td>Some Degree</td>
<td>148</td>
</tr>
<tr>
<td>Quite a Bit</td>
<td>619</td>
</tr>
<tr>
<td>A Great Deal</td>
<td>263</td>
</tr>
</tbody>
</table>

The frequency data of principal instructional leadership self-efficacy and teacher instructional practice self-efficacy were used to conduct a Chi Square Goodness of Fit calculation to ensure that the observed survey values were valid. The results of these calculations are found in Table 8 and Table 9. The Chi^2 value for principal self-efficacy for instructional leadership was 59.649 with a p value of < 0.001. The result was significant at p=≤0.05. The Chi^2 value for teacher self-efficacy for instructional practice was 1213.131 with a p value of < 0.001. The result was significant at p=≤0.05.
These results demonstrate evidence that the frequency distributions were statistically valid.

Table 8

*Principal Instructional Leadership Self-Efficacy Chi^2 Goodness of Fit*

<table>
<thead>
<tr>
<th>Principal Instructional Leadership Self-Efficacy Chi^2 Goodness of Fit Values</th>
<th>Chi^2 Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>59.64</td>
<td>&lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .05.

Table 9

*Teacher Instructional Practice Self-Efficacy Chi^2 Goodness of Fit*

<table>
<thead>
<tr>
<th>Teacher Instructional Practice Self-Efficacy Chi^2 Goodness of Fit Values</th>
<th>Chi^2 Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1213.13</td>
<td>&lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .05.

The results of the Pearson product-moment bivariate correlation test used to measure the correlation between principal self-efficacy for instructional leadership and teacher self-efficacy for instruction practice are summarized in Table 10. There was evidence to conclude there was a statistically significant positive correlation between principal sense of self-efficacy for instructional leadership and teacher sense of self-efficacy for instructional practice, r=.94, p=.014. Higher levels of principal self-efficacy in instructional leadership are proven to be statistically associated with higher levels of collective faculty self-efficacy for instructional practice. Lower levels of principal sense of self-efficacy in instructional leadership are proven to be statistically associated with lower levels of collective faculty self-efficacy for instructional practice.
Table 10

*Relationship Between Principal Self-Efficacy for Instructional Leadership and Teacher Self-Efficacy for Instructional Practice Beliefs*

<table>
<thead>
<tr>
<th></th>
<th>Correlation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Efficacy for Instructional Leadership and Teacher Efficacy for Instructional Practice</td>
<td>.94</td>
<td>.014</td>
</tr>
</tbody>
</table>

**Relationship between principal self-efficacy for school management and teacher self-efficacy for classroom management.** Frequency distributions were calculated for the survey responses for those questions on the PSES and the TSES that pertained to school management practices of the principal and classroom management practices of the teacher. These frequency distributions are found in Table 11 and Table 12 respectively.

Table 11

*Principal Self-Efficacy for School Management Frequency Data*

<table>
<thead>
<tr>
<th>Likert Response Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None at All</td>
<td>0</td>
</tr>
<tr>
<td>Very Little</td>
<td>2</td>
</tr>
<tr>
<td>Some Degree</td>
<td>13</td>
</tr>
<tr>
<td>Quite a Bit</td>
<td>45</td>
</tr>
<tr>
<td>A Great Deal</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 12

*Teacher Self-Efficacy for Classroom Management Frequency Data*

<table>
<thead>
<tr>
<th>Likert Response Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>None at All</td>
<td>3</td>
</tr>
<tr>
<td>Very Little</td>
<td>40</td>
</tr>
<tr>
<td>Some Degree</td>
<td>184</td>
</tr>
<tr>
<td>Quite a Bit</td>
<td>520</td>
</tr>
<tr>
<td>A Great Deal</td>
<td>305</td>
</tr>
</tbody>
</table>

The frequency data of principal school management self-efficacy and teacher
classroom management self-efficacy were used to conduct a Chi Square Goodness of Fit
calculation to ensure that the observed survey values were valid. The results of these
calculations are found in Table 13 and Table 14. The Chi^2 value for principal self-
efficacy for school management was 85.47 with a p value of < 0.001. The result was
significant at p=≤0.05. The Chi^2 value for teacher self-efficacy for classroom
management was 843.86 with a p value of < 0.001. The result was significant at
p=≤0.05. These results demonstrate evidence that the frequency distributions were
statistically valid.

Table 13

**Principal Self-Efficacy for School Management Chi^2 Goodness of Fit**

<table>
<thead>
<tr>
<th>Principal Self-Efficacy for School Management Values</th>
<th>Chi^2 Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>85.47</td>
<td>&lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .05.

Table 14

**Teacher Self-Efficacy for Classroom Management Chi^2 Goodness of Fit**

<table>
<thead>
<tr>
<th>Teacher Self-Efficacy for Classroom Management Values</th>
<th>Chi^2 Value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>843.65</td>
<td>&lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .05.

The results of the Pearson product-moment bivariate correlation test used to
measure the correlation between principal self-efficacy for school management and
teacher self-efficacy for classroom management is summarized in Table 15. There was
evidence to conclude there was a statistically significant positive correlation between
principal sense of self-efficacy for school management and teacher sense of self-efficacy
for classroom management, r=.97, p=.005. Higher levels of principal self-efficacy in
school management are proven to be statistically associated with higher levels of
collective faculty self-efficacy for classroom management. Lower levels of principal
sense of self-efficacy in school management are proven to be statistically associated with lower levels of collective faculty self-efficacy for classroom management.

Table 15

*Relationship Between Principal Self-Efficacy for School Management and Teacher Self-Efficacy for Classroom Management Beliefs*

<table>
<thead>
<tr>
<th></th>
<th>Correlation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Self-Efficacy for School Management and Teacher Self-Efficacy for Classroom Management</td>
<td>.97</td>
<td>.005</td>
</tr>
</tbody>
</table>

*Significant at .05.

**Summary**

Chi Square Goodness of Fit calculations were completed for the frequency distributions of the survey data for the teacher self-efficacy survey data and principal self-efficacy survey data. These calculations determined that the frequency of Likert survey responses was statistically significant and appropriate. Pearson product-moment bivariate calculations were then conducted on the two datasets, results from which established a strong and statistically significant positive association between overall principal self-efficacy and collective staff-efficacy.

Chi Square Goodness of Fit calculations were also completed for the frequency distributions of the construct survey data for the teacher self-efficacy survey on teacher self-efficacy for classroom management and teacher self-efficacy for instructional practice. Chi Square Goodness of Fit calculations were also completed for the frequency distributions of the construct survey data for the principal self-efficacy survey on principal self-efficacy for building management and principal self-efficacy for instructional leadership. These calculations determined that the frequency of Likert survey responses for these constructs was statistically significant and appropriate. Pearson product-moment bivariate calculations were then conducted on each of the two
construct datasets, results from which established a strong and statistically significant positive association between principal self-efficacy for instructional leadership and teacher self-efficacy for instructional practice as well as principal self-efficacy for building management and teacher self-efficacy for classroom management.
Chapter 5: Discussion

Overview

This chapter provides a summary of the study and the findings. After a brief review of the background, purpose, and methodology of the study, the results and interpretation of the data and research question will follow. The concluding section discusses the implications of the results and suggestions for future research.

Background

Student achievement has become increasingly important in the age of accountability that has increasingly been a fixture of American society. Effective with NCLB (2006) and now it seems even more so with ESSA (2015), the terms accountability, growth, and progress have quickly become part of the lexicon of American education. In this increasingly accountability driven world, the school principal takes a starring role and transitions from a chiefly managerial role to one that must be focused on efforts to lead continual school improvement, increase student outcomes, and develop teachers (Tschannen-Moran & Gareis, 2004).

Principals are now required to be masters of many different trades. The NASSP, NAESP (2013) lists many of these: disciplinarian, community builder, public relations expert, budget analyst, facility management, special program management, and experts in various state and federal policies and contract laws. These seemingly all-consuming responsibilities do not seem to begin to fully explain the role of the principal but provide context for this expanding and complex role (Davis et al., 2005).

Teachers have not been immune to this march towards accountability. The landmark A Nation at Risk (National Commission on Excellence in Education, 1983) report highlighted the beginning of the trend towards teacher accountability for student
outcomes with its assertion that the characteristics of an individual teacher have significant impact on student learning. This assertion was compounded by research by Darling-Hammond (1999) who found that teachers who held certification and a major in the field in which they were teaching had an increased impact on student achievement of the students than other factors. This assertion is highlighted prevalently in NCLB’s highly qualified requirements that signaled a major paradigm shift in preservice teacher preparation in the United States. In summary, teachers are increasingly held accountable for student outcomes and expected to meet student needs, academic and otherwise. Educators must now look at all possible action they might take to improve the learning outcomes of their students.

**Social Cognitive Theory and Efficacy**

One major factor that has been found to contribute to the achievement of students is teacher efficacy. Bandura’s (1997) social cognitive theory defines efficacy as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Researchers have also held that teacher sense of efficacy impacts student achievement (Ashton & Webb, 1986; Gibson & Dembo, 1984; Tschannen-Moran & Woolfolk Hoy, 2001). This collective research holds that a teacher who believes that he/she has the ability, skills, and content knowledge to teach will be more likely to persist when inevitable challenges arise and will attempt new pedagogical methods and persevere (Ashton & Webb, 1986).

More recently, Bandura (1997) turned to the study of collective efficacy in schools. Bandura (1997) recognized that teachers do not exist in a vacuum but are part of dynamic environments, which can greatly influence their efficacy beliefs. Collective efficacy is a measure of the faculty’s sense of the whole organization’s ability to
effectively educate students. Collective efficacy has been found to explain variability between schools in terms of student achievement when all other factors are similar (Goddard, 2002; Goddard et al., 2000).

Many prominent education researchers, including Marzano et al. (2005), Ross and Gray (2006), and Tschannen-Moran and Gareis (2004), have recently started examining the role of the principal in schools. Many studies have found connections between principal leadership behaviors and student outcomes (O’Donnell & White, 2005; Marzano et al., 2005). Other researchers such as Ross and Gray (2006) have found principal influence on achievement to be reconciled by collective faculty efficacy. Goddard (2002) found that specific behaviors of the principal have a measurable impact on the collective efficacy of the faculty.

To examine principal leadership characteristics, it is important to examine the beliefs that those characteristics represent. Principals who are good building managers and instructional leaders serve in schools that showed strong behaviors in developing trusting relationships with the entire school community (Clifford et al., 2012). Recent studies have found a positive correlation between principal instructional leadership and other accomplishments related to continuous school improvement, including increased teacher collaboration and improved instructional practices (Goddard, 2002). Hoy (2012) and Thoonen et al. (2012) suggested that effective principals are the cornerstones of an effective school; and without their belief in their effective leadership, neither teachers nor students can improve academic outcomes.

An important relationship exists between principal and teacher self-efficacy beliefs (Bandura, 1997). When principals and teachers have high self-efficacy, an environment is likely to exist for consistent high academic and other measurable
outcomes. Berry et al. (2010) and Tschannen-Moran and Woolfolk-Hoy (2001) stated that self-efficacy is the most critical piece that drives human learning and intrinsic motivation; therefore, leadership efficacy and behaviors of principals are pivotal to understanding the composition of high-performing schools and determining what behaviors are significant for the success of teachers and students and as a driver for continuous school improvement.

**Purpose of the Study**

The purpose of this research was to analyze the relationship between principal self-efficacy and teacher self-efficacy beliefs. The study was conducted during the 2017-2018 school year. The study focused on the efficacy beliefs in the constructs of instructional leadership, instructional practice, school management, and classroom management. The research was guided by the following research question: “What is the relationship between principal self-efficacy and teacher self-efficacy beliefs?”

**Review of Methodology**

The population used for this research included all schools in a rural North Carolina public school district in the 2017-2018 school year. These schools contained a population of 22 principals and approximately 1,017 certified staff members. All principals and teachers in the population were invited to participate in the study.

The instrument used to measure principal sense of self-efficacy was the PSES (Appendix A). Tschannen-Moran and Gareis (2004) introduced this instrument in order to examine the self-efficacy of principals and their ability to influence teacher self-efficacy belief as well as student achievement.

For measuring teacher sense of self-efficacy, the researcher used the TSES (Appendix D). Tschannen-Moran and Woolfolk Hoy (2001) created the instrument for
teacher self-efficacy to examine the self-efficacy of teachers as it relates to student engagement, instructional strategies, and classroom management.

The research addresses principal and teacher self-efficacy and the difference between perceived self-efficacy and school and individual demographics. The PSES was used to collect principal perceptions of self-efficacy in three dimensions: Efficacy for Management, Efficacy for Instructional Leadership, and Efficacy for Moral Leadership. According to the author of the instrument and validators Hallinger et al. (1996), principal leadership “should be considered both an independent and dependent variable and has implications for both research and practice” (p. 544). A Pearson product-moment correlation was then computed to determine the relationship between the dimensions of principal perceptions of their own efficacy and three dimensions of teacher perceptions of efficacy.

The research question involves the relationship between the three dimensions of principal and teacher self-efficacy. To analyze this relationship, this study used a 9-point Likert scale and composite means of each of the factors; the principal scores for efficacy for all factors of the PSES were reported as a composite mean, representing the scores of all principals participating. Likewise, using a 9-point Likert scale and means of each of the factors, teacher scores for efficacy for all factors of the TSES were reported as a composite mean, representing the scores of all participating teachers participating. A Pearson product-moment correlation was then computed to determine the relationship between the mean principal self-efficacy score and the mean teacher self-efficacy score of their building.

**Research Findings**

The main purpose of the research was to determine the correlation that exists, if
any, between principal self-efficacy and collective teacher efficacy, principal self-efficacy in instructional leadership and teacher self-efficacy in instructional practices, and principal self-efficacy for school management and teacher self-efficacy for classroom management in a rural North Carolina school district. The findings related to the research question are as follows:

1. The relationship between principal self-efficacy and teacher self-efficacy was a statistically significant positive correlation.

2. The relationship between the self-efficacy of principals for instructional leadership and the self-efficacy of teachers for instructional practice had a statistically significant positive correlation.

3. The relationship between the self-efficacy of principals for school management and the self-efficacy of teachers for classroom management had a statistically significant positive correlation.

Conclusions

Based on the analysis of the study data, the following conclusions can be reasonably drawn.

1. Principal self-efficacy has an effect on teacher self-efficacy. This effect can be positive or negative in correlation, dependent upon the leadership behaviors and self-efficacy beliefs of the principal.

2. Principal self-efficacy beliefs related to instructional leadership impact the self-efficacy beliefs of teachers related to instructional practice.

3. Principal self-efficacy beliefs related to school management impact the self-efficacy beliefs of teachers related to classroom management.
Discussion

The study of self-efficacy of principals is a burgeoning area in education (Tschannen-Moran & Gareis, 2004). Research studies have shown efficacy beliefs of teachers, individually and collectively, to be a critical factor in student achievement outcomes (Ashton & Webb, 1986; Gibson & Dembo, 29184; Goddard et al., 2000; Hoy & Woolfolk, 1993; Tschannen-Moran & Barr, 2004). As such, it is a reasonable extrapolation that the efficacy beliefs of principals could also impact student achievement outcomes, vis-à-vis the collective efficacy of the staff.

Bandura (1995) held that his social cognitive theory, the theoretical framework of this study, reflected clearly that the self-efficacy of leaders plays a large role in their decision-making process. Furthermore, Bandura (1994) held that the best principals excel in the ability to get their staff to work together with a strong sense of purpose and to believe in their capabilities to achieve their mission.

Based on this study’s results, principals with a high sense of self-efficacy are associated with a collective staff with a higher self-efficacy. The study found that there was a statistically significant positive relationship between self-efficacy perceptions of principals and teachers. According to an increasing amount of research, principals have a direct link with improvement of student achievement, and those principals with higher self-efficacy engage in effective leadership practices more often than their colleagues (Aderhold 2005; Wallace Foundation, 2011). Similarly, researchers have found that principal self-efficacy can be analyzed through principal interaction with staff, and more efficacious principals are highly collaborative and involved with their staff (Berry, 2010).

Principals who promote instructional leadership are able to greatly influence the self-efficacy of teachers (Caprara et al., 2012; Hoy, 2012; Thoonen et al., 2012).
Principal efforts to increase collaboration, reflection, professional growth participation and opportunities, and constructive dialogue regarding high yield instructional practices will increase student achievement (Hoy, 2012). These practices will likely result in the increase of collective staff efficacy.

**Limitations of the Study**

Caution should be used in applying these results to any other district or population. The small number of participants almost certainly impacts the results and the ability to generalize to other groups of schools. As only 13 principals participated in this study, the results can only determine and suggest other possible areas in which further and expanded research should be completed.

**Recommendations for Practice**

Bandura (1977a) held that self-efficacy is developed through a combination of performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal. Furthermore, Bandura (1986) described self-efficacy to be context specific and determined by a reciprocal relationship. Bandura (1977a) also found that an individual’s self-efficacy is determined by the actions and judgments of his/her past and the feedback that an individual has received from the environment. This study’s results support the theory of reciprocal causation. Practitioners can reasonably assume that the interactions of the school principal and his/her teachers are reciprocal in nature, and the principal can influence the efficacy of teachers just as the teachers can influence the efficacy of the principal.

Principals with higher efficacy have an increased chance of ensuring that teachers are properly guided and monitored. The more intentional and purposeful a principal is in mentoring and guiding teachers, the greater the chance a teacher has to develop an
increased sense of self-efficacy. The theory of reciprocal causation would hold that gains in areas such as student achievement can build teacher efficacy just as teacher efficacy can result in the increase of student achievement (Hallinger, 2005).

Preservice and early-career principals should be required to learn about self-efficacy and its impact on collective staff efficacy due to environmental conditions. Professional development could center on the role of the principal as an influencer of teachers in an effort to positively impact student achievement and increase outcomes. Additionally, districts should consider principal self-efficacy when evaluating candidates for school leadership, and school principals should consider self-efficacy of prospective teacher applicants.

According to Hoy and Miskel (2008), individuals will work hard when they are capable of being successful. This contention is a powerful one in terms of its implications for culture as a continuous driver of school improvement. This is compounded by Bandura’s (1977b) view that self-efficacy does not refer to ability or skill but what an individual believes they can do with the skills and competencies that an individual possesses. In other words, individuals with a high degree of efficacy are likely to approach tasks much differently than individuals with low self-efficacy beliefs. The aforementioned researchers would argue, and this study’s results would support, that a leader’s self-efficacy is one of the most important tools of continuous organizational improvement, as an individual with a high-degree of self-efficacy is likely to approach tasks with a higher degree of determination and is less likely to give up when presented with barriers to the task at hand.

Bandura’s (1977a) theory of reciprocal causation supports the conclusion of the study that the interaction of the principal and the teacher are reciprocal and the self-
efficacy of the teacher can impact the self-efficacy of the principal and vice versa.

The implications of this study, which should be considered in light of the study’s limitations, are significant nonetheless.

Schools districts should ensure that they are examining the self-efficacy of prospective and in-service principals, particularly in terms of the instructional and managerial constructs of the PSES. This will allow districts to match principals with high degrees of self-efficacy in those individual constructs with the schools that need leaders with a high deal of self-efficacy in those areas. For example, if a school is suffering from poor managerial processes as determined by achievement and perception data, a principal should only be hired for that school if he/she has a high degree of self-efficacy in the school management construction of the PSES.

Bandura’s (1977a) theory of reciprocal causation suggests that the principal has the ability to alter his/her behavior and manipulate the environment in order to affect teacher self-efficacy. As such, individual schools should examine teacher self-efficacy to determine how to alter leadership behaviors to improve collective efficacy.

As a result of this study, the following recommendations are made for practitioners.

1. Principals should be intentional about devoting time to increase their sense of self-efficacy.
2. Principals should consider self-efficacy before hiring any individual for a school’s staff.
3. Principals must engage with teachers in a way that will ensure a reciprocal increase of self-efficacy.
4. Superintendents and boards of education should consider self-efficacy
perceptions of those individuals wishing to become school principals.

5. Principals, as part of routine perception data collection, should complete the PSES; and faculty members should complete the TSES and ensure that adequate time is set aside to analyze and reflect on the results and their meaning.

**Recommendations for Future Study**

The construct of principal efficacy is still a relatively new one and more research is still needed to determine those variables that influence a principal’s sense of efficacy. Additionally, more attention needs to be focused on the beliefs of principals, which are very likely to affect their self-efficacy beliefs. Though these results are small in terms of scale, they add to the literature of the subject of self-efficacy of a principal and the impact of principal self-efficacy on collective staff efficacy. As principals are consistently being asked to take on new roles and develop new skills, it is important to continue to study how their sense of efficacy impacts their actions (Bandura, 1997; NASSP, NAESP, 2013; Tschannen-Moran & Gareis, 2004).

Replication of this study is needed to further substantiate its conclusions and to provide further conclusive evidence related to the reasons behind these findings.

The following recommendations are made for further research.

1. A study that explores the differences of self-efficacy beliefs for elementary, middle, and high school principals.

2. Further studies should be conducted to examine the relationship of both principal and teacher efficacy and student academic outcomes.

3. A study should be conducted to allow for the exploration of teacher perceptions of those principal behaviors that contribute to teacher efficacy.
4. As an extension, a study should be considered that examines the effects of principal supervisor (directors, superintendents) efficacy and principal efficacy.

5. A qualitative study should be conducted to examine actual principal behaviors with respect to self-efficacy beliefs.
References


Appendix A

Principal Self-Efficacy Scale
# Principal Questionnaire

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for principals in their school activities.

**Directions:** Please indicate your opinion about each of the questions below by marking one of the nine responses in the columns on the right side. The scale of responses ranges from "None at all" (1) to "A Great Deal" (6), with "Some Degree" (3) representing the mid-point between these low and high extremes. You may choose any of the nine possible responses, since each represents a degree on the continuum. Your answers are confidential.

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

<table>
<thead>
<tr>
<th>&quot;In your current role as principal, to what extent can you...&quot;</th>
<th>None at All</th>
<th>Very Little</th>
<th>Some Degree</th>
<th>Quite a Bit</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. facilitate student learning in your school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. generate enthusiasm for a shared vision for the school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. handle the time demands of the job?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. manage change in your school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. promote school spirit among a large majority of the student population?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. create a positive learning environment in your school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. raise student achievement on standardized tests?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. promote a positive image of your school with the media?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. motivate teachers?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. promote the prevailing values of the community in your school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. maintain control of your own daily schedule?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. shape the operational policies and procedures that are necessary to manage your school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. handle effectively the discipline of students in your school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. promote acceptable behavior among students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. handle the paperwork required of the job?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. promote ethical behavior among school personnel?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. cope with the stress of the job?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. prioritize among competing demands of the job?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix B

Permission Letter from Author of Survey Instrument
January 22, 2018

Douglass,

You have my permission to use the Teacher Sense of Efficacy Scale (formerly called the Ohio State Teacher Sense of Efficacy Scale), which I developed with Anita Woolfolk Hoy, in your research. You can find a copy of the measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch. Please use the following as the proper citation:


You also have my permission to use the Principals’ Sense of Efficacy Scale, which I developed with Chris Gareis, in your research. The best citation to use is:


I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

I would love to receive a brief summary of your results.

All the best,

Megan Tschannen-Moran
The College of William and Mary
School of Education
Appendix C

Directions for Scoring PSES
Principal Self-Efficacy Scale Scoring Guide

Principal Sense of Efficacy Scale

**Efficacy for Management**

- Handle the time demands of the job
- Handle the paperwork required of the job
- Maintain control of your own daily schedule
- Prioritize among competing demands of the job
- Cope with the stress of the job
- Shape the operational policies and procedures that are necessary to manage your school

**Efficacy for Instructional Leadership**

- Motivate teachers
- Generate enthusiasm for a shared vision for the school
- Manage change in your school
- Create a positive learning environment in your school
- Facilitate student learning in your school
- Raise student achievement on standardized tests

**Efficacy for Moral Leadership**

- Promote acceptable behavior among students
- Promote school spirit among a large majority of the student population
- Handle effectively the discipline of students in your school
- Promote a positive image of your school with the media
- Promote the prevailing values of the community in your school
- Promote ethical behavior among school personnel

To score the full scale, calculate a mean of all 18 items. To calculate each of the subscales, calculate the mean of the six items listed under each heading.
Appendix D

Teacher Self-Efficacy Scale
### Teacher Beliefs - TSES

**Directions:** Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

<table>
<thead>
<tr>
<th>Question</th>
<th>None at all</th>
<th>Very Little</th>
<th>Some Degree</th>
<th>Quite a Bit</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much can you do to get through to the most difficult students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How much can you do to help your students think critically?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. How much can you do to control disruptive behavior in the classroom?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. How much can you do to motivate students who show low interest in school work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. To what extent can you make your expectations clear about student behavior?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How much can you do to get students to believe they can do well in school work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. How well can you respond to difficult questions from your students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. How well can you establish routines to keep activities running smoothly?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. How much can you do to help your students value learning?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. How much can you gauge student comprehension of what you have taught?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. To what extent can you craft good questions for your students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. How much can you do to foster student creativity?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. How much can you do to get children to follow classroom rules?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. How much can you do to improve the understanding of a student who is failing?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. How much can you do to calm a student who is disruptive or noisy?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. How well can you establish a classroom management system with each group of students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. How much can you do to adjust your lessons to the proper level for individual students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. How much can you use a variety of assessment strategies?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. How well can you keep a few problem students from running an entire lesson?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. To what extent can you provide an alternative explanation or example when students are confused?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. How well can you respond to defiant students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. How much can you assist families in helping their children do well in school?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. How well can you implement alternative strategies in your classroom?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. How well can you provide appropriate challenges for very capable students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Directions for Scoring TSES
Directions for Scoring the Teachers' Sense of Efficacy Scale

Developers: Megan Tschannen-Moran, College of William and Mary
Anita Woolfolk Hoy, the Ohio State University.

Construct Validity

For information the construct validity of the Teachers' Sense of Teacher efficacy Scale, see:


Factor Analysis

As we have used factor analysis to test this instrument, we have consistently found three moderately correlated factors: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. At times, however, the make up of the scales may vary slightly. With preservice teachers we recommend that the full scale (either 24-item or 12-item short form) be used, because the factor structure often is less distinct for these respondents.

Subscale Scores

To determine the Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management subscale scores, we compute unweighted means of the items that load on each factor. Generally these groupings are:

**Short Form**

Efficacy in Student Engagement: Items 2, 4, 7, 11
Efficacy in Instructional Strategies: Items 5, 9, 10, 12
Efficacy in Classroom Management: Items 1, 3, 6, 8

**Long Form**

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

Reliabilities

In the study reported in Tschannen-Moran & Woolfolk Hoy (2001) above the following reliabilities were found:

<table>
<thead>
<tr>
<th></th>
<th>Long Form</th>
<th></th>
<th>Short Form</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>alpha</td>
<td>Mean</td>
</tr>
<tr>
<td>TSES</td>
<td>7.1</td>
<td>.94</td>
<td>.94</td>
<td>7.1</td>
</tr>
<tr>
<td>Engagement</td>
<td>7.3</td>
<td>1.1</td>
<td>.87</td>
<td>7.2</td>
</tr>
<tr>
<td>Instruction</td>
<td>7.3</td>
<td>1.1</td>
<td>.91</td>
<td>7.3</td>
</tr>
<tr>
<td>Management</td>
<td>6.7</td>
<td>1.1</td>
<td>.90</td>
<td>6.7</td>
</tr>
</tbody>
</table>

1 Because this instrument was developed at the Ohio State University, it is sometimes referred to as the Ohio State Teacher Efficacy Scale. We prefer the name, Teachers' Sense of Efficacy Scale.
Appendix F

School District IRB Approval
February 7, 2018

Douglas R. Massengill, Jr.
Doctoral Candidate
Gardner-Webb University

Dear Mr. Massengill,

I am pleased to inform you that the Moore County Schools Internal Review Board has supported your request for permission to conduct research in Moore County Schools.

As per your research design, through Gardner-Webb University, you are permitted to proceed with your process in joint effort with our Department of Planning, Accountability, and Research. Thank you for supporting our requirements that principal, assistant principal and/or teacher participation in the study is completely voluntary.

As we agreed, Moore County Schools shall not be named in the final reports or subsequent presentations of your research. Please provide a copy of your University’s IRB approval if at all possible before you begin your work.

When your research is completed and approved by your university, a final copy of your research must be submitted to Moore County Schools at the Office of Planning, Accountability, and Research.

Moore County Schools wishes you success with your research and looks forward to learning from your findings.

Sincerely,

Robin Calcutt, Ed.D
Director for Planning, Accountability and Research
Appendix G

Principal Letter of Invite
Dear Colleague,

I would like to thank you in advance for participating in this research investigation. Your assistance in this project is greatly appreciated.

This project is research for my dissertation on Principal Effectiveness: An Analysis of the Effects of Principal Self-Efficacy on Collective Staff Efficacy in a Rural North Carolina School System. Numerous researchers, to include Fuller (2003), Pargle & Green (2002), and Goodard, Woolfolk, & Hoy (2000), have held that the efficacy beliefs of the principal are vital to meeting the challenging expectations of school administrators. Likewise, principal efficacy research could play a significant role in any change in recruitment, preparation, professional development, and retention programs that a district might implement. It is the intent of this study to determine if there are statistically significant relationships between school administrator self-efficacy scores on the Principal Sense of Efficacy Scale (PSES) and collective teacher efficacy scores on the Teacher Sense of Efficacy Scale (TSES).

There are no known risks to participating in this survey. Although the questionnaires are anonymous, there may be some, however, who become anxious about the potential of others to learn of their status. I want to assure you of anonymity and confidentiality. No participants’ identity will be obtained nor reported and all individuals are reminded of their right to withdraw or refuse participation at any time without penalty. It should take approximately 15-20 minutes for you to complete this short questionnaire. By submitting your answers, you are indicating your consent to participate in the study.

You may participate in the study by completing the survey at the following link: https://goo.gl/forms/TZ3z3y1xGHNy1gK4

Summary results, aggregated so no individual or facility is identifiable, will be available by June of 2018. Alternatively, if you have questions or would like to learn the results of the study, you may contact me, Douglas Massengill, Jr., at dmassengill@givens-webb.edu. Thank you for your participation. What is learned through this study has the potential to improve our administration induction programs and teacher and principal professional development offerings as your responses are very valuable.

Sincerely,

Douglas R. Massengill, Jr., Ed.S.
Doctoral Candidate
Givens-Webb University
Appendix H

Informed Consent
Title of Study
An Analysis of the Effects of Principal Self-Efficacy on Collective Staff Efficacy in a Rural North Carolina School System

Researcher
Douglas Massengill, Educational Leadership

Purpose
The purpose of this study is to determine the extent that principal self-efficacy impacts collective teacher self-efficacy?

Procedure
What you will do in the study:
All principals and teachers in the district will be invited to complete the survey via an email invitation that includes the invitation to participate/informed consent form. After two weeks, a reminder email will be send to all participants. Participants will have three weeks to respond to the survey request. As stated in the informed consent form, completion of the survey will imply the subject’s consent to participate.

Time Required
It is anticipated that the study will require about 15 minutes of your time.

Voluntary Participation
Participation in this study is voluntary. You have the right to withdraw from the research study at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. If you choose to withdraw, you may request that any of your data, which has been collected, be destroyed unless it is in a de-identified state.

Confidentiality
Data will be collected anonymously via a Google form. The survey and invitation to participate/informed consent will be sent out by the district’s Planning, Accountability, and Research office. The Planning, Accountability, and Research Office will download the results and share them with the researcher via a secure dropbox. All data will be stored on the district’s secure network, which requires authentication after login to access.

Data Linked with Identifying Information
The information that you give in the study will be handled confidentially. Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

Anonymous Data
The information that you give in the study will be handled confidentially. Your data will be anonymous which means that your name will not be collected or linked to the data.

**Risks**
There are no anticipated risks in this study.

**Benefits**
There are no direct benefits associated with participation in this study. The study has the potential to improve administrator induction programs and teacher and principal professional development offerings so your responses are very valuable.

**Payment**
You will receive no payment for participating in the study.

**Right to Withdraw From the Study**
You have the right to withdraw from the study at any time without penalty.

**How to Withdraw From the Study**
- If you want to withdraw from the study prior to completing the survey, then you do not have to participate.
- If you would like to withdraw after your materials have been submitted, please contact the researcher, Doug Massengill, by email at [doug.massengill@gmail.com](mailto:doug.massengill@gmail.com), and request that your data be removed from the study’s results.

If you have questions about the study, contact the following individuals.
Douglas Massengill
Department of Educational Leadership
School of Education
Gardner-Webb University
Boiling Springs, NC 28017
XXXXXXXXXXX

Dr. Danny Stedman
Department of Educational Leadership
School of Education
Gardner-Webb University
Boiling Springs, NC 28017
XXXXXXXXXXX

If the research design of the study necessitates that its full scope is not explained prior to participation, it will be explained to you after completion of the study. If you have concerns about your rights or how you are being treated, or if you have questions, want more information, or have suggestions, please contact the IRB Institutional Administrator listed below.
**Voluntary Consent by Participant**

I have read the information in this consent form and fully understand the contents of this document. I have had a chance to ask any questions concerning this study and they have been answered for me.

_____ I agree to participate in the confidential survey.

_____ I do not agree to participate in the confidential survey.

________________  __________________________
Participant Printed Name  Date: __________________

________________  __________________________
Participant Signature  Date: __________________

You will receive a copy of this form for your records.
Appendix I

Teacher Letter of Invitation
Dear Colleague,

I am inviting all Moore County classroom teachers to complete the survey linked below. I would greatly appreciate your support in this endeavor. This study has been approved by the Moore County Schools Institutional Review Board and the Gardner-Webb University Institutional Review Board.

This project is research for my dissertation on Principal Efficacy: An Analysis of the Effects of Principal Self-Efficacy on Collective Staff Efficacy in a Rural North Carolina School System. Principal efficacy research could play a significant role in any change in recruitment, preparation, professional development, and retention programs that a district might implement. It is the intent of this study to determine if there are statistically significant relationships between school administrator self-efficacy scores on the Principal Sense of Efficacy Scale (PSES) and collective teacher efficacy scores on the Teacher Sense of Efficacy Scale (TSES).

There are no known risks to participating in this survey. Although the questionnaires are anonymous, there may be some, however, who become anxious about the potential of others to learn of their status. I want to assure you of anonymity and confidentiality. No participants' identity will be obtained or reported and all individuals are reminded of their right to withdraw or refuse participation at any time without penalty. It should take approximately 15-20 minutes for you to complete the short questionnaire. By submitting your answers, you are indicating your consent to participate in this study.

You may participate in the study by completing the survey at the following link: https://goo.gl/forms/WSuYQszTj6QCCX2s

Summary results, aggregated so no individual or facility is identifiable, will be available by June of 2018. Alternatively, if you have questions or would like to learn the results of the study, you may contact me, Douglas Massengill, at dmassengill@gwc.edu. Thank you for your participation. What is learned through this study has the potential to improve our administrator induction programs and teacher and principal professional development offerings so your responses are very valuable.

Sincerely,

Douglas R. Massengill, Jr., Ed.S.
Doctoral Candidate
Gardner-Webb University
Appendix J

Survey Invitation Follow-Up Email
Dear Colleague,

I would like to express my appreciation to those teachers who have completed the survey. The survey window will close on the afternoon of Sunday, April 1. If you would still like to participate, please do so by this deadline.

Thanks in advance for your assistance in this endeavor.

Kind Regards,
Doug Masten

88