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The Relationship Between Secondary School Teachers' Perceptions of Principal Ethical Leadership and Organizational Health

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The Relationship between Secondary School Teachers' Perceptions of
Principal Ethical Leadership and Organizational Health

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Creston, for tolerating a stressed-out wife and mom for many, many years and for being

so supportive throughout this whole process. I love you all very much. Let the good times

roll. Thanks, Mom and Dad, for instilling the importance of education in me long ago.

ABSTRACT

The purpose of this descriptive, correlational study was to determine if any significant relationships existed between secondary school teachers' perceptions of principal leader integrity as measured by the Perceived Leadership Integrity Scale ([PLIS], Craig & Gustafson, 1998) and schools' organizational health as perceived by secondary school teachers and gauged by the Organizational Health Inventory for Secondary Schools ([OHI-S], Hoy & Feldman, 1987). The study also explored the seven OHI-S dimensions: (1) Institutional Integrity, (2) Initiating Structure, (3) Consideration, (4) Principal Influence, (5) Resource Support, (6) Morale, and (7) Academic Emphasis—and their relationships with the demographics of the sample. The sample involved six hundred fifty (650) Tennessee secondary school teachers identified through a purposive sampling process. These teachers completed both surveys and the requested demographic questionnaire online. Pearson product correlations revealed statistically significant relationships between Perceived Leader Integrity (PLI) and the composite score calculated from the scores of the seven OHI-S dimensions—the Organizational Health Index (OH Index), as well as between PLI and each of the seven OHI-S dimensions. Multiple regression analysis provided closer scrutiny of the data. In terms of the seven dimensions on PLI, this analysis showed the OH Index to have a moderate direct relationship, Consideration to be the strongest indicator, and Institutional Integrity and Academic Emphasis to a have a smaller, but statistically significant relationships. Univariate and multivariate analysis of variance tests were conducted to determine differences between and among PLI, the OH Index, and the demographic variables.

Subject taught was strongly significant in relation to the seven OHI-S dimensions. The

Tukey HSD and the Bonferroni correction were performed to examine more closely the

significant differences found to exist among educational level or total years of teaching

experience and the OH Index, as well as each of its seven dimensions. These findings

help broaden understanding of the relationship between leadership and ethics. Northouse

(2004) suggests that clarification of this relationship can identify implications for policy

and decision making. Future research should explore the use of longitudinal or qualitative

research methodology to study PLI and organizational health in greater depth.

TABLE OF CONTENTS

LIST OF TABLES

TABLE OF FIGURES

CHAPTER 1

INTRODUCTION

Ethics is a part of every decision a leader must make, and the ethical integrity of a leader guides every choice (Northouse, 2004). In fact, Leithwood and Riehl (2003) emphasized that effective leaders must model appropriate actions and dispositions. Followers' perceptions of their ethical integrity correspond to the overall success of those leaders (Craig & Gustafson, 1998). These principles hold true in the school environment.

The Interstate School Leadership Licensure Consortium (ISLLC) and the Standards for Advanced Programs in Educational Leadership (ELCC) expect school administrators to become educational leaders who support "the success of all students by acting with integrity, fairness, and in an ethical manner" (Council of Chief State School Officers [CCSSO], 1996, p. 18; National Policy Board for Educational Administration [NPBEA], 2002, p. 13). According to Glanz (2006), all principals should be continually active in providing ethical leadership within the school.

Educational leaders have the responsibility of creating effective learning communities (Strike, 2007), ones that are built and sustained by ethical leadership (Glanz, 2006; Sergiovanni, 1992; Starratt, 2003). Ubben, Hughes, and Norris (2007) advised that a school leader in a learning community must structure an organization in a way that allows individuals to "continually [expand] their capabilities to shape their future—leaders are responsible for learning" (p. 25). Owings and Kaplan (2003) and Levy (2004) concurred. The quality of each individual within an organization determines the quality of the organization in its entirety (Strike). The ISLLC (CCSSO, 1996) and

ELCC (NPBEA, 2002) standards suggested that school administrators must exemplify an ability to foster a school culture contributing to both student learning and staff growth. When students and faculty members are connected within a learning community, they view themselves as team members working together to attain moralistic objectives (Strike, 1999).

Northouse (2004) implied there is no "I" in team; however, "I" is the beginning of integrity, just as a leader's influence on an organization is the beginning of the organization's ethical climate. Sergiovanni (2007) further suggested the culture within the school is what holds the organization together, and at the center of a positive culture is a cohesive vision and strong values. An ethical organization cannot function for long without an ethical leader (Aronson, 2001). Aronson described ethical leadership as not only fostering ethical behavior, but, more importantly, promoting effectiveness. Effective schools are healthy schools (Browne, 2002); they are organizations that avoid persistent, systemic ineffectiveness (Miles, 1965). Healthy schools have effective principals who are dynamic, supportive, and influential (Hoy & Tarter, 1997). The creation of healthy schools lies in the hands of the principals (Leithwood & Riehl, 2003; Miles, 2002; Sergiovanni, 2006).

Statement of the Problem

Ciulla (1995) argued that researchers were spending too much time researching the definition of leadership; instead, they should have been determining what characteristics made a good leader. In a more recent article, Ciulla (2003) proposed that a good leader was not simply effective, but also morally good. Therefore, the question of

concern posed from Ciulla's earlier article became whether ethics was actually the difference between a *good* leader and an *effective* one.

As stated previously, studies have indicated that healthy schools had effective leaders (Hoy & Tarter, 1997). The relationships and differences between a school's organizational health and the principal's ethical integrity needed to be uncovered. Ethical leadership research has been a fairly new development (Craig & Gustafson, 1998; Fowler, 2010; Northouse, 2004; Strike, 2007), with scant literature pertaining to the topic available to date. Understanding the relationship between leadership and ethics has relied strongly upon conducting research from a variety of perspectives, cultures, and disciplines (Ciulla, 2005). Northouse recommended more intensive and more rigorous research in this area to clarify the relationship between leadership and ethics and to identify possible implications for policy and decision making.

Purpose of the Study

The purpose of this study was to examine the relationship between secondary school principals' ethical leadership as perceived by the teachers and measured by the Perceived Leadership Integrity Scale ([PLIS], Craig & Gustafson, 1998) and schools' organizational health as perceived by teachers and gauged by the Organizational Health Inventory for Secondary Schools ([OHI-S], Hoy & Feldman, 1987). The study also explored the relationship between teachers' perceptions of principals' ethical leadership and the individual dimensions of the OHI-S—Institutional Integrity (II), Initiating Structure (IS), Consideration (C), Principal Influence (PI), Resource Support (RS), Morale (M), and Academic Emphasis (AE). Other components of this study included the

differences among teachers' perceptions of leader integrity and teachers' perceptions of organizational health or any of its seven dimensions. Also, the study observed differences among the teachers' perceptions of leader integrity and teacher demographic variables, as well as teachers' perceptions of organizational health (or its dimensions) and teacher demographic variables.

Null Hypotheses

The hypotheses for this study concentrated on whether any relationships existed between perceived principal integrity and teachers' perceptions of organizational health or its dimensions. They also probed possible differences among the teachers' perceptions of leader integrity and teacher demographic variables, as well as teachers' perceptions of organizational health (or its dimensions) and teacher demographic variables. The following null hypotheses were tested:

H_01 There is no significant relationship between teachers' perceptions of the principals' ethical leadership as measured by the PLIS and teachers' perceptions of secondary schools' organizational health as measured by the OHI-S.

H_02 There is no significant relationship between teachers' perceptions of the principals' ethical leadership as measured by the PLIS and the seven OHI-S dimensions of secondary schools' organizational health as perceived by teachers and measured by the OHI-S.

H_03 There is no significant relationship between teachers' perceptions of the principals' ethical leadership levels as measured by the PLIS and teachers' perceptions of schools' organizational health as measured by the OHI-S.

H_04 There is no significant relationship between teachers' perceptions of the principals' ethical leadership levels as measured by the PLIS and the seven dimensions of the OHI-S.

4

H$_0$5   There is no significant difference between teachers' demographics (age, gender, ethnicity, subject area, educational level, and total years of teaching experience) and teachers' perceptions of the principals' ethical leadership levels as measured by the PLIS.

H$_0$6   There is no significant difference between teachers' demographics (age, gender, ethnicity, subject area, educational level, and total years of teaching experience) and teachers' perceptions of organizational health or the seven dimensions as measured by the OHI-S.

Operational Definitions

Terms such as "ethical leadership" and "Institutional Integrity" might encompass a variety of meanings depending upon the context in which they were used. Therefore, to foster a clear understanding of how specific terms were interpreted in this particular study and to further the reader's comprehension of the language used, the following definitions were provided:

1. *Academic Emphasis:* The level at which teachers place importance on meeting the educational goals of all students (Hoy, Tarter, & Kottcamp, 1991).

2. *Consideration:* The level at which a principal behaves in a supportive, collegial, and friendly manner (Hoy et al., 1991).

3. *Ethical Leadership*: Management and direction of a group or organization (e.g., school) in a manner going beyond mere concern for self to the greater concern for the happiness and welfare of the entire group (Northouse, 2004).

4. *Initiating Structure:* The level at which the task and achievement-oriented behaviors are articulated among school administrators (Hoy et al., 1991).

5. *Institutional Integrity:* The level at which an organization (e.g., school) protects its members (e.g., teachers) from the external forces exerted within a school's community (Hoy, 1991).

6. *Morale:* The level of trust, enthusiasm, confidence, and collegiality experienced among teachers (Hoy, 1991).

7. *Organizational Health*: The level at which a school carries out its mission by creating an environment where administrators and teachers work together as a team to meet the needs of the students while coping successfully with negative outside forces (Hoy, 1991).

8. *Perceived Leader Integrity:* The level at which a leader acts in an ethical manner, as perceived by subordinates (Craig & Gustafson, 1998).

9. *Principal Influence:* The level at which the principal is able to impact decisions made by superiors (Hoy, 1991).

10. *Resource Support:* The level at which a school supplies teachers with materials they need for instructional purposes (Hoy, 1991).

11. *Secondary Personnel:* Any faculty member serving students in grades 9-12 or grades 10-12, excluding alternative and vocational schools.

Delimitations of the Study

Delimitations are those constraints placed on the study by the researcher for the purpose of controlling the scope of the study. These delimitations may have an effect on the generalizability of the findings. The researcher delimited this study as follows:

1. Schools selected for the study were drawn from the districts in the state of Tennessee.

2. Only secondary schools were selected for the study.

3. Only teachers from the selected secondary schools were asked to participate in the study.

4. The analysis included only questionnaires completed (i.e., all items were answered) and returned within the designated timeframes.

Limitations of the Study

Limitations of a research study are those uncontrollable characteristics possibly having a negative effect on its results (Gay, Mills, & Airasian, 2009). These results and their implications, especially regarding the generalizability of the study, must be analyzed

in consideration of the limitations of the study. This study's limitations included the

following:

1. The overall parameters of this study were limited by time factors and economic feasibility.

2. The researcher chose to focus only on quantitative data.

3. Constructs like leader ethicality could not be directly measured. The researcher relied on teachers' perceptions of the leader's integrity as measured by the selected instrument.

4. The instruments selected for this study were restricted to those instruments' items as well as the constraints of self-report surveying. Therefore, potential self-report bias and common method variance exist, as well as multicollinearity among selected variables.

5. Causality could not be determined from these findings.

6. The study's results were limited to the researcher's statistical capabilities and computer software used in the study.

Assumptions

Gay, Mills, and Airasian (2009) defined an assumption much like an axiom or a

postulate. They considered it a "fact" not requiring proof or confirmation in any way. In

conducting this study, the researcher made the following assumptions:

1. The researcher used approved research methodology and accurately reported the results. In order to eliminate bias and increase the study's credibility, the researcher's perspective was not included (Brewer, 2001).

2. Study participants completed surveys fully, honestly, and accurately, to the best of their ability.

3. All participants read, understood, and followed the instructions provided for questionnaire completion before submission of the survey.

4. Administrative leaders actively encouraged their subordinates to participate in the study.

5. Indications of the presence and strength of constructs like ethical leadership could be measured using the PLIS.

6. The selected instruments were valid and reliable.

7. The sample was selected in a manner that could be reasonably expected to represent the population at large.

8. The researcher applied the Pearson correlation coefficient, r to identify linear relationships among the variables, if any such relationships existed (Gay, Mills, & Airasian, 2009).

9. Variables examined in this study were normally distributed.

Significance of the Study

Society today finds itself in an era of ethical decline (Bennett, 1999). Boeing, Enron, Tyco International, WorldCom, HealthSouth Corporation, and Arthur Anderson are among the major corporations impacted by severe ethical issues over the past decade (Uhl-Bien & Carsten, 2007). Walker Information National Study (2001) conducted research on business ethics that revealed supervisory pressure on employees to compromise the ethical standards of the organization. For example, only 31% of employees identified ethics as a consideration in making decisions when monetary gains were at risk. When dealing with ethical matters, 54% reported being pressured to reduce quality of the standards they would normally apply in most situations, and a mere 37% were comfortable enough to report unethical practices. In this ever changing world, it has been getting harder to distinguish between right and wrong. The leader's primary purpose has been to guide the organization in the appropriate direction (Dess & Picken, 2000). The most difficult task in accomplishing this has been to activate adaptive change among the people within the organization (Heifetz & Laurie, 1997) without sacrificing values and integrity.

Student achievement has been shown to increase when teachers were satisfied with their jobs (Sergiovanni & Starratt, 1988). However, conditions that have contributed to job dissatisfaction and, subsequently, the ineffectiveness of schools needed to be recognized and resolved (Tye & O'Brian, 2002). For example, heightened accountability in schools has had unintended negative effects on school-wide organizational health as mediated by the ethical decision making of principals. Tye and O'Brian found this heightened accountability to be the primary reason teachers were leaving the profession. In the same study, tension among faculty and administration was ranked the fifth cause for teachers' departure.

Furthermore, the pressures of high stakes testing have caused educators to practice behaviors that were not only unethical but also illegal (Wright, 2009). The administrator as leader has set the tone in the organization (Barney, 2005; Weaver, Trevino, & Agle 2005), and employees have responded accordingly (Grojean, Resick, Dickson, & Smith, 2004). In other words, ethical leaders inspired ethical behavior ((Brown & Trevino, 2006a). However, administrators have felt the pressures of accountability and have made unethical decisions they would hardly consider otherwise (Strike, 2007). Maylone (2002), Strike, and Tienken (2010) suggested that educators have learned to "game" the system by raising test scores in some way rather than by focusing on the best approaches to educating their students. In turn, these decisions have impacted the school's organizational health (Strike).

Strike (2007) attributed qualities of ethical leadership to one who created a positive school community; however, this definition lacked research-driven support. The

9

researcher anticipated using this study to present evidence to negate or substantiate Strike's assumptions of such a relationship between ethical leadership and school climate. Not only did this study expand on the research in the area of ethical leadership, as suggested by many (Craig & Gustafson, 1998; Fowler, 2010; Northouse, 2004; Strike, 2007), but, more importantly, the study revealed whether ethical leaders, as proposed by Ciulla (2003), were also more effective in creating a healthier organization.

Organization of the Study

This study examined the relationship between teachers' perceptions of the secondary school principals' ethical leadership and teachers' perceptions of the school's organizational health. In chapter 1, the researcher presented an introduction, statement of the problem, purpose of the study, hypotheses, term definitions, delimitations, limitations, and significance of the study. A summary of current literature involving ethical leadership and organizational health and the basis they provided for the study's theoretical framework were presented in chapter 2. Chapter 3 outlined the research methods used to conduct this study. It included research design, instruments, population and sample selection, data collection, and data analysis. The results of the study shown in chapter 4 included the data from the administration of both instruments, their analyses, the suggested relationships between the two instruments, and the demographics. Chapter 5 offered a discussion of the conclusions and recommendations for future, ethical leadership research. Practical implications of the findings that were drawn from answers to the six null hypotheses were provided in this chapter.

CHAPTER 2

REVIEW OF LITERATURE

As explained in chapter 1, this study was conducted in Tennessee secondary schools. It was designed to investigate the relationship between teachers' perceptions of the secondary principals' ethical leadership by using the PLIS (Craig & Gustafson, 1998) and teachers' perceptions of the school's organizational health by using the OHI-S (Hoy & Feldman, 1987). Chapter 2 provides a review of the literature related to these constructs. It synthesizes current views on ethical leadership, organizational health, ethical leadership and organizations, teacher demographic research, business ethics research, and impacts of unethical leadership—all culminating in the theoretical framework for the study.

Ethical Leadership

For the purpose of this study, ethical leadership was described as a school leader leading within the school with concern for the entire school, all stakeholders, not just for self (Northouse, 2004). In order to determine the best research options, a review of literature was conducted dealing with problems with ethical leadership research, the need for ethical leadership within schools, and current ethical leadership research in schools.

Problems with ethical leadership research.

As stated in chapter 1, ethical leadership research represented a fairly new area of study with relatively scant literature available (Craig & Gustafson, 1998; Fowler, 2010; Northouse, 2004; Strike, 2007). The relationship between leadership and ethics could not be fully understood without conducting research from many perspectives, cultures, and

11

disciplines (Ciulla, 2005). More intensive and rigorous research had to be conducted in this area to help clarify the relationship between leadership and ethics and provide reasonable implications for leaders' decision making process.

As argued by Butcher (1997), ethics coincided with effective leadership. Ethics itself has been defined differently by different individuals, making the idea of ethical leadership difficult to grasp (Campbell, 1997). Hodgkinson (1991) suggested that literature in this area was shallow and complained about the lack of theory that overtly connected ethics with leadership. Although Northouse (2004) included a chapter on ethical leadership in his third edition of *Leadership Theory and Practice*, he did not state that his material served as foundation for such a theory. Many have attributed this continuing gap to both the inability to effectively measure the integrity level of a leader within an organization and the lack of a unified, consistent definition of ethical leadership (Craig & Gustafson, 1998; Northouse; Strike, 2007). Ryan (1993) even proposed that a core set of values could not be agreed upon because of the diverse nature of the population of our nation. He suggested that troubles found in society and in schools stemmed from this lack of agreement on values and moral principles. On the other hand, Walker (1993) found that over half of the people participating in his study *were* in agreement on the idea of ethics, further substantiated by Carter's (1996) purporting American democracy to be made up of core values incremental to ethics and its application.

Transformational leadership—a leadership approach or style creating positive change in its followers—has been linked to ethical leadership by many researchers

12

(Bennis, 1989; Burns, 1978; Ciulla, 1998; Sergiovanni, 1990) who even suggested that ethical leaders had been performing similarly to transformational leaders. For example, followers desired to practice higher levels of ethical behaviors *because* their transformational leaders themselves focused on their followers' higher order needs. Bass (1985) proposed trustworthiness and integrity as two vital characteristics of transformational leaders. The same could be said of ethical leaders.

Need for ethical leadership research within schools.

Gray (1996) suggested that one of the main reasons people made unethical decisions was due to the pressures to meet expectations. The No Child Left Behind Act (NCLB) signed into law on January 8, 2002 had one primary purpose: "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments and to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind" (No Child Left Behind, 2002, p. 4). Only 9% of Americans considered the law very favorable (Bushaw & McNee, 2009), with the majority of Americans, including educators, rather narrowly concluding that the NCLB merely represented high scores on state-mandated tests (Russell & McCombs, 2006; Strike, 2007).

In 2005, Tennessee progressed toward meeting the requirements of NCLB, with 87% of all 8th graders scoring proficient on Tennessee reading and mathematics achievement assessments. However, students did not fare as well on national assessments. Later in 2005, only 26% of those same Tennessee 8th graders scored

13

proficient on the National Assessment of Educational Progress (NAEP). In the spring of 2007, the National Chambers of Commerce did a comparison report card of key educational factors in all states, and Tennessee received an 'F' in the Truth in Advertising category because of this huge discrepancy (Eddins, 2008; TDOE, 2008) between state- and national-level student score results. In an attempt to fix the problem, Tennessee joined the America Diploma Project (ADP) Network (Tennessee Department of Education, 2008) which required an upgrade of the state standards to a more rigorous level commensurate with national tests.

As of the 2009-2010 school year, Tennessee teachers at all levels beginning with kindergarten were mandated to teach their students more skills in accordance with the newly adopted and more rigorous standards and the revised accountability measures designed to test the new standards in a more accurate manner. For example, the earlier Algebra 1 Gateway Exam was very basic. Written as an eighth grade exit exam, it did not actually test the state standards for Algebra 1. However, the new End of Course (EOC) for Algebra 1 has been developed to meet the requirements of the new Algebra 1 standards. The difficult task for teachers in the Algebra 1 classroom has not been confined to teaching all students by the more rigorous standards applied; they have also had to teach the students skills based on their cumulative experience of having been taught under the new standards in every other grade (Eddins, 2008; TDOE, 2008). From that standpoint, a true Algebra 1 evaluation could not be determined effectively until the 2009-2010 kindergarten students take the Algebra 1 EOC AYP assessment. By that time,

a school previously not on the as being at-risk regarding standards compliance could be placed on probation and even restructured.

Tennessee educators and administrators across the state have been implementing these new, more rigorous standards and assessments in their respective schools; their efforts have paid off. Tennessee and Delaware were selected as co-winners of the Race to the Top (RTTT) grant. Over a grant period of four years, five hundred million dollars were to be distributed among all schools in the two states committed to implementing the new standards (Achieve, 2010; Hamilton, 2010).

Strike (2007) described ethical school leaders as being resourceful in meeting legislative mandates while building a school community and setting high expectations for all students. "The danger of these mandates and benchmarks is that they will also create an alienated culture of mere compliance in which teachers and leaders are motivated more by incentives than by professional norms and in which attention will be focused on compliance and meeting benchmarks by any means possible" (p. 148).

The pressures of high stakes testing have caused educators to practice not only unethical, but also illegal, behaviors (Wright, 2009). Because administrators have felt the pressures of accountability, they have made unethical decisions they would not make otherwise (Strike, 2007). Maylone (2002), Strike, and Tienken (2010) proposed that educators might learn to "game" the system by raising test scores in other ways rather than by focusing on the best ways to educate students.

Many school districts in multiple states (e.g., Florida, Michigan, and Texas, just to name a few) have already succumbed to the pressures of the high stakes accountability

issues discussed earlier, with Georgia being added most recently to the list of states acting unethically to meet state standards (Turner, 2011a). *USA Today* (Toppo, 2011, July 6) reported that a state probe had found teachers and principals in over 40 elementary and middle schools to be cheating on state achievement tests for nearly seven years. As related by Turner and Toppo, Georgia's governor had issued a detailed report to the effect that Atlanta Public Schools (APS) former superintendent and her administration had "emphasized test results and public praise to the exclusion of integrity and ethics." The review of over 800,000 documents and results of conducting 2,100 interviews (Turner) validated the suspicion of a "culture of fear, intimidation, and retaliation" within the schools. As a result of tampering with test answer documents, hundreds of teachers were likely to lose their teaching license and could serve as many as 10 years in prison (Toppo). In hopes of preventing other unethical scandals, the recently appointed interim APS superintendent has determined that ethics training for all employees within the district would be required annually (Turner, 2011b).

Current ethical leadership research in schools.

Ethical leadership research conducted within schools in the United States has been rare (Flumerfelt, Smith, Ingram, & Brockberg, 2009), with most related literature typically found to be an opinion piece or a reflection rather than a research-based perspective. Internationally, studies have been done in countries such as Australia, Canada, and Turkey, as summarized below.

Ethical leadership research in Australia.

Dempster, Freakly, and Parry (2000) conducted a study in Queensland, Australia focusing on principals' perceptions of the schools' ethical climate. Qualitative data were gathered by interviewing 25 participants; subsequently, 552 respondents completed questionnaires developed by the researchers and based on the interview responses. Through an interview process, the researchers found that principals perceived the ethical climates within schools as being impacted negatively by factors such as localized school management, a shift to measurable outcomes, and an increase in parental and community involvement in the decision making process. Factors perceived as having a positive impact on schools' ethical climate were identified as increased access to resources, increased school-based resource management, and increased equity, social justice and diversity accommodations. Eighty-one percent (81%) of the population in this study indicated that complex ethical decisions being made in schools had increased by 14% when dealing with ethical dilemmas on a daily basis, 30% on a weekly basis, and 25% on a monthly basis. Dempster and colleagues also determined that student and faculty relationships, external relationships, and finance and resources were the primary issues requiring an ethical decision making process among principals in their study. These principals reported being strongly influenced in their ethical decisions by educational experience, leadership within the job, and parents. The majority of the principals participating were found to consult other principals when dealing with ethical dilemmas. Sixty-eight percent (68%) of the participants stated they were provided with ethical decision making professional development opportunities.

Ethical leadership research in Canada.

Langlois and Lapointe (2007) conducted a qualitative study in seven Canadian provinces by employing an open-ended interview process in questioning 47 principals, administrators at French-language minority schools. Using a factor analysis on the data collected, the researchers uncovered three separate levels of ethical leadership development: justice, critique and care. With experience found to be an important factor with the justice level. Emerging from this study were two concurrent combinations of ethics—critique and care. In other words, when dealing with mandates, principals in Canadian schools have had to decide between caring for the students and implementing the mandates. Nevertheless, Langlois and Lapointe showed that principals still have acted at a caring ethical level.

Ethical leadership research in Turkey.

In Turkey, Karakose (2007) completed a descriptive study to gain insight on teachers' perceptions of principals' ethical leadership. The researcher selected the Ethical Leadership Scale ([ELS], Yilmaz, 2006) as the survey instrument. The instrument comprised four levels of ethical leadership: communicative ethics, climate ethics, ethics in decision making, and behavioral ethics. It was administered to a sampling of 463 teachers, resulting in data for 339. The ANOVA, Kruskal-Wallis H Test, and the Mann-Whitney U Test were used in the analysis of these data.

Karakose (2007) found teacher gender to be significantly related ($p = .014$) to teachers' perceptions of principals' ethical leadership behaviors. Specifically, females indicated lower perceptions of the principals' climate ethics behavior. Teacher

educational level was significantly related (*p* = .029) to the ELS behavioral ethics level. No significant relationships were found among the ELS sub-levels and teachers' years of teaching experience.

Organizational Health

Miles (1965) was one of the first researchers to use the health metaphor to evaluate schools. He proposed that a school was healthy when it grew and thrived over time, not when it merely survived. While healthy schools might not be at their best at all times, they avoided long-term ineffectiveness. Miles (1969) developed 10 properties to determine the level of health of an organization categorized into three, different areas of needs: task needs, maintenance needs, and growth and development needs. Miles described task needs as those having goal focus, communication adequacy, and optimal power equalization. Maintenance needs consisted of resource utilization, cohesiveness, and morale. Innovativeness, autonomy, adaptation, and problem-solving adequacy were properties Miles categorized as growth and development needs. In conjunction with work from Parsons and his colleagues (1953) and Etzioni (1975), Hoy and Feldman (1987) used these three categories and 10 properties to develop the seven dimensions of the OHI-S: Institutional Integrity, Principal Influence, Consideration, Initiating Structure, Resource Support, Morale, and Academic Emphasis.

Organizational health index in schools.

Many studies have been conducted employing various techniques (e.g., use of the OHI-S as the instrument) to analyze organizational health in schools. This section

presents the review of literature dealing with application of the OHI-S, the OH Index, and each of the seven OHI-S dimensions.

A study conducted by Barth (2001) investigated the relationship between middle school organizational health, school size, and student achievement in reading and language arts and math, with socioeconomic status (SES) as an intermediary. A total of 69 West Virginia middle schools participated in the study. ANOVAs and Pearson's correlation coefficient were used to analyze survey data from the Organizational Health Inventory for middle schools and the Stanford Achievement Test, Ninth Edition, Form S. Barth found that the schools with a low SES correlated positively with organizational health and student achievement, but the converse was not true. There was no corresponding correlation found for schools with high SES. When controlled by low SES, school size correlated positively with reading and language arts and math achievement. In contrast, Henderson (2007) discovered that schools with higher organizational health scores were directly related to student achievement.

Osborn (2006) conducted a study comparing schools' organizational health with the OHI-S standard scores and attrition among public school teachers. Organizational health for participating secondary schools was found to be above average, and middle school teachers' low OHI-S rankings were related to teacher relationships and enthusiasm.

Dimension 1: Institutional Integrity (II).

Hoy and his colleagues (1991) depicted II as a board-level dimension. In a healthy school—a school with a high II, the board is successful in safeguarding the school

policies from outside influence, thereby conserving energy for the school's mission. In unhealthy schools—those schools with a low II, parents and other community members have a diminishing influence on the policies made within the school. II represented a major predictor of the faculty members' trust in the school principal. Hoy also discovered teachers to be more committed to schools with a high II.

As an institutional-level health indicator, II was described by Hoy and Woolfolk (1993) as the school's level of ability to protect faculty members from any outside forces. II was one of the two out of the seven health dimensions to actually predict general personal efficacy of teachers. Hoy and Hannum (1997) showed II correlated negatively with middle school student achievement. They surmised that this was due to the fact that any parent involvement, intrusive or welcomed, led to a positive student outcome. Mau (1997) and Wang and Wildman (1996) all agreed that students performed better when parents were active within the school. Brown, Roney, and Anfara (2003) confirmed high performing middle schools showed increased parental involvement as well as a higher ability to resist external pressures; these schools were able to focus more on how they could help the community at large. Browne (2002) also found a positive correlation between II and school performance levels and effectiveness.

Dimension 2: Initiating Structure (IS).

Hoy and Woolfolk (1993) considered IS an administration-level dimension of health. A principal who was very clear in articulating work procedures, expectations, and performance standards had a strong IS (Hoy et al., 1991), one that also correlated positively with teacher commitment to the school (Bass, 1981; Halpin, 1966; Hoy et al.).

On the other hand, Hoy and his colleagues described an unhealthy school as one with no guidance and direction from the principal. Research conducted by Angelle (2010) found teachers strongly attributed student achievement to the structure of the organization and attributed the success of the structure to leadership practices.

Dimension 3: Consideration (C).

Consideration, another administration-level dimension of health (Hoy & Woolfolk, 1993), was deemed as high when principal behavior was proved collegial and supportive (Hoy et al., 1991). In other words, the principal's friendliness in a healthy school did not preclude high standards. Hoy found C to be a predictor of trust for faculty members—trust in their principal and in their colleagues, as well.

Consideration has been linked to ethical leadership. Brown, Trevino, and Harrison (2005) found a positive correlation between ethical leadership and C. When leaders demonstrated high levels of C, followers performed higher quality work, appeared more satisfied, and perceived the leader as more effective (Yukl, 2002). Leaders with high C scores were found by Fleishman and Harris to have (1962) experienced fewer turnovers, obtained higher job satisfaction from workers, and received a lower number of grievances filed. However, that same study did show performance levels of the workers to be lower as well. According to Hoy and Woolfolk (1993), principals exemplifying C were found to have stronger systems of management.

Dimension 4: Principal Influence (PI).

Hoy and Woolfolk (1993) considered PI an administrative-level dimension of organizational health. Hoy et al. (1991) defined PI as the principal's ability to sway the

school board and director. PI accompanied by Morale could together predict collegial

mutual trust. In Styron's and Nyman's (2008) study, influence of the principal was

significantly different among high- and low performing middle schools. High performing

middle schools scored a lower PI rating than did low performing middle schools.

Dimension 5: Resource Support (RS).

Resource Support is an administrative-level organizational health dimension (Hoy

& Woolfolk, 1993). The description of RS was given by Hoy et al. (1991) as a school

providing instructional and classroom supplies sufficiently and upon request and making

extra resources available when needed. Teacher commitment was partially attributed to

RS. A positive correlation between student achievement and RS was found by many

researchers (Browne, 2002; Henderson et al., 2005; Hoy & Hannum, 1997; Hoy, Tarter,

& Bliss, 1990; Sweetland & Hoy, 2000; Valente, 1999).

Dimension 6: Morale (M).

A teacher-level dimension of school health (Hoy & Woolfolk, 1993), M deals

with faculty members' rapport, i.e., teachers working together and sharing trust,

enthusiasm, and confidence with one another (Hoy et al., 1991). Hoy and Feldman (1987)

conducted a study with results indicating a relationship between M and teachers'

perceptions of school climate. Specifically, when combined with PI, M was a predictor of

faculty members' trust in one another. In a study conducted by Angelle (2010), the

organizational culture in a middle school was strengthened by trust. Increased

accountability has contributed to a decline in teacher and administrator M (Russell &

McCombs, 2006). Morale alone significantly impacted general teacher efficacy, and when combined with AE, it also influenced personal teacher efficacy (Hoy & Woolfolk).

Dimension 7: Academic Emphasis (AE).

Academic Emphasis was another teacher-level dimension of school health as interpreted by Hoy and Woolfolk (1993). Hoy and his colleagues (1991) described AE as existing in a school focusing on the success of students by setting goals and high expectations and fostering shared respect in pursuit of excellence in academics. They also found AE to be related to faculty members' trust in colleagues. Styron and Nyman (2008) discovered high performing schools had higher mean scores on AE. Uniquely, AE significantly impacted and even predicted the personal efficacy of teachers in the study completed by Hoy and Woolfolk. Hoy and Hannum (1997) found strong, positive correlations between AE and student achievement in math, reading, and writing. This dimension was among the most influential of organizational health dimensions in terms of student achievement (Brown, Roney & Anfara, 2003; Browne, 2002; Goddard, Sweetland & Hoy, 2000; Henderson, 2007; Hoy, Tarter & Bliss, 1990; Hoy & Hannum, 1997; Hoy, Hannum & Tschannen-Moran, 1998; Hoy, Tarter & Hoy, 2006; Sweetland & Hoy, 2000). Browne found AE to have significant positive correlations with the overall performance of the school, not just specific academic areas. In multiple studies (Brookover et al., 1978; Cawelti, 1999; Glidden, 1999; Licta & Harper, 1999) using a variety of research methods, student achievement and AE were strongly and positively correlated. It is especially important to note that Henderson showed a specific relationship existed between AE and students who were disadvantaged economically.

Ethical Leadership and Organizations

McCann and Holt (2009) studied employees' perceptions of ethical leadership in supervisors of manufacturing companies within the United States. The study used a PLIS scale breakdown exactly like the one presented by Northouse (2004): high ethical range was 31 to 35; moderate ethical range, 36 to 66; and low ethical range, 67 to 124. This breakdown was not originated by the authors of the PLIS; it was used by Northouse only for purposes of individual reflection within that particular context (B. Craig, personal communication, August 25, 2010). McCann and Holt (2009) determined that the majority of the employee participants considered the supervisors to be high ethical leaders, as measured by the scale used in the study, while most others ranked supervisors as moderate ethical leaders. They also ran a question-by-question analysis of the PLIS. The majority of the 31 items were strongly correlated.

White and Lean (2008) surveyed 245 Master of Business Administration (MBA) students to determine the relationships between Perceived Leader Integrity (PLI) and the work team environment. Confirmation that PLI did have an impact on the teams' ethical intentions was received from the findings, with a stronger relationship between situations that impacted the entire organization and the entire group. Team members were also found to commit unethical behaviors that would impact the team when the leader was perceived to have a higher amount of integrity, with extremely high integrity perceptions having the strongest impact. Cairns (1995) found 68% of Montana principals surveyed indicated that organizational success was very dependent on the relationship between the leader's personal ethics and the organization's ethical perimeter.

Davis and Rothstein (2006) conducted a meta-analysis using 12 effect sizes and 12 different studies to determine effects of perceived leaders' ethical behaviors on attitudes of the employees. The researchers uncovered a strong relationship between behavioral integrity and employee attitudes, with predominately male studies showing less significance. A moderator analysis was conducted and revealed only small differences between gender and the study's variables and no differences between study location and the study's variables.

Parry and Proctor-Thomson (2002) studied the relationship between PLI and transformational leadership in a sample of organizations throughout New Zealand. The researchers used both the PLIS and the Multifactor Leadership Questionnaire ([MLQ] Bass & Avolio, 1990). They found high levels of perceived integrity among the participants. More importantly, a significant positive relationship was also found between PLI and transformational leadership.

Teacher Demographics Research

Much research has been completed on teacher demographics and other variables such as job satisfaction and attrition. Demographic variables impacting teachers' job satisfaction and attrition could also potentially impact teachers' perceptions of principals' integrity and organizational health. The review of literature continued as discussed below, synthesizing information on the selected teacher demographic variables of gender, ethnicity, subject taught, total years of teaching experience, and educational level, along with other variables influenced by these demographic variables such as teacher attrition and teacher job satisfaction.

The literature provided little evidence of relationships among demographic variables when compared with ethical leadership. However, ethics researchers (Ambrose & Schmicke, 1999) and gender researchers (Eagly & Carli, 2003) have shown an interest in leadership research. Even though Gilligan (1982) did not conduct an efficient, comprehensive review of literature (Rest 1986), he argued that moral development and reasoning differed along gender lines. Brown and Trevino (2006b) and Walker (1985) confirmed Rest's claim that gender simply had no significant relationship to ethical leadership confirmed in the literature.

Teacher gender.

Karakose (2007) uncovered significant differences between gender and teachers' perceptions of principals' cultural leadership behaviors. Using the Mann Whitney U test, Karakose (2007) discovered significant differences between gender and the "climate ethical level." Also after conducting a Mann Whitney U test, Gosmire, Morrison, and Van Osdel (2009) reported that male teachers perceived principals as more *ethical* leaders while female teachers perceived principals as more *managerial* leaders. Bird, Wang, Watson, and Murray (2009) also found no statistical differences among gender differences and teachers' ratings on principals' authentic leadership, teacher engagement, and teacher trust.

Teacher ethnicity.

Henderson and his colleagues (2005) conducted research comparing school demographics with the organizational health in selected middle schools. They learned that the school with the least number of students had the highest scores in teacher

affiliation, AE, and RS dimensions, as well as highest OH Index. This high scoring school also had the lowest percentage of white students and largest percentage of black and Hispanic students of those schools selected for the study. The study results further showed that the school with the largest number of students had the lowest scores in teacher affiliation, AE, and RS, as well as the lowest OH Index. No significant differences were found among ethnic groups and teachers' ratings on principals' authentic leadership, teacher engagement, and teacher trust (Bird et al., 2009).

Subject taught.

Among the demographic variables examined in a study conducted by Ingersoll, 2001, math and science teachers were found to have higher attrition than teachers teaching other subjects. Middle school special education teachers who participated in Osborn's (2006) study perceived less healthy schools in relation to the level of principals' collegial leadership and higher perceptions of AE in contrast to other teachers. Teachers' perceptions of principals' cultural leadership behavior were statistically different when analyzed by subjects taught (Karakose, 2007).

Total years of teaching experience.

In a study conducted by Osborn (2006), the researcher had analyzed the respondents' demographic information in relation to the schools' OH Index, revealing that the II scores of secondary schools under study were impacted by the respondents' age and experience, with perceptions of lower organizational health paired with less experience. Using an ANOVA, Gosmire, Morrison, and Van Osdel (2009) found instructional leadership to be ranked significantly higher among teachers with 10 to 19

years of teaching experience than those with 20 or more years. Among elementary

teacher participants, Hoy and Woolfolk (1993) found that personal teacher efficacy (i.e.,

ability to motivate difficult students) had a positive relationship with teaching experience,

but had a negative relationship with general teaching effect (i.e., inability to overcome the

students' home life). Karakose (2007) found statistical differences between total years of

teaching experience and teachers' perceptions of principals' cultural leadership

behaviors.

Educational level.

In a study conducted by Snyder (1999), teachers who had earned graduate degrees

were less likely to leave the field of education than those with a bachelor's degree as their

highest educational level. In a different study (Gosmire et al., 2009), teachers holding

only bachelor's degrees were found to rank instructional leadership as significantly

higher than those holding Ed.S. or Ed.D. degrees. Bird and colleagues (2009) conducted a

MANOVA on their data and found no statistical differences among educational levels

and teachers' ratings on authentic principal leadership, teacher engagement, and teacher

trust. Yet, in a study previously discussed in this chapter, educational level was observed

to have significant differences with teachers' perceptions of the principals' "behavioral

ethics level" (Karakose, 2007). This same study discovered that ethical leadership

behaviors were perceived to be higher by teachers with less advanced degrees and lower

by teachers holding graduate degrees. Hoy and Woolfolk (1993) found teachers' personal

efficacy to be significant ($p < .01$) in relation to the teachers' educational level. On a

different note, a study conducted in the manufacturing industry by McCann and Holt

(2009) using the PLIS observed no significance between educational level and PLI.

Business Ethics Research

Within the organization, ethical behavior was viewed by Johns (1995) as both a

way to attract employees and as a way to retain them. Koestenbaum (1991) and Rae

(1995) even went so far as to say companies were successful when strong ethics formed

values and character within the organization. Posner and Schmidt (1987) conducted a

study of companies in America and found supervisors more than twice as likely as

executives to say their organizations were not being directed by high ethical standards.

This study also found supervisory and middle managers were more likely than executives

to conform to the organizational goals while compromising personal values. Costa (1998)

studied over 500 managers and discovered most of them lacked development in personal

ethics. Trautman (2000) stated corruption in an organization began with the leader, either

by overlooking unethical situations or by performing small unethical acts. New

administrators were greatly influenced by both their immediate supervisor and by the

organization's overall atmosphere (Brenner & Molander, 1977; Caudron, 1993; Posner &

Schmidt, 1984; Schmidt & Posner, 1983).

In Milgram's (1974) study, 65% of blue-collar workers sent traumatizing electric

shocks to guiltless victims located in another room simply because their superior imposed

upon them to do so. The impact of such unethical leadership was found to have a

negative impact on the followers and, in turn, the organization.

30

However, the opposite is also true. Ethical leaders have a positive impact on their followers and, in turn, cause their followers to behave ethically (Lewis, 1985). Managers participating in Posner and Schmidt's (1984) survey considered their ethical behavior to be highly dependent on the ethical behavior of their immediate supervisor. In an earlier study, the two researchers had also found that ethical conduct within an organization was influenced first and foremost by the supervisor's behavior (Schmidt & Posner, 1983). Brenner and Molander (1977) had similar findings years before; they reported participants ranked supervisory behavior as the number one influence on their own ethical behavior.

Impacts of Unethical Leadership Found in the *Bible*

There are many examples of ethical and unethical leadership throughout the *Bible*. As far back as the 6th century B.C., the *Bible* provided some of the best accounts available of the impact leaders had on their followers, especially in 1 and 2 Kings. Focusing on 2 Kings, examples of evil and righteous kings and the impact of their leadership on two nations, Israel and Judah, were discussed throughout the book. These examples clearly portrayed how a leader's unethical behavior influenced followers to behave unethically also. Evil kings led their people to disaster; righteous kings led their people in the way of the Lord and were blessed accordingly.

The northern nation of Israel had a total of 11 different kings discussed in 2 Kings, all of whom were considered evil. Judah to the south had a total of 16 kings discussed in this book, and of the 16, only six were considered righteous. The problems with the evil kings primarily stemmed from their being concerned only with themselves.

On the other hand, the righteous kings devoted most of their time rectifying difficult conditions created by the self-serving actions and poor decisions of the evil kings; the righteous kings did this for the good of others. As a result of all of the wrongdoings committed in each kingdom, Israel and Judah were both destroyed in 723 B.C. and 586 B.C., respectively.

Whether looking back to thousands of years ago or assessing present day thought, the idea of leadership often falls far short of the ideal. In Matthew 20: 25-28, Jesus said "Ye know that the princes of the Gentiles exercise dominion over them, and they that are great exercise authority upon them. But it shall not be so among you: but whosoever will be great among you, let them be your minister; Even as the Son of man came not to be ministered unto, but to minister, and to give his life a ransom for many (King James Version)." In those verses, Jesus was describing leadership as it should be…putting others first, not self.

Theoretical Framework

At best, researchers specify the theoretical framework of their study to foster an understanding of the overarching concepts involved and to lend structure to the course of their research. When dealing with ethical theories underlying leadership, Northouse (2004) described two main categories: conduct theories and character theories. Conduct theories referred to those theories dealing with the ethical conduct of a leader; they were further broken down into two subgroups of teleological theories and deontological theories. Teleological theories focused on the consequences of the actions carried out by a leader, whereas deontological theories dealt with the rules governing those actions.

Character theories were virtue-based theories addressing the character of the leader. With this categorization in mind, utilitarianism represented a teleological theoretical approach suggesting efforts to create "the greatest good for the greatest number" (p. 304). This approach was selected for this study to help determine if a relationship among higher levels of organizational health existed when the leader was perceived to have a higher level of ethical integrity, and vice versa. This theory encompassed both aspects involved in this study—the individual and the group as a whole.

Utilitarianism has been considered the simplest and best known moral theory. It was typically attributed to Jeremy Bentham and, more specifically, to his follower, John Stuart Mill (Mill & Bentham, 1987). Mill (1871) wrote a brief essay titled *Utilitarianism*. His essay built on Bentham's "greatest happiness principal" and ultimately helped define utilitarianism. Mill described the utilitarian standard as "not the agent's own greatest happiness, but the greatest amount of happiness altogether" (p. 16). He conjectured that the only way this could happen would be by enhancing one's character to become noble. Mill described the utilitarian as one who lived by the Biblical teachings of doing unto others as one would have others do unto them and loving one's neighbors as one's own self. As described by Mill, the utilitarian was able to accommodate both the interests of each individual and the interests of the entire group as much as possible.

This study attempted to build on this theory in the secondary school setting. By choosing utilitarianism as a theoretical framework for this study, the researcher was able to analyze the greatest good, in terms of teachers' perceptions of the ethical integrity of the school leader, for the greatest number—teachers' perceptions of the schools' overall

organizational health. These teacher viewpoints of the principals' integrity were based on the leaders' individual decisions and actions. The results of this study allowed a glimpse into the relationship between the individual interests of each leader and the interests of the entire group, the teachers and, in turn, the students served.

Summary of Review of Literature Chapter

The review of related literature consisted of several topics relevant to this particular study: ethical leadership, organizational health, ethical leadership and organizations, teacher demographics research, business ethics research, and the impacts of unethical leadership. Literature pertaining to utilitarianism and its underpinnings as the theoretical framework selected for the study was also explored. This review hinted at a possible relationship between Perceived Leader Integrity (PLI) and school organizational health. In the process of conducting this review of literature, it became evident that more research needed to be done in reference to ethical leadership and organizational health. In the upcoming chapter, a study will be outlined and described that will form a foundation for future research in the area of leader integrity and organizational health in the educational arena.

CHAPTER 3

METHODOLOGY

As explained in the first chapter, this study was an investigation of the

relationship between teachers' perceptions of secondary school Principal Integrity, as

determined by the PLIS and teachers' perceptions of secondary schools' organizational

health, as determined by the OHI-S. The previous chapter reviewed the literature related

to ethical leadership, organizational health, and the theoretical framework used for this

study. Concepts in terms of theoretical perspectives, as well as current research

approaches, were presented in the review. This current chapter provides a description of

the population and sample, instrumentation, design and process, data collection, data

analysis, and, finally, a brief summary of the chapter.

Population and Sample

In this descriptive, correlational study, the initial sampling process began with a

purposive sampling. The researcher intentionally identified the school districts from the

population of all school districts in Tennessee with secondary schools. Thus, the sample

began with 116 school districts. A letter (Appendix A) was emailed to all 116 school

district directors or superintendants throughout the state to obtain permission to contact

the secondary school principal(s) in the district by email. The researcher deliberately

identified the secondary school principals within the approved districts and emailed a

letter (Appendix B) to the secondary school principal(s) within the approved districts

requesting the schools' participation in the study. Upon approval from the secondary

school principal, an additional letter (Appendix C) was sent to the principal via an email

message containing a link and a school code. The principal then forwarded the email to each faculty member, and each teacher at the participating schools had the opportunity to anonymously participate.

Instrumentation

Several instruments were reviewed to determine the most appropriate measurement devices for the constructs involved and the variables needed in this study. Two instruments were selected. In addition, demographic information was collected from the individual respondents for descriptive and comparative purposes.

The instruments evaluated for the ethical leadership aspect of this study were the Multifactor Leadership Questionnaire ([MLQ] Bass & Avolio, 1990), the Spiritual Leadership Survey ([SLS] Malone, & Fry, 2003), and the Perceived Leader Integrity Scale ([PLIS], Craig & Gustafson, 1998). The MLQ was not selected for two reasons: (1) transformational leaders could be both ethical and unethical, as in the case of Adolf Hitler who was unethical yet transformational (Burns, 2003), and (2) the use of the instrument would be very costly for a study surveying approximately 650 teachers. The SLS was permitted for use at no cost to the researcher; however, it proved inappropriate because the survey focused more on the spirituality of the leader rather than on the person's ethical integrity. While the PLIS did have a very negative phrasing, research (Kaiser & Hogan, 2010) showed the best way to measure PLI was by having respondents speculate on what unethical behaviors a leader might be capable of displaying. Additionally, all the data collected from individuals in this study were completely confidential; therefore, no harm was likely to come to participants from the collection of the data with this

instrument. Thus, the PLIS was chosen because it could be used to measure the level of the leader's ethical integrity as perceived by the teachers from each of the participating schools' faculty members.

The instruments assessed for the organizational health aspect of this study were the Organizational Politics Perceptions ([OPP], Ferris & Kacmar, 1992), Organizational Climate Description Questionnaire for Secondary Schools ([OCDQ-RS], Halpin & Croft, 1963), and the Organizational Health Inventory for Secondary Schools ([OHI-S], Hoy & Feldman, 1987). The OPP was intriguing and would likely support an interesting study of teachers' perceptions of the leader's ethical integrity. However, the OPP could be very controversial as indicated by this item as one example: "Favoritism rather than merit determines who gets ahead around here" (Ferris & Kacmar, p. 115). Therefore, the OPP was not chosen due to its dealing with the perceptions of the politics at play within the organization; it might not receive approval for use by many of the school leaders. The OCDQ-RS proved a more conservative fit for this study, but two of the five dimensions dealt with the path-goal theory, such as supportive and directive principal behavior, while the other three dealt with teacher behavior. This was not the intent of the researcher's focus. The OHI-S was selected because it was used to measure seven dimensions of the school's organizational health as perceived by the teachers from the participating schools. Detailed discussions of both the PLIS and the OHI-S have been included in the following sections.

Perceived Leader Integrity Scale (PLIS).

The 31-item Perceived Leader Integrity Scale (PLIS) was developed by Craig and Gustafson (1998). Craig and Gustafson found a marginal reliability estimated at 0.95, with a traditional Cronbach's alpha of 0.96. Marginal reliability was used with item response theory and averages reliability across a continuum. They also found convergent validity with relation to factors of job satisfaction and the desire to resign. This study measured ethical integrity levels of the principals using the PLIS. Each school's faculty members assessed their school principal through their current perceptions of the leader's ethical integrity. A copy of the survey instrument is provided in Appendix D.

The PLIS measured teachers' perceptions of the leaders' integrity. It helped determine if the employees believed the leader to be acting in an ethical manner. Participants responded to the instrument items by choosing one of four categories: *not at all*, *somewhat*, *very much*, or *exactly*. These response categories coincided with how well each item described their principal, with *not at all* receiving a score of 1; *somewhat*, a score of 2; *very much,* a score of 3; and *exactly*, a score of 4. Each respondent's scores were summed for all 31 items, and a mean was then calculated to determine a school score. The school scores ranged from 31 to 124, with 31 being the most ethical and 124 being the least ethical.

Organizational Health Inventory for Secondary Schools (OHI-S).

The 44-item OHI-S was developed by Hoy and Feldman (1987). The construct validity for this instrument was determined using multiple samples (Hoy & Tarter, 1992; Hoy et al., 1991). A copy of the instrument can be found in Appendix E. For the purposes

of this study, the OHI-S was used to measure school health based on current perceptions reflected in the responses recorded by each school faculty member, respectively. These teachers' perceptions were then corresponded with the seven OHI-S dimensions with the reliability shown as follows: Institutional Integrity (0.91), Principal Influence (0.87), Consideration (0.90), Initiating Structure (0.89), Resource Support (0.95), Morale (0.92), and Academic Emphasis (0.93).

Each participant responded to the instrument items by choosing one of four categories: *rarely occurs*, *sometimes occurs*, *often occurs*, or *very frequently occurs*. *Rarely occurs* received a score of 1; *sometimes occurs*, 2; *often occurs*, 3; and *very frequently occurs*, 4 for all items except 8, 15, 20, 22, 29, 30, 34, 36, and 39, which were reverse-scored. For those items, *rarely occurs* received a score of 4; *sometimes occurs*, 3; *often occurs*, 2; and *very frequently occurs*, 1. Each item was scored for each individual respondent, and then an average for each item was taken from all the item responses of the school's faculty members to obtain the school item score. The school item score was used in combination with the other items for each of the seven dimensions. Table 1 displays each of the seven OHI-S dimensions and each item number used to calculate the school dimension score. The mean and standard deviations provided in the table were calculated by the instrument's developers; they used data from a large New Jersey school sample. These means and standard deviations were used to calculate the z score for each dimension, represented in the table as standardized score (SdS) formulas.

Table 1

OHI-S Dimension Information

Dimension	Items	*M*	*SD*	Standardized Scores Formulas (SdS)
Institutional Integrity (II)	1, 8, 15, 22, 29, 36, 39	18.61	2.66	SdS for II = 100(II-18.61)/2.66 + 500
Initiating Structure (IS)	4, 11, 18, 25, 32	14.36	1.83	SdS for IS = 100(IS-14.36)/1.83 + 500
Consideration (C)	3, 10, 17, 24, 31	12.83	2.03	SdS for C = 100(C-12.83)/2.03 + 500
Principal Influence (PI)	2, 9, 16, 23, 30	12.93	1.79	SdS for PI = 100(PI-12.93)/1.79 + 500
Resource Support (RS)	5, 12, 19, 26, 33	13.52	1.89	SdS for RS = 100(RS-13.52)/1.89 + 500
Morale (M)	6, 13, 20, 27, 34, 37, 40, 42, 44	25.05	2.64	SdS for M =100(M-25.05)/2.64 + 500
Academic Emphasis (AE)	7, 14, 21, 28, 35, 38, 41, 43	21.33	2.76	SdS for AE =100(AE-21.33)/2.76 + 500

While *z* scores have typically been used to obtain a standardized comparison, this was not the case in this study. Standardized scores had to be calculated in order to use the formula for calculating each school's OH Index. To obtain an OH Index for each school, the following formula was applied: HEALTH = [(SdS for II)+(SdS for IS)+(SdS for C)+(SdS for PI)+(SdS for RS)+ (SdS for M)+(SdS for AE)] /7. After the OH Index for the school had been calculated, the scores were interpreted using Table 2.

Table 2

Organizational Health Index and Interpreted Rating

OH Index	Health Rating
Above 600	Very High
551-600	High
525-550	Above Average
511-524	Slightly Above Average
490-510	Average
476-489	Slightly Below Average
450-475	Below Average
400-449	Low
Below 400	Very Low

Demographic Questionnaire

The participant demographic questionnaire (Appendix F) was included as part of the online survey and was completed by each individual respondent at the same time the other instruments were completed. Survey items included gender, ethnic group, subject taught, educational level, and total years of teaching experience. They provided the data used to describe the participants statistically and to test for possible differences among other variables.

Design and Process

This quantitative study used a correlational research approach to investigate the relationship between teacher perceptions of principal ethical integrity and organizational health. The data collected were used to determine if a relationship existed between the

variables, and the correlation coefficient expressed the degree to which these perceptions were related. The scores derived from the data obtained from the teachers' individual responses were correlated. Although this study could not provide basis to conclude that teachers perceived the school as healthier because of the perception of higher ethical integrity from the leader, it could determine the degree of the relationships between teachers' perceptions of the principal's ethical integrity and of the school's organizational health.

The study process began with the purposive sampling of districts with secondary schools in the state of Tennessee. District directors were contacted via email to confirm research permission. Nonresponding directors were sent additional requests every 10 days, with a minimum of four requests. Upon confirmation of district permission, each school principal was contacted via electronic mailing to request their permission to gather data for the study within the school. Upon approval, the principal was then asked to forward an email containing the link and school code using the list serve for all faculty members within the school. Nonresponding principals were sent additional requests every 10 days, with a minimum of four requests.

All teachers at each participating school were contacted via electronic mailing. The mailing provided a link to access a university webpage containing both instruments and a demographic information form. Access to the webpage was controlled by a unique code assigned to each school; this protocol safeguarded respondent anonymity while still linking each teacher's data to the appropriate school.

Figure 1 outlined the timeline for data collection and charted the procedural steps involved as a graphical representation of the overall process followed. After the first mailing, the researcher waited two weeks before contacting principals about respondents. Principals with most or all faculty members completing the survey were thanked, while principals with low response rates from faculty members were encouraged to boost response. Additional contacts were made to principals of schools still having a low response rate four weeks after the initial mailing. Two additional weeks (a total of six weeks from the initial mailing) elapsed, allowing time for follow-up responses. This ended the data collection process. The data analysis was then completed, and results, conclusions, and recommendations were made.

Data Collection

Principal ethical leadership, organizational health, and demographic data were collected from December 2010 through May 2011 from teachers in secondary schools in Tennessee. All Tennessee school districts were asked electronically for permission to contact secondary school principals. Initial electronic mailings were sent to each district director. The principals of secondary schools from the districts granting approval were asked via email for cooperation to conduct research in their school.

Principal email addresses were obtained from the state directory and school websites. Principals were sent an email containing the research link and the school code and were asked to forward it to their faculty members for electronic administration of the survey. By participating in this study, the principals and teachers of the schools were provided a profile chart and description of their school's ethical leadership and

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┌─────────────────────────────────────┐
│      Purposive Sample Selection       │
│            116 Districts              │
│     Tennessee Secondary Schools       │
└─────────────────────────────────────┘
                   ⬇
┌─────────────────────────────────────┐
│    Initial Research Permission        │
│   Director Electronic Mailing         │────┐
│            116 Districts              │    ▼
└─────────────────────────────────────┘  ╭────────╮
                   ⬇                      │ Approval │
┌─────────────────────────────────────┐  ╰────────╯
│  School Level Research Permission     │◄───┘
│    Principal Electronic Mailing       │
│          Approved Districts           │
└─────────────────────────────────────┘
          ╭────────╮    ⬇
          │ Approval │
          ╰────────╯
┌─────────────────────────────────────┐
│    Survey Link and School Code        │
│    Principal Electronic Mailing       │────┐
│          Approved Schools             │    ▼
└─────────────────────────────────────┘  ╭────────╮
                   ⬇                      │ 10 days │
┌─────────────────────────────────────┐  ╰────────╯
│    Electronic Mailing Response        │◄───┘
│    Follow-up to Nonrespondents        │
│    Research Update to Respondents     │
└─────────────────────────────────────┘
   ╭────────╮       ⬇
   │ 10 days │
   ╰────────╯
┌─────────────────────────────────────┐
│    Electronic Mailing Response        │
│    Thank you to Respondents           │────┐
│    Follow-up to Nonrespondents        │    ▼
└─────────────────────────────────────┘  ╭────────╮
                   ⬇                      │ 4 weeks │
┌─────────────────────────────────────┐  ╰────────╯
│            Data Analysis              │◄───┘
└─────────────────────────────────────┘
                   ⬇
┌─────────────────────────────────────┐
│            Conclusions                │
│            Implications               │
│          Recommendations              │
└─────────────────────────────────────┘
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Figure 1. Flowchart and timeline of the study.

organizational health. Research confirmed response rates were increased even when only

small monetary incentives were provided to participants (Huck, & Gleason, 1974).

Therefore, in hopes of increasing the response rate for this study, the researcher chose to

implement a similar strategy. The school with the highest percentage response rate would

be awarded a 55-inch television. If multiple schools were tied with the highest response

rate, a drawing would take place to determine the winner of the television.

All full-time classroom teachers were forwarded an email from their principal

asking for their participation and providing them a link to a website where the surveys

were housed. The online survey software called "mrInterview" was used for data

collection. Upon clicking the link, the participants were taken to a university website

created by the researcher using the "mrInterview" software. When the participants were

finished with the surveys and demographic information, they clicked a "submit" button

which allowed survey results to be stored in a secure electronic database for the study.

Any responses left blank were recognized by the software. Incomplete survey data from

participants were not used in the study results.

Data Analysis

The online electronic survey system enabled the researcher to have instant access

to the data and to electronically transfer the data from the survey system directly to a

Statistical Package for the Social Sciences (SPSS) file. The SPSS software was utilized to

analyze the data per the study's hypotheses as described in the following paragraphs.

The purpose of null hypothesis 1 was to consider the significance of the

relationship of the variables, PLI and the OH Index. Typically the most precise estimate

when calculating a correlation, Pearson's product moment (r) was employed to test H_01. Kendall's tau and Spearman rank correlation coefficient were two other types of correlation coefficient tests available for analysis. However, both were to be used with rank data (Gay, Mills, & Airasian, 2009), which was not the case in this study. The Pearson r was deemed more suitable as it dealt with continuous variables (Gay et al.).

The purpose of null hypothesis 2 was to analyze the significance of the relationship between PLI and the seven dimensions of the OHI-S: II, IS, C, PI, RS, M, and AE. A Pearson's product correlation was also used to assess H_02. As previously stated, this was determined to be the best correlation for continuous variables like the ones being studied here.

The purpose of null hypothesis 3 was to look more closely at the relationship between PLI and the OH Index. Several correlation-based analyses were considered to test H_03: multiple regression, factor analysis, and canonical analysis. The factor analysis and canonical analysis approaches offered a better fit for a larger number of variables than involved in this study. The canonical analysis also required two groups of variables. The multiple regression appeared to be the most suitable as it allowed analysis of the correspondance of the OH Index on PLI, optimal to this study. It did not, however, demonstrate causality. Instead, it demonstrated the strength of the relationship (Gay, Mills, & Airasian, 2009).

The purpose of hypothesis 4 was to analyze the correlation of the seven dimensions on PLI. A multiple regression allowed a closer analysis of the relationships. Rather than demonstrating causality, the multiple regression analysis revealed the

strength of each relationship. Again, because there were fewer variables tested for this null hypothesis, the factor analysis and canonical analysis were not used.

The purpose of hypothesis 5 was to determine differences between demographic variables and PLI. Gender, ethnicity, subject taught, educational level, and total years of teaching experience were the fixed factors while PLI was the dependent factor. The analysis of variance (ANOVA) was used to test this hypothesis. Similar to the independent samples *t*-test, the ANOVA tested for significant differences between multiple variable means of interval and ratio data (Gay, Mills, & Airasian, 2009).

The purpose of null hypothesis 6 comprised two parts: (1) the differences between demographic variables and (2) the differences between demographic variables and the seven OHI-S dimensions. The first part of this hypothesis was tested with an ANOVA, much like $H_0 5$. Gender, ethnicity, subject taught, educational level, and total years of teaching experience were the fixed factors while the OH Index was the dependent factor. For the second part of this hypothesis, to determine the significant differences between the demographic variables and the seven OHI-S dimensions (II, IS, C, PI, RS, M, and AE), a multivariate analysis of variance (MANOVA) was used. There were several options available when conducting the MANOVA: Hotelling's trace, Wilks' lambda, Pillai's trace. While Hotelling came up with his process first, his method only worked with two groups. Wilks then built on Hotelling's trace with his method that allowed the effect of all seven dimensions on each demographic variable. Pillai tweaked Wilks' Lambda only slightly, but Wilks' Lambda has been more commonly used. For that reason, the Wilks' Lambda was used in the analysis of the second part of $H_0 6$.

47

Summary of Methodology Chapter

This chapter outlined the research methods used to complete this study. It included the research design, instruments, population and sample selection, data collection, and data analysis. The following chapter presents an analysis of the data resulting from the scores on both instruments. Furthermore, the six null hypotheses posed by this study are addressed. Conclusions and recommendations are then asserted based on the findings and results of the data analyses.

CHAPTER 4

FINDINGS AND RESULTS

The purpose of this study was to examine any significant relationships or differences between secondary school teachers' perceptions of principal ethical integrity as evaluated by the PLIS (Craig & Gustafson, 1998) and schools' organizational health as perceived by secondary school teachers and gauged by the OHI-S (Hoy & Feldman, 1987) and the seven OHI-S dimensions. PLI is the level at which a leader acts in an ethical manner, as perceived by subordinates (Craig & Gustafson). Organizational health is the level at which a school carries out its mission by creating an environment where administrators and teachers work together as a team to meet the needs of the students while coping successfully with negative outside forces (Hoy, Tarter, & Kottcamp, 1991). There are seven separate dimensions that are defined by Hoy et al. as follows:

1. Academic Emphasis is the level at which teachers place importance on meeting the educational goals of all students.

2. Consideration is the level at which a principal behaves in a supportive, collegial, and friendly manner.

3. Initiating Structure is the level at which the task and achievement-oriented behaviors are articulated among school administrators.

4. Institutional Integrity is the level at which an organization (e.g., school) protects its members (e.g., teachers) from the external forces exerted within a school's community.

5. Morale is the level of trust, enthusiasm, confidence, and collegiality experienced among teachers.

6. Principal Influence is the level at which the principal is able to impact decisions made by superiors.

7. Resource Support is the level at which a school supplies teachers with materials they need for instructional purposes.

The study's purpose also included determining differences among (a) gender, (b) ethnicity, (c) subject taught, (d) highest educational level, and (e) total years of teaching experience and the dependent variables of ethical leadership and organizational health. Chapter 3 addressed the population, sample, instruments, design and process, and data collection and analysis. This chapter discusses the results of the data analysis pertaining to each null hypothesis.

Response Rates

This study used purposive sampling due to the decreased participation among schools. Although purposive sampling was not as generalizable to a population, the researcher invited every district in the state to participate and every secondary school within the approved districts. The researcher did not purposefully select any particular districts or secondary schools for the study. Nonparticipating schools and districts chose not to participate for three main reasons:

1. Principals felt their teachers were already being required to participate in other state-required research and trainings. For example, the state of Tennessee conducted a state-wide survey requiring the majority of Tennessee teachers to participate. This survey took approximately 45 minutes to complete. Also, some schools were a part of Battelle for Kids which required teachers to conduct eight professional development lessons, each taking a minimum of 25 minutes.

2. With spring semester in schools experienced as a busy time due to many state-required tests, principals were "protecting" their teachers' time by not participating in the study.

3. Principals were protecting themselves. Fear of the ethical aspect of the study kept many districts and secondary schools from participating in the study.

The researcher initially sent out an electronic mailing to all directors (Appendix A) of Tennessee school districts containing secondary schools, for a total of 112 districts. The email requested permission to contact each secondary school principal within the district. If there was no response from a director, follow-up emails were sent every 10 days, as many as seven times. Director response rates are shown in Table 3. Ten (10) directors (8.9%) requested that the secondary school principals not be contacted. Sixty-one (61) directors (54.5%) did not respond after a minimum of 4 requests. Forty-one (41) directors (36.6%) granted permission for the secondary school principals to be contacted by the research.

Table 3

Director Response Rates

Responses	Frequencies	Response Rate (%)
Yes	41	36.6
No	10	8.9
No Response	61	54.5

The 41 districts gave the researcher access to 88 secondary schools. All 88 principals were contacted electronically (Appendix B), in the same manner as the directors. The email to principals requested permission for their school's participation in the study. More specifically, it requested permission for the researcher to send the survey link and a unique school code to the principal, which in turn allowed the principal to forward the link to all certified staff. Principals not responding to the initial email were sent follow-up emails every 10 days, a minimum of three times. Principals allowing participation in the study received an email (Appendix C) with the link and school code for forwarding purposes. Response rates for principals can be found in Table 4. Six (6) principals (6.8%) were not willing to participate in the study. Forty-three (43) principals (48.9%) did not respond after multiple requests. Thirty-nine (39) principals (44.3%) chose to participate in the study and were willing to forward the link to their faculty members. However, of the 39 participating schools, schools 6, 27, 30, and 32 had been sent a link, but no data were submitted. These schools were eliminated from the study. Response rates from each school can be viewed below in Table 5. After averaging each school's individual response rate, the total response rate calculated was 42.5%.

Table 4

Principal Response Rates

Responses	Frequencies	Response Rate (%)
Yes	39	44.3
No	6	6.8
No response	43	48.9

Table 5

Individual School Response Rate

School Code	Study Participants	Faculty Members	Response Rate (%)
1	12	68	17.6
2	27	85	31.8
3	13	55	23.6
4	30	32	93.8
5	5	58	8.6
7	11	35	31.4
8	3	36	8.3
9	6	38	15.8
10	4	35	11.4
11	43	118	36.4
12	26	50	52.0
13	15	25	60.0
14	21	38	55.3
15	13	25	52.0
16	10	15	66.7
17	9	34	26.5
18	24	92	26.1
19	71	114	62.3
20	10	52	19.2
21	11	35	31.4
22	13	34	38.2
23	22	33	66.7
24	18	30	60.0
25	28	86	32.6
26	33	42	78.6
28	33	63	52.3
29	25	45	55.6
31	3	51	5.9
33	14	26	53.8
34	16	19	84.2
35	28	76	36.8
36	1	55	0.0
37	8	18	44.4
38	10	16	62.5
39	34	35	97.1

As seen in Table 5, school 39 had the highest response rate. Because of this, the school received a black Samsung 55-inch 1080p 120Hz LED HDTV. The television was purchased by the research and delivered directly to the winning school.

Description of Sample

This study's data were gathered from 35 secondary schools in 22 districts across the state of Tennessee. Of the districts that participated, 3 (13%) were from West Tennessee; 8 (34.8%), Middle Tennessee; and 12 (52.2%), East Tennessee. Of the secondary schools participating, 3 (8.6%) were from West Tennessee; 16 (45.7%), Middle Tennessee; and 16 (45.7%), East Tennessee. Of the 650 participants, 61 (9.4%) were from West Tennessee; 403 (62%), Middle Tennessee; and 186 (28.6%), East Tennessee.

The demographic data describing this study's participants are presented in Table 6 as frequencies and percentages. All 650 participants (100%) answered all five of the demographic questions. Two hundred thirty-four (234) participants (36.0%) were men, and 416 (64.0%) were women.

With respect to ethnicity, 620 participants (95.4%) described themselves as white. "Other" represented a distant second category of participants at a frequency of 13 (2.0%). Five (5) participants (0.8%) described themselves as African American; 7 participants (1.1%), Hispanic; 2 participants (0.3%), Asian-Pacific Islander; and 3 participants (0.5%), Native American. Because the majority of the participants (95.4%) categorized themselves as white, and because there were less than 5% representing other races, the

ethnicity item was excluded from the data analysis process. The remaining independent variables of gender, subject taught, educational level, and total years of teaching experience were used for data analysis of hypotheses dealing with demographics, $H_0 5$ and $H_0 6$.

With respect to subject taught, 354 participants (54.5%) described themselves as teaching subjects other than math, English, history, or science. One hundred one (15.5%) participants reported being English teachers; 90 (13.8%), math teachers; 60 (9.2%), science teachers, and 45 (6.9%) history teachers.

The analysis of the demographic questionnaire revealed that 40.6% of the participants held a bachelor's degree; 50.5%, a master's degree; and 7.4%, an educational specialist degree. Approximately 2% of the participants held a doctorate degree.

The last question on the demographic questionnaire assessed participants' total years of teaching experience. Forty-one (41) participants (6.3%) had less than two years' teaching experience. One hundred fourteen (114) participants (17.5%) had been teaching two to five years; 266 participants (40.9%), six to 15 years; 152 participants (23.4%), 16 to 25 years. Seventy-seven (77) participants (11.8%) had taught 26 years or more.

Table 6

Demographic Data of Participants

Variable	Frequency	Percent	Cumulative Percent
Gender			
Male	234	36.0	36.0
Female	416	64.0	100.0
Total	650	100.0	
Ethnicity			
White	620	95.4	95.4
African American	5	0.8	96.2
Hispanic	7	1.1	97.2
Asian-Pacific Islander	2	0.3	97.5
Native American	3	0.5	98.0
Other	13	2.0	100.0
Total	650	100.0	
Subject Taught			
Math	90	13.8	13.8
English	101	15.5	29.4
History	45	6.9	36.3
Science	60	9.2	45.5
Other	354	54.5	100.0
Total	650	100.0	
Educational level			
B.A./B.S. Degree	264	40.6	40.6
M.A./M.S. Degree	328	50.5	91.1
Educational Specialist Degree (ED.S.)	48	7.4	98.5
Doctorate Degree	10	1.5	100.0
Total	650	100.0	
Total Teaching Experience			
Less than 2 years	41	6.3	6.3
2-5 years	114	17.5	23.8
6-15 years	266	40.9	64.8
16-25 years	152	23.4	88.2
26 years or more	77	11.8	100.0
Total	650	100.0	

Analyses of Hypothesis Testing

As previously discussed in the data analysis section in chapter 3, the six null

hypotheses were tested using various types of statistical analyses. Correlations involving

the Pearson product-moment correlation coefficient *r* statistical procedure were used to

study $H_0 1$ and $H_0 2$. Multiple regressions were completed to test $H_0 3$ and $H_0 4$. ANOVAs

were conducted on $H_0 5$ and the first part of $H_0 6$ dealing with the OH Index. The second

part of $H_0 6$ addressing the separate dimensions of organizational health was tested using

a multivariate technique, the MANOVA. In the analysis of data including demographics,

ethnicity was eliminated from the demographic analysis because the majority of the

participants (95.4%) described themselves as white, and less than (5%) described

themselves as other ethnicities. The following sections will discuss the results of each

analysis in detail.

Statistical Results for Null Hypotheses 1.

$H_0 1$: There is no significant relationship between teachers' perceptions of the

principals' ethical leadership as measured by the PLIS and teachers' perceptions of

secondary schools' organizational health as measured by the OHI-S.

The PLIS scores for perceived leader integrity ranged from 31 to 124, with 31

being the best score and 124 being the worst. Thus, the calculated negative correlations

actually represented positive relationships, and vice versa. The OH Index was calculated

as described in chapter 3.

Individual participants' perceptions of principal integrity were correlated with the

individual participants' perceptions of organizational health, resulting in a negative linear

relationship ($r = -.509$, $p <.05$), as illustrated by Figure 2. Therefore, because a lower

score on the PLIS was desired, a positive relationship existed between the PLIS and the

OHI-S. Thus, null hypothesis 1 was rejected.
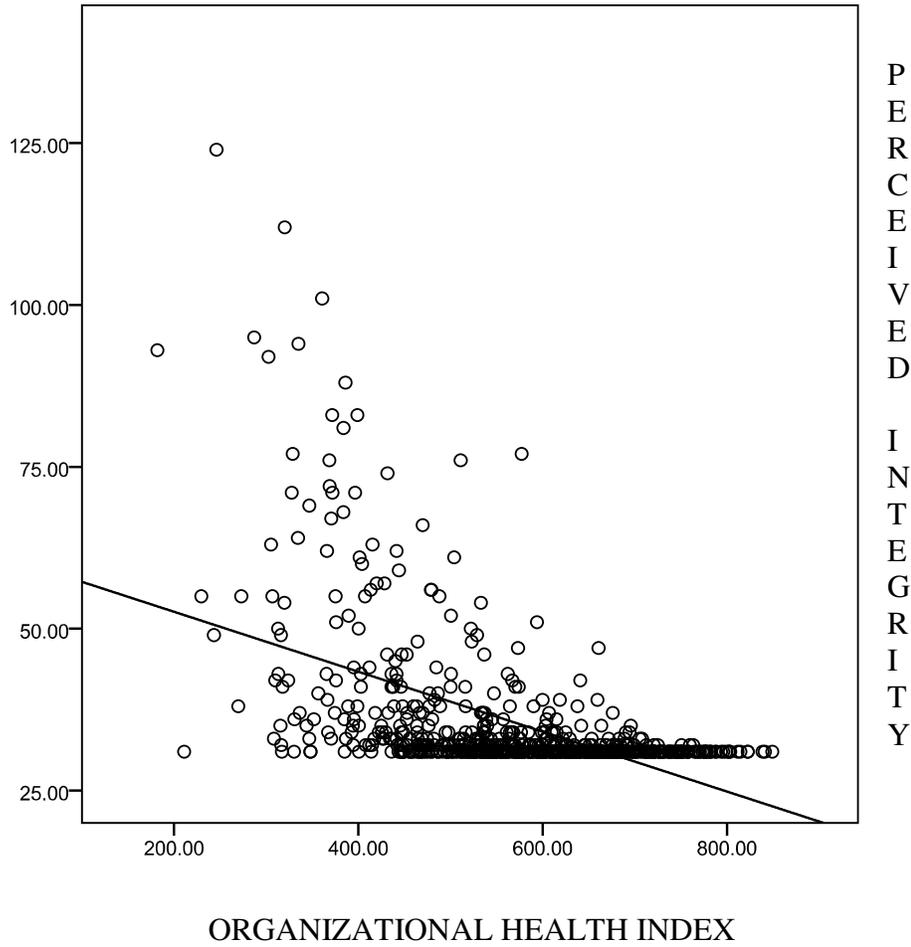
Figure 2. Scatter Plot of Organizational Health Index and Perceived Leader Integrity

58

Statistical Results for Null Hypotheses 2.

$H_0$2: There is no significant relationship between teachers' perceptions of the principals' ethical leadership as measured by the PLIS and the seven OHI-S dimensions of secondary schools' organizational health as perceived by teachers and measured by the OHI-S.

The correlation coefficients for the seven OHI-S dimensions and PLI can be found in Table 7. Because smaller scores on the PLIS represented more ethical leaders, negative correlations actually indicated positive relationships. Thus, a calculated negative correlation suggested a positive relationship. Statistically significant correlations ($p < .05$) found were as follows:

1. Institutional Integrity correlated negatively with PLI ($r = -.399$), thus indicating a positive relationship between these two variables.

2. Initiating Structure correlated negatively with PLI ($r = -.477$), showing a positive relationship between IS and PLI.

3. Consideration correlated negatively with PLI ($r = -.609$). Therefore, a positive relationship existed between C and PLI.

4. Principal Influence correlated negatively with PLI ($r = -.303$), confirming a positive relationship between PI and PLI.

5. Resource Support correlated negatively with PLI ($r = -.262$), thus providing evidence of a positive relationship between RS and PLI.

6. Morale correlated negatively with PLI ($r = -.355$), representing a positive relationship between M and PLI.

7. Academic Emphasis correlated negatively with PLI ($r = -.245$), which signifies a positive relationship between AE and PLI.

All seven dimensions were significantly related to PLI. As a result of these findings, null hypothesis 2 was rejected.

The alpha coefficient and inter-item correlations were used in an attempt to evaluate internal consistency and reliability. The results for Cronbach's alpha were $\alpha = .828$ which was considered acceptable. The inter-item matrix can be found in Table 7.

Table 7

Inter-Item Correlation* Matrix for $H_0 2$

Variables	PLI	II	IS	C	PI	RS	M	AE
Perceived Integrity (PLI)	1.000							
Institutional Integrity (II)	-.339	1.000						
Initiating Structure (IS)	-.477	.218	1.000					
Consideration (C)	-.609	.255	.758	1.000				
Principal Influence (PI)	-.303	.384	.447	.428	1.000			
Resource Support (RS)	-.262	.235	.488	.458	.535	1.000		
Morale (M)	-.355	.382	.512	.527	.364	.461	1.000	
Academic Emphasis (AE)	-.245	.250	.541	.516	.450	.595	.600	1.000

*All correlations significant at the 0.05 level (2-tailed).

Statistical Results for Null Hypotheses 3.

$H_0 3$: There is no significant relationship between teachers' perceptions of the principals' ethical leadership levels as measured by the PLIS and teachers' perceptions of schools' organizational health as measured by the OHI-S.

High correlations had suggested a potential multicollinearity concern. However, it was no longer a concern after the tolerance value (tolerance = 0.741) was calculated using SPSS and was greater than .1. The Variance Inflation Factor (VIF = 1.35) had been calculated and did not exceed 10 thus the multicollinearity issue was dismissed. PLI was taken as a dependent variable, and the OH Index was taken as the independent variable (Introduction to SAS, UCLA). Table 8 indicates that the OH Index had a moderate direct relationship to PLI (β = -.509, $p < .05$). The OH Index only accounted for a moderate amount of the variance of PLI (R = .509 with an adjusted R^2 = .257, $p < .05$). Therefore, $H_0 3$ was rejected due to the strong significance found between PLI and OH Index.

Table 8

Means, Standard Deviations, and Regression Coefficients for $H_0 3$

Variable	M	SD	B	β	Sig.**
Perceived Integrity	35.69	11.29			
Health Index	565.37	123.99	-.046	-.509	.000*

*p < .05
**Dependent Variable: Perceived Leader Integrity

Statistical Results for Null Hypotheses 4.

$H_0 4$: There is no significant relationship between teachers' perceptions of the principals' ethical leadership levels as measured by the PLIS and the seven separate dimensions of the OHI-S.

The purpose of null hypothesis 4 was to look closer at the relationship between PLI and the seven separate OHI-S dimensions: II, IS, C, PI, RS, M, and AE. High correlations have suggested a potential multicollinearity concern. Thus tolerance, a measure of collinearity was calculated using SPSS. This process is done by subtracting r^2 from one for each of the seven dimensions. Since the calculated tolerance values for II (.777), IS (.380), C (.391), PI (.601), RS (.537), M (.525), and AE (.479) were not less than .1 further investigations did not take place. The VIF for II (1.286), IS (2.633), C (2.555), PI (1.663), RS (1.863), M (1.905), and AE (2.090), were also calculated using SPSS and it is no longer a concern since all values are less than 10 (Introduction to SAS, UCLA).

In this test, PLI was the dependent variable; II, IS, C, PI, RS, M, and AE were the independent variables. Table 9 indicates that C was the strongest indicator of PLI ($\beta = -.566$, $p < .05$); in fact only two of the other six dimensions had any relationship to PLI: II ($\beta = -.201$, $p < .05$) and AE ($\beta = .159$, $p < .05$). Interestingly, this revealed that AE had a negative correlation to PLI, with lower scores indicating higher PLI. Four (4) of the seven dimensions, IS ($\beta = -.067$), PI ($\beta = -.016$), RS ($\beta = .010$), and M ($\beta = -.040$), had no relationship to PLI. These findings allowed rejection of $H_0 4$.

Table 9

Mean, Standard Deviations, and Regression Coefficients for H_04

Variable	M	SD	B	β	Sig.**
Institutional Integrity	523.80	159.82	-.014	-.201	.000*
Initiating Structure	602.82	167.30	-.004	-.067	.172
Consideration	634.26	174.70	-.037	-.566	.000*
Principal Influence	533.91	166.28	-.001	-.016	.683
Resource Support	519.29	203.24	.001	.010	.813
Morale	593.85	169.66	-.003	-.040	.330
Academic Emphasis	549.69	152.20	.012	.159	.000*

* p < .05
**Dependent Variable: Perceived Leader Integrity

Statistical Results for Null Hypotheses 5.

H_05: There is no significant difference between teachers' demographics (age, gender, ethnicity, subject area, educational level, and total years of teaching experience) and teachers' perceptions of the principals' ethical leadership levels as measured by the PLIS.

As seen in Table 10, the ANOVA revealed no significant difference between gender ($F = .882$, $p = .348$), subject taught ($F = 1.961$, $p = .099$), educational level ($F = .834$, $p = .475$), or total years of teaching experience ($F = 2.215$, $p = .066$) and PLI. For this reason, no post hoc tests were conducted. Also, because of these results, H_05 failed to be rejected.

Table 10

ANOVA Results for $H_0 5$

Demographic Variables	*df*	*F*	Sig.**
Gender	1	.882	.348
Subject Taught	4	1.961	.099
Educational level	3	.834	.475
Total Years of Teaching Experience	4	2.215	.066

* $p < .05$
**Dependent Variable: Perceived Leader Integrity

Statistical Results for Null Hypotheses 6.

$H_0 6$: There is no significant difference between teachers' demographics (age,

gender, ethnicity, subject area, educational level, and total years of teaching experience)

and teachers' perceptions of organizational health or the seven dimensions as measured

by the OHI-S.

As seen in Table 11, the ANOVA revealed no significant difference between

gender ($F = .430$, $p = .512$) or subject taught ($F = .546$, $p = .702$) and the OH Index.

However, the ANOVA did reveal significant differences between educational level ($F =

4.861$, $p = .002$) and the OH Index, as well as total years of teaching experience ($F =

3.004$, $p = .018$) and the OH Index. Due to the significance of these findings, post hoc

tests were conducted, and the results for the significant variables can be found in Table

12. Both the Tukey HSD and the Bonferroni correction found significant differences

between highest educational level and the OH Index; results can be found in table form in

Appendix G. The significant differences with both post hoc tests were as follows:

1. Participants with bachelor's degrees were found to be significantly different from those with educational specialist degrees ($p = .004$).

2. Participants with master's degrees were also found to be significantly different from those with educational specialist degrees ($p = .002$).

3. Participants with six to 15 years' total teaching experience and those with 26 plus years' total teaching experience were found significantly different with results of the Tukey HSD ($p = .009$), but not with those of the Bonferroni correction ($p = .011$).

As seen in Table 12, the MANOVA revealed significant differences for three of the four

demographic variables related to the participants: subject taught ($F_{28, 2277} = 2.214$, $p =$

.000), highest educational level ($F_{21, 1812} = 1.715$, $p = .023$), and total years of teaching

experience ($F_{28, 2518} = 1.941$, $p = .002$).

Table 11

ANOVA Results for H_06

Demographic Variables	*df*	*F*	Sig.**
Gender	1	.430	.512
Subject Taught	4	.546	.702
Educational level	3	4.861	.002*
Total Years of Teaching Experience	4	3.004	.018

* $p < .05$
**Dependent Variable: Organizational Health Index

Table 12

MANOVA Results for H₀6

Demographic Variables	Wilks' Lambda	*F*	*df*	Sig.
Gender	.993	.667	7, 631	.701
Subject Taught	.908	2.214	28, 2277	.000*
Educational level	.945	1.715	21, 1812	.023*
Total Years of Teaching Experience	.918	1.941	28, 2518	.002*

*p = .05

Due to the statistically significant differences found among the variables, the

Tukey HSD and the Bonferroni correction post hoc tests were again conducted for a more

in-depth analysis of these variables. Results for these tests can be found in table form in

Appendix H. The results were as follows for each dependent variable:

1. For PLI, participants with B.A./B.S. degrees were significantly different from those with Ed.S. degrees (Tukey HSD $p = .001$ and Bonferroni correction $p = .002$).

2. For PLI, participants with M.A./M.S. degrees differed significantly from those with Ed.S. degrees (Tukey HSD $p = .002$ and Bonferroni correction $p = .003$).

3. For RS, participants with B.A./B.S. degrees and those with Ed.S. degrees were found to be significantly different from each other ($p = .000$ for both the Tukey HSD and the Bonferroni correction).

4. For RS, participants with M.A./M.S. degrees and those with Ed.S. degrees were found to be significantly different from one another (both Tukey's and Bonferroni's, $p = .000$).

5. For AS, participants with B.A./B.S. degrees and those with Ed.S. degrees were found to be significantly different from each other (Tukey HSD and the Bonferroni correction, $p = .002$).

6. For AS, participants with M.A./M.S. degrees and those with Ed.S. degrees were found to be significantly different from one another (both Tukey's and Bonferroni's, $p = .002$).

7. For M, participants with two to five years' total teaching experience and those with 26 plus years' total teaching experience were found significantly different from each other (Tukey HSD, $p = .001$ and Bonferroni correction, $p = .001$).

8. For M, participants with six to 15 years' total teaching experience and those with 26 plus years' total teaching experience were found significantly different, with a strong p value of .000 for both the Tukey HSD and Bonferroni correction.

9. For M, participants with 16 to 25 years' total teaching experience and those with 26 plus years' total teaching experience were found significantly different with the Tukey HSD ($p = .006$), but not with the Bonferroni correction ($p = .007$).

To take the analysis one step further, testing for between-subjects effects revealed significant differences among the educational level of the participant and IS (.022), PI (.002), RS (.000), and AE (.010). Also, total years of teaching experience was found to be significant among C (.019), M (.000), and AE (.042). Because of this, an ANOVA was conducted for each of the relationships, with the demographic variables being independent and the seven dimensions being the dependent variables. The ANOVA results were as follows:

1. Participant educational level and IS were found to have a p value of .028.

2. Participant educational level and PI were found to be significant with a p value of .002.

3. Participant educational level and RS had strong significance ($p = .000$).

4. Participant educational level and AE were found statistically significant with $p = .003$.

5. The total years of teaching experience of the participants paired with C had a calculated *p* value of .027.

6. The total years of teaching experience of the participants and M were also found to have a strong significance (.000).

7. The total years of teaching experience of the participants and AE were found statistically significant with *p* = .028.

With this plethora of statistically significant findings, $H_0 6$ was rejected.

Summary of Findings and Results

Chapter 4 discussed frequencies and percentages used to describe the common characteristics of the participants as well as the analytical procedures performed to test the six null hypotheses of this study statistically. Pearson product correlations were conducted to assess null hypotheses 1 and 2. Null hypothesis 1 was rejected due to established significant relationships between PLI and OHI. Null hypothesis 2 was rejected because of significant relationships found between PLI and all seven OHI-S dimensions.

Multiple regression analysis was the procedure of choice to gain a closer look at the data relating to null hypotheses 3 and 4. Null hypothesis 3 was rejected due to findings of the moderate direct relationship with the OH Index on PLI. Null hypothesis 4 was rejected because the strongest indicator for PLI was established to be C. II and AE were the only others out of the seven dimensions correlated to PLI.

The ANOVA was selected for testing null hypotheses 5 and the first part of null hypotheses 6; the last part of null hypotheses 6 was evaluated using a MANOVA with an ANOVA conducted on all significant variables. Also in null hypotheses 6, post hoc tests—the Tukey HSD and the Bonferroni correction—were used for a more in-depth

analysis for variables found to be significant. Null hypothesis 5 failed to be rejected due to the lack of significance found among PLI and demographic variables (gender, subject taught, educational level, and total years of teaching experience). Null hypothesis 6 was rejected, even though no significant relationship between gender or subject taught and the OH Index was found. There were, however, significant findings among educational level or total years of teaching experience and the OH Index and its seven dimensions: II, IS, C, PI, RS, M, and AE. Although gender was not found to be significantly different from the seven OHI-S dimensions, subject taught was found to have a strong significance in relation to those seven dimensions. Null hypotheses 1, 2, 3, 4, and 6 were all rejected while null hypothesis 5 was accepted.

CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

The previous chapter provided the results obtained from statistical analyses conducted for the six null hypotheses formulated for this study. It presented the data as they related to the Perceived Leadership Integrity Scale ([PLIS], Craig, & Gustafson, 1998), the Organizational Health Inventory for Secondary Schools ([OHI-S], Hoy & Feldman, 1987), and the demographic questionnaire in relation to each hypothesis. This chapter offers conclusions, recommendations, and implications made based on those results.

Discussion of the Findings

This section discusses the findings of this study, beginning with a demographic profile of the participants and proceeding through the relationships found between the PLIS and OHI-S, differences between the PLIS and the OHI-S, demographic differences and the PLIS, and demographic differences and the OHI-S. Generalizability concerns and lessons learned close out the section.

Demographic profile of the subjects.

The 650 secondary school teachers who participated in the study included 64.0% women and 36.0% men, a proportional distribution that fits the social role theory—a theory which suggests that more women than men work as teachers (Mason, 1995). Surprisingly, whites comprised 95.4% of the sample, and other ethnicities made up less than 5%. Just over half of the teachers who participated (54.5%) taught classes other than

70

math, English, history, or science. Of the remaining 45.5%, English teachers were the largest group (15.5%) followed by math teachers (13.8%), science teachers (9.2%), and history teachers (6.9%). Half of the participants (50.5%) held a master's degree as their highest degree, while a bachelor's degree was a close second with 40.6% of the participants. Participants holding an educational specialist or doctorate degree made up much smaller percentages (7.4% and 2%, respectively). Lastly, a large percentage (40.9%) of the participants had been teaching six to 15 years. Those teachers having 16 to 25 years of teaching experience made up 23.4% of the sample. Seventeen and a half percent (17.5%) of the sample consisted of teachers with two to five years' teaching experience. Teachers with 26 years or more of teaching experience made up 11.8% of the sample. Novice teachers (6.3%)—teachers with less than two years' teaching experience—were the smallest group represented in the sample.

Relationships between the PLIS and the OHI-S.

Null hypothesis 1 focused on the relationship between PLI and the OHI. Use of the Pearson product correlation identified this relationship to be statistically significant ($p < .05$), thereby rejecting the null. PLI and the seven dimensions of the OHI were scrutinized to test null hypothesis 2, again using Pearson product correlations. Results indicated significant relationships ($p < .05$) for all seven dimensions and PLI—basis for rejecting the null. These results supported Koestenbaum (1991) and Rae (1995) who found that companies with stronger ethics became more successful. The results of this study were similar to the work of Cairns (1995) who did a study of leaders' self-perceptions' linking leaders' ethics to the organizational ethical perimeter.

To evaluate the differences among PLI and organizational health and the seven OHI dimensions, multiple regression analyses were completed on null hypotheses 3 and 4. The $H_0 3$ regression found the OHI to have a moderate, direct relationship to PLI ($p < .05$). Multiple regressions for null hypotheses 4 and the seven dimensions helped determine C ($p < .05$) to be the strongest indicator of PLI. These analyses also showed that II and AE had a lesser, but still statistically significant correlation, all with a confidence level of .01 ($p < .05$). These results aligned well with the work of Brown, Trevino, and Harrison (2005), researchers who also found a positive correlation between Ethical Leadership and Consideration.

Demographic differences and the PLIS.

The ANOVA was selected to analyze null hypotheses 5. No significant differences were discovered among the demographic variables and PLI; therefore, no post hoc tests were conducted. The null was accepted. Although Gilligan (1982) suggested that moral development differed among males and females, the results of the current study coincided with Brown and Trevino (2006b), Rest (1986), and Walker (1985). They advised that gender was not related significantly at all to ethical leadership. In contrast, Gosmire, Morrison, and Van Osdel (2009) and Karakose (2007) had found significant differences between PLIS scores and male and female perceptions. Karakose also found significant differences between teachers' perceptions of the leaders ethical behaviors and teachers' educational level.

Demographic differences and the OHI-S.

The differences among the demographic variables and the overall OHI, as well as each of its seven dimensions, were analyzed for $H_0 6$. To evaluate the differences among the overall health and the demographic variables, an ANOVA was conducted. For the analysis of the seven dimensions and the demographic variables, a MANOVA was performed, followed by an ANOVA (along with the Tukey HSD and Bonferroni correction) for a more in-depth analysis of those variables for which significant differences were detected. The OHI differed significantly with educational level ($p < .05$) and with years' teaching experience ($p < .05$). Neither gender nor subject taught differed significantly with the OHI. When looking closer at the seven dimensions—II, IS, C, PI, RS, M, and AE, gender was still not found to be significant. However, rather than obtaining a similar result with subject taught as before, this time, using the Wilks' lambda, subject taught showed strong significance ($p < .05$). Null hypothesis 6 was then rejected. These results were very different from those found in the study conducted by Osborn (2006) establishing the impact of age on the Institutional Integrity of secondary schools. While the current study did not use age as a demographic variable, it did include total years of teaching experience, a similar variable which could be said to at least imply participants' age range. However, even with that taken into consideration, total years of teaching experience did not significantly affect II in the current study.

Concerns about the findings.

There are circumstances within this study that may or may not have affected the results. While this study is considered to be valid and reliable, various conditions or

73

facets of the study have been identified as areas of concern (as enumerated in the

following list) in the event that they may alter the credibility of the findings in some way,

especially as they factor into decisions made in other similar studies.

1. The participants consisted of 650 teachers from 35 secondary schools in 22 different districts across the state of Tennessee. Similar findings may not result from studies conducted in other states.

2. The majority of the participants were from secondary schools in Middle Tennessee. Findings may not reflect the perceptions of teachers across the entire state.

3. There was little diversity among the participants in this study. The majority were white. Findings may not hold for a more ethnically diverse sample.

4. Most of the participants in this study held a bachelor's or master's degree and fewer participants held Ed.S. and doctorate degrees

5. Over half of the participants taught subjects other than the core academic classes: English, math, science, and history. Similar studies must be weighed in terms of the proportional distribution of subjects taught, especially if the goal is to focus on the core academic classes.

6. The range of years' teaching experience for the majority of the participants was two to 25 years. For comparison with other studies, findings must be narrowed to the experience range in question.

7. Nearly two-thirds of the participants were female. Although this distribution will likely hold true in similar studies, it must be considered when drawing comparative findings.

8. Because all districts were asked to participate in the study, yet participation resulted far less that 100%, this begs the question of why this disparity existed. To propose one possible explanation, those directors who chose to participate might have had nothing to hide and also might have felt that their principals had nothing to hide. On the other hand, those directors who chose to decline participation might have experienced certain fears related to their own ethicality or that of their subordinates. Those directors might have in fact considered themselves or their subordinates to be unethical to an appreciable degree. Self-selection bias may have occurred and affected the findings.

9. This study was limited by the sampling process chosen by the researcher. Since entire schools chose not to participate and there was a large part of the population that did not respond.

10. All secondary school principals within the participating districts were asked to participate, yet the numbers might have been fewer than expected because of those nonparticipating principals who felt that the faculty would expose any unethical behaviors or decision making within their school. Again, self-selection bias may have affected the findings.

11. Lastly, all aspects that could impact the health of an organization were not controlled for within this study.

Conclusions of the Study

This study was designed to explore further the relationships between PLI and organizational health. In addition, the design included the evaluation of differences among (a) gender, (b) ethnicity, (c) subject taught, (d) highest educational level, and (e) total years of teaching experience when compared to both PLI and the OH Index. The instruments used in this assessment were the PLIS and the OHI-S—both valid and reliable surveys.

The limitations and delimitations discussed in chapter 1 serve to structure, confine, and validate the conclusions derived from the findings and discussed in this section. Nonetheless, the following conclusions are based on data that provided evidence to support connections suggested by the literature, which were previously discussed in this chapter in the discussion of the findings. In addition, these conclusions confirm implications made by Northouse (2004), Leithwood and Reihl (2003), Miles (2002), and Sergiovanni (2006): the leader's influence on the entire organization is the beginning of an ethical and healthy organization. The conclusions of this study are:

1. Participants with a stronger level of agreement about their leaders as being ethical also perceived their school as healthier than did those who perceived their leaders as less ethical. Thus, the schools' OH Index had a moderate, direct relationship on the participants' perceptions of the principals' ethical integrity.

2. Specifically, participants with a stronger level of agreement on the ethical standing of their leader also indicated stronger levels of agreement in their perceptions of C, IS, M, II, PI, RS, and AE.

3. Consideration within the schools' environment was the strongest indicator on the participants' perceptions of the principals' ethical integrity.

4. Participants' perceptions of principals' ethical integrity were not swayed by gender, subject taught, educational level, or total years of teaching experience.

5. Organizational health, as perceived by the participants, did not differ among participants on gender or subject taught.

6. As perceived by the participants in this study, the OH Index differed among participants on educational level. Specifically, participants with an Ed.S. differed greatly from all other educational level groups.

7. PLI, RS, and AE varied greatly on educational level and total years of teaching experience among this study's participants. Specifically, participants with an Ed.S. differed greatly from all other groups. While agreeing with each other, the novice participants (those teachers with less than two years of teaching experience) and the near retirement participants (those having 26 or more total years of teaching experience) differed greatly from all other groups.

8. Morale varied greatly on educational level and total years' teaching experience among this study's participants. Specifically, participants with an Ed.S. differed greatly from all other groups. Participants with 26 or more total years of teaching experience differed greatly from all other groups except the novice teachers, those with two years or less of teaching experience.

Generalizability of the findings.

Quantitative research lends itself to the question of the generalizability of the study (Gay, Mills, &Airasian, 2009). Sample size and selection technique can hinder or help the application of the study's results to the entire population. The generalizability of

this study is justified in being considered high (as shown in the points that follow), but

must be weighed in terms of the concerns listed previously in this chapter.

1. Cronbach's alpha calculated in the analysis chapter was an acceptable amount with $\alpha = .828$.

2. In light of limited participation among schools in the state, the sampling technique was purposive and not truly random. Every district was included in the sampling process, and every secondary school within the participating district was also included in the sampling process. The researcher had no way of knowing which districts and secondary schools across the state would be willing to participate in the study. There were however entire schools systems that did not respond.

Recommendations of the Study

As suggested by Ciulla, (2005), more research must be conducted to determine

the relationship between ethics and leadership. This study forms a good foundation for

future research to build upon. Researchers should consider the following

recommendations for further investigations into the relationship between perceived leader

integrity and organizational health. The following list is intended as a way to improve

upon and broaden the range and scope of this study, but by no means is it exhaustive. The

recommendations of this study are:

1. A longitudinal study using structural equation modeling will allow researchers to make causal connections between principal integrity and school health.

2. A qualitative measure of leader integrity within schools may support its having a stronger relationship with organizational health than evidenced by this quantitative study.

3. Likewise, a qualitative measure of organizational health in schools may build a case supporting a stronger relationship with leader integrity.

4. A replication of this study should be conducted in a way that includes more schools within the state or other states. A study replicated with a larger sample might confirm or deny the findings of this study.

5. Future research should determine leader integrity differences between principals at public and private elementary schools, public and private middle schools, and private secondary schools.

6. A large, nationally representative, and randomly selected sample of schools and faculty members will broaden the generalizability of the results.

7. A comparative study between secondary, middle, and elementary schools regarding ethical leadership and organizational health will allow researchers to determine if there are any similarities between the different school levels.

8. A study that includes an analysis of secondary school report card data will allow researchers to determine if there are any differences among secondary schools regarding principal integrity and organizational health as a function of the report card variables.

9. A comparative study between small, medium, and large schools regarding ethical leadership and organizational health will allow researchers to determine if there are any similarities between the different school sizes.

10. A comparative study between urban, suburban, and rural schools regarding ethical leadership and organizational health will allow researchers to determine if any similarities exist between school locations.

11. With the recent demise of the Atlanta Public Schools, interesting ethical leadership studies are plentiful. Future research may focus on the leaders and teachers caught up in the scandal, the aftermath within the schools, and even the impact on students, family, and community.

The study in hindsight.

While this study was conducted to the researcher's best ability there are a few things that may have changed the participation and results in this study. In retrospect, there were a few things that are recommended below to strengthen the research process of a replicated study.

1. When initially contacting directors, it should be stated that the research will provide the schools with a great amount of free data to use for school improvement plans and/or accreditation reports.

2. This study was conducted mostly online. While there were several phone contacts and a few personal contacts, the surveys were completely administered online. Participants have the freedom to complete the survey at anytime but also have the ability to forget to complete the survey. The two schools with the highest return rates administered the surveys during faculty meetings. It might be best if the email to the principal requested that the survey link be disseminated during a faculty meeting or if the research went to the faculty meeting and provided the link to the faculty.

3. Since the study was conducted online, the population need not have been limited to just the state of Tennessee. Districts and schools across the nation could participate in a study similar to this one.

Implications of the Study

With the recent downfall of Atlanta Public Schools along with many others due to the unethical behavior of leaders and teachers, it is obvious that ethical leadership research needs to be a priority. The results of this study can help to make current school administrators realize the impact principals' ethical leadership has on the entire school. The following suggestions are for individuals, school leaders, school systems, and university leadership training programs in the development of ways to possibly improve the ethical integrity of all school leaders and organizational health of all schools. The conclusions of this study provide the basis of these suggestions, and the interpretation of each suggestion is at the reader's own discretion.

1. Perceived leader integrity and organizational health were significantly related in this study. This can serve as basis for university leadership training programs to require that future school leaders complete ethics classes.

2. School system directors should provide ethics in-service and professional development opportunities for current school leaders, based on the significant relationship found in this study between perceived leader integrity and organizational health.

3. School board members should ask potential school director candidates to complete an ethical evaluation as part of the interview process, justifying this evaluation with the findings of the positive relationship between perceived leader integrity and organizational health.

4. All school leaders must constantly meet a high ethical standard, always questioning if the decision at hand is the greatest good for the greatest number. Leaders cannot compromise even slightly. Leaders must continually perform self-examinations about where their values lie. This study shows that decisions principals make not only affect themselves, but also the schools' organizational health.

5. Support programs within school systems should be put in place to allow school leaders to meet and discuss ways to deal with pressures of accountability without compromising integrity.

Researchers will continue to enrich the literature involving ethical leadership and organizational health, if future research adheres to the recommendations listed previously. Through appropriate actions taken based on the implications stated above, school leaders' ethical integrity stands a better chance of being higher, and school systems are more likely to be organizationally healthier.

Summary of the Study

This study was conducted to gain understanding of the relationships between perceived leader integrity and organizational health. The study investigated teachers' perceptions' of principals' ethical integrity and organizational health in Tennessee secondary schools as measured by the PLIS and the OHI-S with its seven dimensions: Institutional Integrity, Initiating Structure, Consideration, Principal Influence, Resource Support, Morale, and Academic Emphasis. It also explored whether the scores from the PLIS and the OHI-S were influenced by demographic differences. The six null hypotheses guided the testing of the relationships and differences among instrument

variables and dimensions and selected demographic categories. This study yielded

findings suggesting the following: (1) a significant, positive relationship between

perceived leader integrity and organizational health; (2) valuable input to the research

base, and (3) further validation of other theories and studies in the current literature.

The study's population consisted of Tennessee secondary school teachers, with

650 participants selected through a purposive sampling from 35 different schools. The

study obtained an overall response rate of 42.5% from the administration of the PLIS,

OHI-S, and demographic questionnaire.

Developed by Craig and Gustafson (1998), the 31-item PLIS (estimated reliability

of 0.95, with a traditional Cronbach's alpha of 0.96) measures the level of the leader's

ethical integrity as perceived by subordinates. In this study, the PLIS assessed the ethical

integrity of secondary school principals as perceived by their teachers. The participants

reported principals of the participating schools to be mostly ethical ($M = 35.694$) with a

slight amount of variance ($SD = 11.285$).

Hoy and Feldman (1987) developed the 44-item OHI-S to measure seven

dimensions of a school's OH, with an aggregated index representing the overall health of

the school. The OHI-S was used in this study to measure teacher perceptions of the

participating schools' overall health and seven dimensions of health. Multiple samples

were used to determine the construct validity for this instrument.

This chapter discussed a summary of the study's findings, conclusions,

recommendations, and implications generated by this study. In conclusion, evidence

gained supports the ongoing effort to understand the link between perceived leader

integrity and organizational health. This study will serve as a firm foundation for future research in the area of ethical leadership, which as suggested by many (Craig & Gustafson, 1998; Fowler, 2010; Northouse, 2004; Strike, 2007) is a research area in need. The findings of this study provide confirmation of the impact that leaders' ethics can have on the organization. Furthermore, taking chapter 2's theoretical framework into consideration, evidence is available to support theories regarding the greatest good for the greatest number and to encourage practices that align with those of noted historical and current role models of ethical leadership.

LIST OF REFERENCES

Achieve, Inc. (2010). *Race to the top roundup*. Retrieved April 12, 2010, from

      http://www.achieve.org/race-top-roundup

Ambrose, M. L., & Schminke, M. (1999). Sex differences in business ethics: The

      importance of perceptions. *Journal of Managerial Issues, 11*, 454-474.

Angelle, P. S. (2010). An organizational perspective of distributed leadership: A portrait

      of a middle school. *Research in Middle Level Education, 33*(5), 1-16.

Aronson, E. (2001). Integrating leadership styles and ethical perspectives. *Canadian*

      Journal of Administrative Sciences, 18(4), 244-256.

Barney, J. B. (2005). Should strategic management research engage public policy

      debates? *Academy of Management Journal, 48*, 945-948.

Barth, J. J. (2001). *The investigation of the relationship between middle school*

      organizational health, school size, and school achievement in the areas of

      reading, mathematics, and language. Unpublished doctoral dissertation, West

      Virginia University.

Bass, B. M. (1981). *Stogdill's handbook of leadership*. New York, NY: Free Press.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free

      Press.

Bass, B. M., & Avolio, B. J. (1990). *Multifactor Leadership Questionnaire*. Palo Alto,

      CA: Consulting Psychologists Press.

Bennett, W. J. (1999). *The index of leading cultural indicators: American society at the*

      end of the 20th century. Colorado Springs, CO: Waterbrook Press.

Bennis, W. (1989). *Why leaders can't lead*. San Francisco, CA: Jossey-Bass.

Bird, J. J., Wang, C., Watson, J. R., & Murray, L. (2009). Relationships among principal authentic leadership and teacher trust and engagement levels. *Journal of School Leadership, 19,* 153-171.

Brenner, S. N., & Molander, E. A. (1977). Is the ethics of business changing? *Harvard Business Review, 55*, 57-71.

Brewer, E. W. (2001). Mixed method research designs. In Farmer, E. I. & Rojewski, J. W. (Eds.), *Research Pathways: Writing professional papers, thesis, and dissertations in work force education* (pp. 107-128) Lanham, MD: University Press of America (UPA).

Brookover, W. B., Schweitzer, J. H., Schneider, J. M., Beady, C. H., Flood, P.K., & Wisenbaker, J. M. (1978). Elementary school social climate and school achievement. *American Educational Research Journal, 15*, 301-318.

Brown, K. M., Roney, K., & Anfara, V. A. (2003). Organizational health directly influences student performance at the middle level. *Middle School Journal, 35*(5), 5-15.

Brown, M. E., & Trevino, L. K. (2006a). Charismatic leadership and workplace deviance. *Journal of Applied Psychology, 91*, 954-962.

Brown, M. E., & Trevino, L. K. (2006b). *Role modeling and ethical leadership*. Paper presented at the 2006 Academy of Management Annual Meeting. Atlanta, GA.

Brown, M. E., Trevino, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes, 97*, 117-134.

Browne, M. M. (2002). A study of the relationships between organizational climate and

    school performance in New Jersey urban elementary schools [Abstract] (Doctoral

    dissertation, Seton Hall University, 2002). *Dissertation Abstracts International,*

    63 (01), 33A. (UMI No. 3040982)

Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.

Burns, J. M. (2003). *Transforming leadership*. New York, NY: Grove Press.

Bushaw, W. J., & McNee, J. A. (2009). America speaks out: Are educators and policy

    makers listening? The 41st annual phi delta kappa/gallup poll of the public's

    attitudes toward the public schools. *Phi Delta Kappan, 91*(1), 8-23.

Butcher, W. C. (1997). Ethical leadership. *Executive Excellence, 14*(6), 5-6.

Cairns, D. V. (1995). *Research report: Critical skills necessary for Montana principals.*

    (ERIC Document Reproduction Service No. ED 390). Helena, MT: Montana

    State Board of Education.

Campbell, E. (1997). Ethical school leadership: Problems for an elusive role. *Journal of*

    School Leadership, 7(4), 287-300.

Carter, S. L. (1996). *Integrity*. New York, NY: Basic Books.

Caudron, S. (1993, November 15). Motivation. *Industry Week*, 33.

Cawelti, G. (1999). Improving achievement: Finding research-based practices and

    programs that boost student achievement. *The American School Board Journal,*

    186(7), 34-37.

Ciulla, J. B. (1995). Leadership ethics: Mapping the territory. *Business Ethics Quarterly,*

    5(1), 5-28.

Ciulla, J. B. (1998). *Ethics, the heart of leadership*. Westport, CT: Greenwood.

Ciulla, J. B. (2003). *The ethics of leadership*. Belmont, CA: Wadsworth/Thomson Learning.

Ciulla, J. B. (2005). The state of leadership ethics and the work that lies before us. *Business Ethics: A European Review, 14*(4), 323-335.

Costa, D. (1998). *The ethical imperative: Why moral leadership is good business*. Reading, MA: Addison-Wesley.

Council of Chief State School Officers, (1996). Standards for school leaders. In *Interstate School Leaders Licensure Consortium* (pp. 1-23). Washington, DC.

Craig, S. B., & Gustafson, S. B. (1998). Perceived leader integrity scale: An instrument for assessing employee perceptions of leader integrity. *Leadership Quarterly, 9*(2), 127-145.

Davis, A. L., & Rothstein, H. R. (2006). The effects of the perceived behavioral integrity of managers on employee attitudes: A meta-analysis. *Journal of Business Ethics, 67*, 407-419.

Dempster, N., Freakley, M., & Parry, L. (2000) *The Ethical Decision Making of School Principals: survey results* (Griffith University, Centre for Leadership and Management in Education, Faculty of Education).

Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics, 28*(3), 18-33.

Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly, 14*, 807-834.

Eddins, S. (2008). *Key issues and trends in K-12 STEM education* [PowerPoint slides].

    Present at Tennessee Standards Training.

Etzioni, A. (1975). *A comparative analysis of complex organizations: On power,*

    involvement, and their correlates (2nd ed.). New York: Free Press.

Ferris, G. R., & Kacmar, K. M. (1992). Perceptions of organizational politics. *Journal of*

    Management, 18(1), 93-116.

Fleishman, E. A., & Harris, E. F. (1962). Patterns of leadership behavior related to

    employee grievance and turnover. *Personnel Psychology, 16*, 43-56.

Flumerfelt, S., Ingram, I. L., Smith, J., & Brockberg, K. (2009). An examination of

    professional goal plans and ethical leadership. *Journal of Scholarship & Practice,*

    6(2), 10-20.

Fowler, D. J. (2010). The ethics of educational leadership. *Academic Leadership, 8*(3),

    1-9.

Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational Research Competencies for*

    Analysis and Applications (9th ed.). Upper Saddle River, NJ: Pearson Merrill

    Prentice Hall.

Gilligan, C. (1982). *In a different voice*. Cambridge, MA: Harvard University Press.

Glanz, J. (2006). *What every principal should know about ethical and spiritual*

    leadership. Thousand Oaks, CA: Corwin Press.

Glidden, H. G. (1999). Breakthrough schools: Characteristics of low-income schools that

    perform as though they were high-income schools. *ERS Spectrum, 17*(2), 21-26.

Goddard, R. D., Sweetland, S. R., & Hoy, W. K. (2000). Academic Emphasis of urban

    elementary schools and student achievement in reading and mathematics: A

    multilevel analysis. *Educational Administration Quarterly, 36*, 683-702.

Gosmire, D., Morrison, M., & Van Osdel, J. (2009). Administrators' and teachers'

    perceptions of the value and current use of the ELCC standards. [Electronic

    version]. *National Council of Professors of Educational Administration (NCPEA)*

    Educational Leadership Review (ELR), *10*(2). Retrieved August 25, 2009, from

    Connexions website: http://cnx.org/content/m24426/1.2/

Gray, S. T. (1996). Avoiding on the edge ethical choices. *Association Management,*

    *48(*13), 112.

Grojean, M., Resick, C., Dickson, M., & Smith, D. B. (2004). Leaders, values, and

    organizational climate: Examining leadership strategies for establishing an

    organizational climate regarding ethics. *Journal of Business Ethics, 55*, 223-241.

Halpin, A. W. (1966). *Theory and research in administration*. New York, NY:

    Macmillan.

Halpin, A. W., & Croft, D. P. (1963). *The organizational climate of schools*. Chicago:

    University of Chicago, Midwest Administration Center.

Hamilton, J. (2010). *Tennessee and Delaware win first race to the top grants*. Retrieved

    May 30, 2010, from the U.S. Department of Education Web site:

    http://www2.ed.gov/news/pressreleases/2010/03/03292010.html

Heifetz, R. A., & Laurie, D. (1997). The work of leadership. *Harvard Business Review*,

    75(1), 124-134.

Henderson, C. L. (2007). *Organizational health and student achievement gains in elementary schools*. Unpublished doctoral dissertation. The University of Tennessee–Knoxville.

Henderson, C. L., Buehler, A. E., Stein, W. L., Dalton, J. E., Robinson, T. R., & Anfara, V. A. (2005). Organizational health and student achievement in Tennessee middle schools. *NASSP Bulletin, 89*(64), 54-75.

Hodgkinson, C. (1991). *Educational leadership: The moral art*. Albany, NY: State University of New York Press.

Hoy, W. K., & Feldman, J. A. (1987). Organizational health: The concept and its measure. *Journal of Research and Development in Education, 20*(4), 30-37.

Hoy, W. K., & Hannum, J. W. (1997). Middle school climate: An empirical assessment of organizational health and student achievement. *Educational Administration Quarterly, 33*, 290-311.

Hoy, W. K., & Tarter, C. J. (1992). Measuring the health of the school climate: A conceptual framework. *NASSP Bulletin, 76*(547), 74-79.

Hoy, W. K., & Tarter, C. J. (1997). *The road to open and healthy schools: A handbook for change elementary and middle school edition.* Thousand Oaks, CA: Corwin Press.

Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal, 93*(4), 355-372.

Hoy, W. K., Hannum, J. W., & Tschannen-Moran, M. (1998). Organizational climate and

    student achievement: A parsimonious and longitudinal view. *Journal of School*

    Leadership, 8, 336-359.

Hoy, W. K., Tarter, C. J., & Bliss, J. R. (1990). Organizational climate, school health,

    and effectiveness: A comparative analysis. *Educational Administration Quarterly,*

    26, 260-279.

Hoy, W. K., Tarter, C. J., & Hoy, A. W. (2006). Academic optimism of schools: A force

    for student achievement. *American Educational Research Journal, 43*, 425-446.

Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools/healthy schools:*

    Measuring organizational climate. Beverly Hills, CA: Sage.

Huck, S. W., & Gleason, E. M. (1974). Using monetary inducements to increase response

    rates from mailed surveys: A replication and extension of previous research.

    Journal of Applied Psychology, 59(2), 222-225.

Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational

    analysis. *American Educational Research Journal, 38*(3), 499-534.

Introduction to SAS. UCLA: Academic Technology Services, Statistical Consulting

    Group. from http://www.ats.ucla.edu/stat/sas/notes2/ (accessed August 14, 2011).

Johns, T. (1995). Don't be afraid of the moral maze. *People Management, 1*(20), 32-40.

Kaiser, R. B., & Hogan, R. (2010). How to (and how not to) assess the integrity of

    managers. *Consulting Psychology Journal: Practice and Research, 62*(4), 216-

    234.

Karakose, T. (2007). High school teachers' perceptions regarding principals' ethical leadership in Turkey. *Asia Pacific Education Review, 8*(3), 464-477.

Koestenbaum, P. (1991). *Leadership: The inner side of greatness*. San Francisco, CA: Jossey-Bass.

Langlois, L., & Lapointe, C. (2007). Ethical leadership in Canadian school organizations: Tensions and possibilities. *Educational Management Administration & Leadership, 35*(2), 247-260.

Leithwood, K. A., & Riehl, C. (2003). *What do we already know about successful school leadership?* Paper prepared for the AERA Division A Task Force on Developing Research in Educational Leadership.

Levy, P. E. (2004). A methodological framework for practice-based research in networked learning, *Computer-Supported Collaborative Learning, 4*, 43-64.

Lewis, P. V. (1985). Business ethics: Like nailing jello to a wall. *Journal of Business Ethics, 4*, 377-383.

Licta, J. W., & Harper, G. W. (1999). Healthy schools, robust schools and Academic Emphasis as an organizational theme. *Journal of Educational Administration, 37*, 463-475.

Mason, E. S. (1995). Gender differences in job satisfaction. *Journal of Social Psychology, 135*(2), 143-151.

Malone, P. F., & Fry, L. W. (2003). *Transforming schools through spiritual leadership: A field experiment.* Paper presented at the Academy of Management, Seattle, WA.

Mau, W. (1997). Parental influences on high school students' academic achievement: A comparison of Asian immigrants, Asian Americans, and white Americans. *Psychology in the Schools, 34*, 267-277.

Maylone, N. (2002). The relationship of socioeconomic factors and district scores on the Michigan educational assessment program tests: An analysis (Doctoral dissertation, Eastern Michigan University, 2002). *Dissertation Abstracts International, 64-05,* 1617.

Miles, M. (1965). Planned change in organizational health: Figure and ground. *Change processes in the public schools.* The Center for the Advanced Study of Educational Administration, (pp. 11-34). Eugene, Oregon.

Miles, M. B. (1969). Planned change and organizational health: Figure and ground. In F. D. Carver & T. J. Sergiovanni (Eds.), *Organizations and human behavior: Focus on schools* (pp. 375-391). New York: McGraw-Hill. (Reprinted from *Change processes in the public schools*, pp. 11-34, 1965, Center for the Advance Study of Educational Administration, Oregon University)

Miles, M. T. (2002). *The relative impact of principal instructional and transformational leadership on school culture.* Unpublished doctoral dissertation. University of Missouri–Columbia.

Milgram, S. (1974). *Obedience to authority*. New York, NY: Harper & Row.

Mill, J. S. (1871). *Utilitarianism*. Cambridge, MA: Harvard Depository Brittle Book.

Mill, J. S., & Bentham, J. (1987). *Utilitarianism and other essays* (A. Ryan, Ed.). London: Penguin Books.

McCann, J., & Holt, R. (2009). Ethical Leadership and Organizations: An analysis of

  leadership in the manufacturing industry based on the perceived leadership

  integrity scale. *Journal of Business Ethics, 87*, 211-220.

National Policy Board for Educational Administration, (2002). In *Standards for*

  Advanced Programs in Educational Leadership for Principals, Superintendents,

  Curriculum Directors, and Supervisors (pp. 1-18). Arlington, VA.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002).

Northouse, P. G. (2004). *Leadership theory and practice* (3rd ed.). Thousand Oaks,

  California: Sage Publications, Inc.

Osborn, A. (2006). *Public school teacher attrition and organizational health: A*

  comparative study. Unpublished doctoral dissertation. The University of Texas–

  Austin.

Owings, W. A., & Kaplan, L. S. (2003). *Best practices, best thinking and emerging issues*

  in school leadership. Thousand Oaks, CA: Corwin Press.

Parry, K. W., & Proctor-Thomson, S. B. (2002). Perceived integrity of transformational

  leaders in organizational settings. *Journal of Business Ethics, 35*, 75-96.

Parsons, T., Bales, R. F., & Shils, E. A. (1953). *Working papers in the theory of action.*

  Glencoe, IL: Free Press.

Posner, B. Z., & Schmidt, W. H. (1984). Values and the American manager: An update.

  California Management Review, 26, 202-216.

Posner, B. Z., & Schmidt, W. H. (1987). Ethics in American companies: A managerial

  perspective. *Journal of Business Ethics, 6*, 383-391.

Rae, S. B. (1995). *Moral choices: An introduction to ethics*. Grand Rapids, MI:
    Zondervan.

Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York, NY:
    Praeger.

Russell, J., & McCombs, J. S. (2006). *Superintendant, principal and teacher
    understanding of and attitudes about accountability*. RAND Education working
    paper presented at the annual meeting of the American Educational Research
    Association, San Francisco.

Ryan, K. (1993). Why a center for the advancement of ethics and character? *Journal of
    Education, 175*(2), 1-11.

Schmidt, W., & Posner, B. (1983). *Managerial values in perspective*. New York, NY:
    American Managerial Association.

Sergiovanni, T. J. (1990). *Value-added leadership*. San Diego, CA: Harcourt Brace
    Jovanovich.

Sergiovanni, T. J. (1992). *Moral leadership: Getting to the heart of school improvement*.
    San Francisco: Jossey-Bass.

Sergiovanni, T. J. (2006). *The principalship: A reflective practice perspective.* New
    York, NY: Pearson Education, Inc.

Sergiovanni, T. J. (2007). *Rethinking leadership: A collection of articles* (2nd ed.).
    Thousand Oaks, CA: Corwin Press.

Sergiovanni, T. J., & Starratt, R. J. (1988). *Supervision: Human perspectives* (4th ed.).
    New York, NY: McGraw-Hill.

Snyder, T. (1999). *Digest of education statistics, 1998*. Washington, DC: National Center for Education Statistics.

Starratt, R. J. (2003). A perspective on ethical educational leadership: An ethics of presence. In F. C. Lunenburg & C. S. Carr (Eds.), *Shaping the future: Policy, partnerships and emerging perspectives* (pp. 146-184). Lanham, MD: Scarecrow Education.

Strike, K. A. (1999). Can schools be communities? The tensions between shared values and inclusion. *Educational Administration Quarterly, 35*(1), 46-70.

Strike, K. A. (2007). *Ethical leadership in schools: Creating community in an environment of accountability*. Thousand Oaks, CA: Corwin Press.

Styron, R. A., & Nyman, T. R. (2008). *Key characteristics of middle school performance. Research in middle level education, 31*(5), 1-17.

Sweetland, S. R., & Hoy, W. K. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly, 36*, 703-729.

Tennessee Department of Education. (2008). *The Tennessee diploma project: Aligned expectations*. Retrieved May 30, 2010, from the State of Tennessee Web site: http://tennessee.gov/sbe/TDP 1-23-08

Tienken, C. H. (2010). What the research suggests. *Kappa Delta Pi Record, 46*(4), 152-154.

Toppo, G. (2011, July 6). "Atlanta public school exams fudged." *USA Today.* Retrieved July 8, 2011, from http://www.usatoday.com/news/nation/2011-07-06-Atlanta-

schools-standardized-test-cheating_n.htmTrautman, N. (2000). How organizations

become corrupt: The corruption continuum. *Law and Order*, *48*(5), 65-68.

Turner, Dorie. (2011a, July 6). Report: Atlanta superintendent knew about cheating.

Associated Press. Retrieved July 19, 2011, from

http://www.google.com/hostednews/ap/article/ALeqM5gCMCstcTn58lqyTqfCeN

kXa2ny1g?docId=ef823f37faed450e9959d82b0a7af321

Turner, Dorie. (2011b, July 7). Atlanta schools announce changes after scandal.

Associated Press. Retrieved July 19, 2011, from

http://www.google.com/hostednews/ap/article/ALeqM5hYJweQ-

TmfVdX8RuZLsGMnJ--j3g?docId=2813f7afbb4f4ef1a3681fadfb9e0c52

Tye, B. B., & O'Brien, L. (2002). Why are experienced teachers leaving the profession?

The Phi Delta Kappan, 84(1), 24-32.

Ubben, G. C., Hughes, L. W., & Norris, C. J. (2007). *The principal: Creative leadership

for excellence in schools* (6th ed.). Boston: Allyn and Bacon.

Uhl-Bien, M. & Carsten, M. K. (2007). Being ethical when the boss is not.

Organizational Dynamics, 36(2), 187-201.

Valente, M. E. (1999, April). *The relationship of organizational health, leadership, and

teacher empowerment.* Paper presented at the Annual Meeting of American

Educational Research Association, Montreal, Quebec, Canada. (ERIC Document

Reproduction Service No. ED430297)

Walker Information National Study, (2001). Ethics culture within the workplace.

    Retrieved October 18, 2001 from http://www.mta.net/corporate/depts

    /ethics/Headlines/headlines/ethics_culture.htm

Walker, K. (1993). Striving for integrity in educational policy making: An ethical

    metaphor. *The McGill Journal of Education, 28*(1), 77-95.

Walker, L. J. (1985). Sex differences in the development of moral reasoning: A critical

    review. *Child Development, 55*, 677-691.

Wang, J., & Wildman, L. (1996). The relationships between parental influence and

    student achievement in seventh grade mathematics. *School Science &*

    Mathematics, 96, 395-399.

Weaver, G. R., Trevino, L. K., & Agle, B. (2005). Somebody I look up to: Ethical role

    models in organizations. *Organizational Dynamics, 34*, 313-330.

White, D. W., & Lean, E. (2008). The impact of perceived leader integrity on

    subordinates in a work team environment. *Journal of Business Ethics, 81*, 765-

    778.

Wright, R. J. (2009). Methods for improving test scores: The good, the bad, and the ugly.

    Kappa Delta Pi Record, 45(3), 116-121.

Yilmaz, E. (2006). *To investigate the effect of school managers' ethical leadership levels*

    on the organizational trust level and to test whether the organizational trust level

    in schools differentiate with respect to some variables or not. Unpublished

    doctoral dissertation, Institute of Social Sciences, Selcuk University, Konya,

    Turkey.

Yukl, G. (2002). *Leadership in organizations* (5th ed.). Upper Saddle River, NJ:

    Prentice Hall.

APPENDIXES

Appendix A: System Director Electronic Mailing

Hello Director Doe,

My name is Jessica H. Chambers. I am a student at the University of Tennessee, Knoxville. I am currently working on my dissertation for a doctoral degree in Educational Leadership and Policy Studies. I am being supervised in my research process by Dr. Ernest W. Brewer from the University.

I am hoping you will allow me permission to contact your secondary school principals for their approval of their school's participation in my study. All teachers at each school will be asked to complete two instruments electronically. There is also a demographic questionnaire included for analysis purposes. Online survey software, mrInterview, will be used for data collection. Once the participants click on the link provided in an email, they will be taken to a University website created by the researcher using the software. When the participants are finished with the surveys and demographic information, the participant will click a submit button which stores the survey results in a secure electronic database for the study. All submissions are completely anonymous yet each will be linked to their designated allowing each school and district to be provided a profile chart and description of each school's ethical leadership and organizational health, as well as demographic makeup.

The purpose of my study is to examine the relationship between secondary school principals' ethical leadership as perceived by the teachers and measured by the Perceived Leadership Integrity Scale ([PLIS], Craig & Gustafson, 1998) and schools' organizational health as perceived by teachers and gauged by the Organizational Health Inventory for Secondary Schools ([OHI-S], Hoy & Feldman, 1987).

If you need additional information or would like to talk to me over the phone or in person, please let me know. I appreciate your time and hope you have a wonderful day. Thank you so much.

Blessings,

Jessica H. Chambers
University of Tennessee, Knoxville
jchamb11@utk.edu
1181 New Light Road
Winfield, Tennessee 37892
423-539-1112

Appendix B: Secondary School Principal Electronic Mailing

Hello Principal Smith,

I have received approval from Director Doe to contact you. I understand you are very busy but I would greatly any time and support you could provide to my research efforts. My name is Jessica H. Chambers. I am a student at the University of Tennessee, Knoxville. I am currently working on my dissertation for a doctoral degree in Educational Leadership and Policy Studies. I am being supervised in my research process by Dr. Ernest W. Brewer from the University.

I am hoping you will allow me permission to contact your secondary faculty members for participation in my study. All teachers will be asked to complete two instruments electronically. There is also a demographic questionnaire included for analysis purposes. Online survey software, mrInterview, will be used for data collection. Once the participants click on the link provided in an email, they will be taken to a University website created by the researcher using the software. When the participants are finished with the surveys and demographic information, the participant will click a submit button which stores the survey results in a secure electronic database for the study. All submissions are completely anonymous yet each will be linked to their designated allowing each school and district to be provided a profile chart and description of each school's ethical leadership and organizational health, as well as demographic makeup.

The purpose of my study is to examine the relationship between secondary school principals' ethical leadership as perceived by the teachers and measured by the Perceived Leadership Integrity Scale ([PLIS], Craig & Gustafson, 1998) and schools' organizational health as perceived by teachers and gauged by the Organizational Health Inventory for Secondary Schools ([OHI-S], Hoy & Feldman, 1987).

If you need additional information or would like to talk to me over the phone or in person, please let me know. I appreciate your time and hope you have a wonderful day. Thank you so much.
Blessings,

Jessica H. Chambers
University of Tennessee, Knoxville
jchamb11@utk.edu
1181 New Light Road
Winfield, Tennessee 37892
423-539-1112

Appendix C: Survey Link Electronic Mailing

Thank you so much Principal Smith. I appreciate your time and support. I am sending the information for your faculty below. Please forward the information including the link and the school code. Let me know if you have any technical difficulties. Thank you in advance for encouraging your teachers to participate. I will be in touch to follow up in a week or so. Thanks again! This data collection is a great opportunity for your school to gain non-academic data for TSIP and SACS reports. The more participants the better your analysis with be. Also remember, the school with the highest percentage participation will get a 55inch Samsung flat screen T.V. (if multiple schools have the same highest percentage a drawing among those schools will take place). So please encourage your teachers to participate. Thanks so much!

Hello Faculty Members,

Thank you so much for taking time to participate in my study. I understand how busy you are, as I am a teacher as well. The surveys should take you approximately 25 minutes to complete. Please rest assured that all data will remain anonymous. You will follow the link provided below to complete the surveys for my study. Once you click on the link you will be asked to you enter a school code, also given below. This code simply allows your school's data to be compiled.

Your school's code is 00

http://survey.utk.edu/mrIWeb/mrIWeb.dll?I.Project=OHIS

Again, thank you so much for your time.

Blessings,

Jessica H. Chambers
University of Tennessee, Knoxville

Appendix D: Perceived Leader Integrity Scale (PLIS)

The following items concern your immediate supervisor (school level principal). You should consider your immediate supervisor (school level principal) the person who you feel has the most control over your daily work activities. Select responses to indicate how well each item describes your immediate supervisor (school level principal).

Response choices: (1) = *Not at all*; (2) = *Somewhat*; (3) = *Very much*; (4) = *Exactly*

Item	Description	1	2	3	4
1.	Would use my mistakes to attack me personally	Not at all	Somewhat	Very much	Exactly
2.	Always gets even	Not at all	Somewhat	Very much	Exactly
3.	Gives special favors to certain "pet" employees, but not to me	Not at all	Somewhat	Very much	Exactly
4.	Would lie to me	Not at all	Somewhat	Very much	Exactly
5.	Would risk me to protect himself/herself in work matters	Not at all	Somewhat	Very much	Exactly
6.	Deliberately fuels conflict among employees	Not at all	Somewhat	Very much	Exactly
7.	Is evil	Not at all	Somewhat	Very much	Exactly
8.	Would use my performance appraisal to criticize me as a person	Not at all	Somewhat	Very much	Exactly
9.	Has it in for me	Not at all	Somewhat	Very much	Exactly
10.	Would allow me to be blamed for his/her mistake	Not at all	Somewhat	Very much	Exactly
11.	Would falsify records if it would help his/her work situation	Not at all	Somewhat	Very much	Exactly
12.	Lacks high morals	Not at all	Somewhat	Very much	Exactly
13.	Makes fun of my mistakes instead of coaching me as to how to do my job better	Not at all	Somewhat	Very much	Exactly
14.	Would deliberately exaggerate my mistakes to make me look bad when describing my performance to his/her superiors	Not at all	Somewhat	Very much	Exactly
15.	Is vindictive	Not at all	Somewhat	Very much	Exactly
16.	Would blame me for his/her own mistake	Not at all	Somewhat	Very much	Exactly
17.	Avoids coaching me because (s)he wants me to fail	Not at all	Somewhat	Very much	Exactly
18.	Would treat me better if I belonged to a different ethnic group	Not at all	Somewhat	Very much	Exactly

19.	Would deliberately distort what I say	Not at all	Somewhat	Very much	Exactly
20.	Deliberately makes employees angry at each other	Not at all	Somewhat	Very much	Exactly
21.	Is a hypocrite	Not at all	Somewhat	Very much	Exactly
22.	Would limit my training opportunities to prevent me from advancing	Not at all	Somewhat	Very much	Exactly
23.	Would blackmail an employee if (s)he thought (s)he could get away with it	Not at all	Somewhat	Very much	Exactly
24.	Enjoys turning down my requests	Not at all	Somewhat	Very much	Exactly
25.	Would make trouble for me if I got on his/her bad side	Not at all	Somewhat	Very much	Exactly
26.	Would take credit for my ideas	Not at all	Somewhat	Very much	Exactly
27.	Would steal from the organization	Not at all	Somewhat	Very much	Exactly
28.	Would risk me to get back at someone else	Not at all	Somewhat	Very much	Exactly
29.	Would engage in sabotage against the organization	Not at all	Somewhat	Very much	Exactly
30.	Would fire people just because (s)he doesn't like them if (s)he could get away with it	Not at all	Somewhat	Very much	Exactly
31.	Would do things which violate organizational policy and then expect his/her subordinates to cover for him/her	Not at all	Somewhat	Very much	Exactly

Appendix E: Organizational Health Inventory

for Secondary Schools (OHI-S)

OHI-S

Directions: The following are statements about your school, Please indicate the extent to which each statement characterizes your school from **rarely occurs** to **very frequently occurs**.

	Rarely Occurs	Sometimes Occurs	Often Occurs	Very Frequently Occurs
1. Teachers are protected from unreasonable community and parental demands.	①	②	③	④
2. The principal gets what he or she asks for from superiors.	①	②	③	④
3. The principal is friendly and approachable.	①	②	③	④
4. The principal asks that faculty members follow standard rules and regulations.	①	②	③	④
5. Extra materials are available if requested.	①	②	③	④
6. Teachers do favors for each other.	①	②	③	④
7. The students in this school can achieve the goals that have been set for them.	①	②	③	④
8. The school is vulnerable to outside pressures.	①	②	③	④
9. The principal is able to influence the actions of his or her superiors.	①	②	③	④
10. The principal treats all faculty members as his or her equal.	①	②	③	④
11. The principal makes his or her attitudes clear to the school.	①	②	③	④
12. Teachers are provided with adequate materials for their classrooms.	①	②	③	④
13. Teachers in this school like each other.	①	②	③	④
14. The school sets high standards for academic performance.	①	②	③	④
15. Community demands are accepted even when they are not consistent with the educational program.	①	②	③	④
16. The principal is able to work well with the superintendent.	①	②	③	④
17. The principal puts suggestions made by the faculty into operation.	①	②	③	④
18. The principal lets faculty know what is expected of them.	①	②	③	④
19. Teachers receive necessary classroom supplies.	①	②	③	④
20. Teachers are indifferent to each other.	①	②	③	④
21. Students respect others who get good grades.	①	②	③	④
22. Teachers feel pressure from the community.	①	②	③	④
23. The principal's recommendations are given serious consideration by his or her superiors.	①	②	③	④
24. The principal is willing to make changes.	①	②	③	④
25. The principal maintains definite standards of performance.	①	②	③	④
26. Supplementary materials are available for classroom use.	①	②	③	④
27. Teachers exhibit friendliness to each other.	①	②	③	④
28. Students seek extra work so they can get good grades.	①	②	③	④
29. Select citizen groups are influential with the board.	①	②	③	④
30. The principal is impeded by the superiors.	①	②	③	④
31. The principal looks out for the personal welfare of faculty members.	①	②	③	④
32. The principal schedules the work to be done.	①	②	③	④
33. Teachers have access to needed instructional materials.	①	②	③	④
34. Teachers in this school are cool and aloof to each other.	①	②	③	④
35. Teachers in this school believe that their students have the ability to achieve academically.	①	②	③	④
36. The school is open to the whims of the public.	①	②	③	④
37. The morale of the teachers is high.	①	②	③	④
38. Academic achievement is recognized and acknowledged by the school.	①	②	③	④
39. A few vocal parents can change school policy.	①	②	③	④
40. There is a feeling of trust and confidence among the staff.	①	②	③	④
41. Students try hard to improve on previous work.	①	②	③	④
42. Teachers accomplish their jobs with enthusiasm.	①	②	③	④
43. The learning environment is orderly and serious.	①	②	③	④
44. Teachers identify with the school.	①	②	③	④

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Appendix F: Tennessee Teachers' Demographic Questionnaire

Instructions: Please select the answer that best describes you.

1. What is your gender?
   a. Male
   b. Female

2. What ethnicity best describes you?
   a. White
   b. African American
   c. Hispanic
   d. Asian-Pacific Islander
   e. Native American
   f. Other

3. What subject do you teach?
   a. Math
   b. English
   c. History
   d. Science
   e. Other

4. What is your highest degree level?
   a. B.A./B.S. Degree
   b. M.A./M.S. Degree
   c. Educational Specialist (Ed.S.) Degree
   d. Doctorate Degree

5. How many total years of teaching experience do you have?
   a. Less than 2 years
   b. 2-5 years
   c. 6-15 years
   d. 16-25 years
   e. 26 years or more

Appendix G: Post Hoc Results for ANOVA on Hypothesis 6

Post Hoc Test	Educational level	Educational level	Sig.**
Tukey HSD	BA/BS Degree	MA/MS Degree	.987
		EDS Degree	.004*
		Doctorate Degree	.944
	MA/MS Degree	BA/BS Degree	.987
		EDS Degree	.002*
		Doctorate Degree	.917
	EDS Degree	BA/BS Degree	.004*
		EDS Degree	.002*
		Doctorate Degree	.734
	Doctorate Degree	BA/BS Degree	.944
		MA/MS Degree	.917
		EDS Degree	.734
Bonferroni	BA/BS Degree	MA/MS Degree	1.000
		EDS Degree	.004*
		Doctorate Degree	1.000
	MA/MS Degree	BA/BS Degree	1.000
		EDS Degree	.002*
		Doctorate Degree	1.000
	EDS Degree	BA/BS Degree	.004*
		EDS Degree	.002*
		Doctorate Degree	1.000
	Doctorate Degree	BA/BS Degree	1.000
		MA/MS Degree	1.000
		EDS Degree	1.000

*p < .05
** Dependent Variable: Organizational Health Index

Post Hoc Test	Total Experience	Total Experience	Sig.**
Tukey HSD	Less than 2	2 to 5 years	.981
		6 to 15 years	.846
		16 to 25 years	.952
		26 years or more	.683
	2 to 5 years	Less than 2 years	.981
		6 to 15 years	.972
		16 to 25 years	1.000
		26 years or more	.113
	6 to15 years	Less than 2 years	.846
		2 to 5 years	.972
		16 to 25 years	.992
		26 years or more	.009*
	16 to 25 years	Less than 2 years	.952
		2 to 5 years	1.000
		6 to 15 years	.992
		26 years or more	.053
	26 years or more	Less than 2 years	.683
		2 to 5 years	.113
		6 to 15 years	.009*
		16 to 25 years	.053
Bonferroni	Less than 2	2 to 5 years	1.000
		6 to 15 years	1.000
		16 to 25 years	1.000
		26 years or more	1.000
	2 to 5 years	Less than 2 years	1.000
		6 to 15 years	1.000
		16 to 25 years	1.000
		26 years or more	.161
	6 to15 years	Less than 2 years	1.000
		2 to 5 years	1.000
		16 to 25 years	1.000
		26 years or more	.011
	16 to 25 years	Less than 2 years	1.000
		2 to 5 years	1.000
		6 to 15 years	1.000
		26 years or more	.068
	26 years or more	Less than 2 years	1.000
		2 to 5 years	.161
		6 to 15 years	.011
		26 years or more	.068

$*p < .05$
** Dependent Variable: Organizational Health Index

Appendix H: Post Hoc Results for MANOVA on Hypothesis 6

Post Hoc Test	Educational level	Educational level	Sig.**	Sig.***	Sig.****
Tukey HSD	BA/BS Degree	MA/MS Degree	.983	.929	.996
		EDS Degree	.001*	.000*	.002*
		Doctorate Degree	.811	.973	.980
	MA/MS Degree	BA/BS Degree	.983	.929	.996
		EDS Degree	.002*	.000*	.002*
		Doctorate Degree	.856	.992	.987
	EDS Degree	BA/BS Degree	.001	.000*	.002*
		EDS Degree	.002*	.000*	.002*
		Doctorate Degree	.837	.299	.579
	Doctorate Degree	BA/BS Degree	.811	.973	.980
		MA/MS Degree	.856	.992	.987
		EDS Degree	.837	.299	.579
Bonferroni	BA/BS Degree	MA/MS Degree	1.000	1.000	1.000
		EDS Degree	.002*	.000*	.002*
		Doctorate Degree	1.000	1.000	1.000
	MA/MS Degree	BA/BS Degree	1.000	1.000	1.000
		EDS Degree	.003*	.000*	.002*
		Doctorate Degree	1.000	1.000	1.000
	EDS Degree	BA/BS Degree	.002*	.000*	.002*
		EDS Degree	.003*	.000*	.002*
		Doctorate Degree	1.000	.483	1.000
	Doctorate Degree	BA/BS Degree	1.000	1.000	1.000
		MA/MS Degree	1.000	1.000	1.000
		EDS Degree	1.000	.483	1.000

*$p < .05$
** Dependent Variable: Principal Influence
***Dependent Variable: Resource Support
****Dependent Variable: Academic Emphasis

Post Hoc Test	Total Experience	Educational level	Sig.**
Tukey HSD	Less than 2	2 to 5 years	.612
		6 to 15 years	.477
		16 to 25 years	.892
		26 years or more	.465
	2 to 5 years	Less than 2 years	.612
		6 to 15 years	1.000
		16 to 25 years	.932
		26 years or more	.001*
	6 to15 years	Less than 2 years	.477
		2 to 5 years	1.000
		16 to 25 years	.799
		26 years or more	.000*
	16 to 25 years	Less than 2 years	.892
		2 to 5 years	.932
		6 to 15 years	.799
		26 years or more	.006*
	26 years or more	Less than 2 years	.465
		2 to 5 years	.001*
		6 to 15 years	.000*
		16 to 25 years	.006*
Bonferroni	Less than 2	2 to 5 years	1.000
		6 to 15 years	1.000
		16 to 25 years	1.000
		26 years or more	.993
	2 to 5 years	Less than 2 years	1.000
		6 to 15 years	1.000
		16 to 25 years	1.000
		26 years or more	.001*
	6 to15 years	Less than 2 years	1.000
		2 to 5 years	1.000
		16 to 25 years	1.000
		26 years or more	.000*
	16 to 25 years	Less than 2 years	1.000
		2 to 5 years	1.000
		6 to 15 years	1.000
		26 years or more	.006*
	26 years or more	Less than 2 years	.993
		2 to 5 years	.001*
		6 to 15 years	.000*
		26 years or more	.006*

*$p < .05$
** Dependent Variable: Morale

VITA

Jessica Hope (King) Chambers attended Oneida High School in Oneida, Tennessee. In August of 1994, Jessica began working on a Bachelor of Science degree with a major in athletic training at Carson Newman College. After taking some time off to work, Jessica began a Master of Science degree with a major in education including a 7- 12 mathematics licensure at The University of Tennessee through the Lyndhurst program. Immediately after graduating in August 2003, she began a Master of Mathematics degree also at The University of Tennessee, Knoxville, while working as a high school mathematics teacher in Scott County. The semester after graduating in 2005, Jessica began working toward her Doctorate of Philosophy degree in Education at The University of Tennessee with a major in Leadership and Policy Studies. During this time, she earned her Pre-K–12 administrators license and also joined Kappa Delta Pi, Nu Chapter. Jessica continues to work as a mathematics teacher in Scott County.