

AN EXAMINATION OF SCHOOL PRINCIPALS' MORAL REASONING
AND DECISION-MAKING ALONG THE PRINCIPALSHIP TRACK
AND ACROSS YEARS OF EXPERIENCE

by

TRENT WILLIAM LING
B.A. Pacific Lutheran University, 1988
J.D. Duke University, 1991

A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Teaching, Learning, and Leadership
in the College of Education and Human Performance
at the University of Central Florida
Orlando, Florida

Summer Term
2014

Major Professor: Barbara A. Murray

© 2014 Trent W. Ling

ABSTRACT

Previous research by Vitton & Wasonga (2009) and Strenth (2013) found public school K-12 principals struggling in the moral reasoning and decision-making measures of the second Defining Issues Test (“DIT-2”). In response to these studies, this research sought to collect, to examine, and to compare DIT-2 data for educational leaders at various stages of the principalship track in an effort to determine and/or to isolate the locus of principals’ reported underperformance. The moral reasoning and decision-making of regular-education K-12 public school principals and assistant principals in Florida, and current master’s degree students in educational leadership programs at a large public Florida university were measured and compared.

Research questions were posed: 1) to find the levels of moral reasoning and decision-making reached by acting principals, acting assistant principals, and current master’s students in educational leadership programs; 2) to determine if there was a difference between these principals, assistant principals, and master’s students in moral reasoning and decision-making; and 3) to see if there was a difference in moral reasoning and decision-making between principals across various years of experience.

The DIT-2 was administered anonymously to participants through an online link, and was scored by the University of Alabama’s Office for the Study of Ethical Development. Data were analyzed through descriptive and inferential statistical methods principally to determine the degree to which participants reasoned and

made decisions based upon personal interests, upon the maintenance of norms, or upon the basis of more sophisticated principles.

Results showed master's students in educational leadership outperforming active principals and assistant principals in moral reasoning and decision-making by more often employing sophisticated principles and by more often avoiding choices associated with personal interests. With regard to principals, the difference was statistically significant on DIT-2 N-2 scores (based on ANOVA and t-test results) and P-scores (based on t-test results, but not based on ANOVA results). Principals not only underperformed master's students in educational leadership statistically significantly, but also underperformed active assistant principals in comparisons of group means on DIT-2 sub-scores.

This research confirms the prior works of Strenth (2013) and Vitton & Wasonga (2009), where principals had been found to struggle in measures of moral reasoning and decision-making. These consecutive and consistent findings now require consideration, discussion, and action by the array of K-12 public school stakeholders. In response to the startling findings that K-12 principals are significantly underperforming those still aspiring for the principalship, a substantial, alarmed, and sober re-examination must take place as to what has happened to principals in K-12 public schools, and as to what can and must be done about it.

In Kingdom years, this has been a very long haul. Looking down an un-promised road, we all signed up for this derailment three years ago from what was and what will go down as the greatest run in history. May this new track, on which we only now begin to chug from the station, prove worthy of our endurance, patience, and original foresight. Here's to you Siauw, Za, Ari, Meme, and Papa!

ACKNOWLEDGMENTS

This research unassumingly commenced exactly two years ago in a course titled Educational Leadership, wherein a 10-minute presentation on Kohlberg's moral development scale morphed into a 90-minute juggernaut and fused the passions of this long-ago philosophy major with his scholarly artful chair, the one and only Dr. Barbara Murray. Through an unpredictable series of inexplicable events, twists, and turns, Dr. Murray was able to elicit and test the mettle of this doctoral candidate, and to coach and direct this cutting-edge research. For that exhilarating and forever unforgettable ride, her unmistakable star will not fade and her aura shall endure, both in this work and in this student. Thank you, Dr. Murray. Obviously, this whole project could never have begun or culminated without you.

This study also owes a great debt and many thanks to Dr. Lee Baldwin whose statistical acumen, precision, and vision appear second to none. Dr. Baldwin's consistently pleasant demeanor and undying readiness to help present as hallmarks by which he, too, shall never be taken for granted or ever forgotten. Thank you, Dr. Baldwin. May your legend continue to grow.

The other two members of the dissertation committee have also poured it out for this work over the course of the past year. Dr. Kenneth Murray has provided feedback from his uniquely orderly perspective, and Dr. Larry Holt has infused the project with a fresh view from outside the educational leadership domain. Thank you both for your insightfully written comments, your appropriate verbal challenges, and your continued willingness to stay the course with this extraordinary effort birthed in unorthodox stages.

Special thanks are due Dr. Rosemarye Taylor, who not only provided an endless supply of professional insight and warm encouragement across the three years of the program, but took our cohort from its infancy in that first semester and gave to us a vision for shaping, charming, and leading the worlds around us with genuine humility and understanding. In addition, dear Dr. Walter Doherty got us “out of the house,” got us to better know and appreciate each other, and got us to Tallahassee to rub elbows with legislators by drafting legislative superstar Dr. Evelyn Lynn to get us into the nooks and crannies of the capitol as if we were VIPs.

As for those in this doctoral cohort, they represented the best of people, and nothing but fondness is felt for them and their patience with what was a freewheeling and edifying program showcasing many voices. Thanks to you Courtney, Craig, Jason, Larry, Lucy, Matt, Melanie, Nikki, Scott, Synthia, and Tim. May your dreams and destinies fully unfold and come through!

TABLE OF CONTENTS

LIST OF TABLES	xiii
CHAPTER 1: INTRODUCTION	1
Background of the Study	1
Statement of the Problem	2
Purpose of the Study	3
Significance of the Study.....	4
Definition of Terms.....	5
Delimitations.....	6
Limitations	7
Theoretical Framework.....	7
The Essence	10
Stages	10
Intelligence and Education.....	12
Role of Experiences	12
Criticism	13
Implications.....	14
Conclusion.....	14
Research Questions and Hypotheses	14
Methodology.....	15
Population	18
Organization of the Dissertation.....	19
CHAPTER 2: REVIEW OF LITERATURE	20

The Principalship.....	20
Pressures and Challenges	21
Climate and Responsibility.....	26
Principal Education	28
Compliance	29
Courage.....	30
Moral Leadership	31
Implications	34
Conclusion.....	36
Rest and the Defining Issues Test.....	37
Decision-Making, Generally	38
The DIT	40
Schema.....	41
Types	44
Validity and Reliability.....	45
Limitations and Critiques	47
Conclusion.....	48
CHAPTER 3: METHODOLOGY	50
Introduction.....	50
Theoretical Framework.....	50
The Essence	52
Stages	53
Intelligence and Education.....	54
Role of Experiences	55

Criticism	56
Implications.....	56
Conclusion.....	57
Statement of the Problem	57
Purpose of the Study	58
Population	59
Research Questions and Hypotheses	59
Procedures	60
Instrumentation.....	65
Analysis of Data.....	72
Summary.....	76
CHAPTER 4: PRESENTATION AND ANALYSIS OF DATA	77
Introduction.....	77
Population	77
Analysis of Research Questions.....	79
Research Question One.....	79
Research Question Two.....	83
Research Question Three.....	86
Additional Analyses.....	92
Real-World Comparisons.....	92
Types	96
Aspiring Principals	98
Gender.....	101
Religious Orthodoxy Comparisons	102

Utilizer Scores.....	104
Summary.....	105
CHAPTER 5: DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS	107
Introduction.....	107
Summary of the Study	107
The Problem	107
The Purpose.....	108
Theoretical Framework.....	108
Research Questions.....	109
Methodology.....	110
Findings.....	111
Discussion.....	112
Research Question One.....	112
Research Question Two.....	117
Research Question Three.....	121
Implications for Practice	125
Lawmakers.....	126
School Districts.....	127
Schools of Educational Leadership	127
School Stakeholders	128
Recommendations for Further Research	129
Conclusions	132
APPENDIX A: PERMISSION TO USE DEFINING ISSUES TEST TWO (DIT-2).....	137
APPENDIX B: DISSERTATION PROPOSAL APPROVAL.....	139

APPENDIX C: INSTITUTIONAL REVIEW BOARD APPROVAL.....	141
APPENDIX D: DEFINING ISSUES TEST TWO (DIT-2)	143
APPENDIX E: COMMUNICATION WITH PARTICIPANTS.....	169
APPENDIX F: ANNOUNCEMENT OF ORAL DEFENSE	190
LIST OF REFERENCES.....	192

LIST OF TABLES

Table 1: Summary of Research Inquiries	75
Table 2: Response-Rate Data	78
Table 3: P, AP, and MS Postconventional Means	80
Table 4: P, AP, and MS Personal-Interest Means	81
Table 5: P, AP, and MS Maintaining-Norms Means.....	82
Table 6: P, AP, and MS N-2 Score Means.....	83
Table 7: ANOVA on P, AP, and MS DIT-2 Scores	85
Table 8: Principal Experience and Postconventional Means.....	87
Table 9: Principal Experience and Personal-Interest Means.....	87
Table 10: Principal Experience and Maintaining-Norms Means.....	88
Table 11: Principal Experience and N-2 Score Means.....	88
Table 12: DIT-2 ANOVA on Grouped Principal Experience.....	89
Table 13: DIT-2 ANOVA on Ungrouped Principal Experience	89
Table 14: Summary of Research Results	91
Table 15: Real-World Comparisons on Postconventional Scores.....	93
Table 16: Real-World Comparisons on Personal-Interest Scores	94
Table 17: Real-World Comparisons on Maintaining-Norms Scores	95
Table 18: Type Counts for P, AP, and MS.....	97
Table 19: Type Means and Medians	97
Table 20: Aspiring and Non-Aspiring Principals' Postconventional Means	99

Table 21: Aspiring and Non-Aspiring Principals' Personal-Interest Means.....	99
Table 22: Aspiring and Non-Aspiring Principals' Maintaining-Norms Means.....	99
Table 23: Aspiring and Non-Aspiring Principals' N-2 Score Means.....	99
Table 24: Aspiring and Current Principals' Postconventional Means.....	100
Table 25: Aspiring and Current Principals' Personal-Interest Means	100
Table 26: Aspiring and Current Principals' Maintaining-Norms Means	100
Table 27: Aspiring and Current Principals' N-2 Score Means	100
Table 28: Gender Means Across DIT-2 Scores.....	101
Table 29: Religious Orthodoxy Counts for P, AP, and MS	102
Table 30: Religious Orthodoxy Means and Medians.....	102
Table 31: Utilizer Means and Medians	104
Table 32: P, AP, and MS Postconventional Means for Discussion.....	113
Table 33: P, AP, and MS Personal-Interest Means for Discussion.....	113
Table 34: P, AP, and MS Maintaining-Norms Means for Discussion	113
Table 35: P, AP, and MS N-2 Score Means for Discussion	114
Table 36: Type Means and Medians for Discussion	115
Table 37: ANOVA on P, AP, and MS DIT-2 Scores for Discussion.....	118
Table 38: Principal Experience and Postconventional Means for Discussion	122
Table 39: Principal Experience and Personal-Interest Means for Discussion	122
Table 40: Principal Experience and Maintaining-Norms Means for Discussion.....	123
Table 41: Principal Experience and N-2 Score Means for Discussion.....	123
Table 42: DIT-2 ANOVA on Grouped Principal Experience for Discussion.....	123

Table 43: DIT-2 ANOVA on Ungrouped Principal Experience for Discussion.....123

CHAPTER 1: INTRODUCTION

This opening chapter unfolds across the following 12 distinct sections:

Background of the Study; Statement of the Problem; Purpose of the Study; Significance of the Study; Definition of Terms; Delimitations; Limitations; Theoretical Framework; Research Questions and Hypotheses; Methodology; Population; and Organization of the Dissertation.

Background of the Study

Perhaps surprisingly, not an abundance of research has been conducted on K-12 school leadership (Marzano, Waters, & McNulty, 2005), especially as rapid turnover at the principal level remains a growing concern because schools cannot be expected to improve if they continue to drive out experienced principals only to replace them with rookies (Ravitch, 2010). Meanwhile, principals who remain in the profession are challenged in the increasingly complex nature of their positions. Resistance is faced at every turn by principals enduring the momentum of the status quo, obstructive staff attitudes and beliefs, parental expectations of privilege, formidable bureaucracies, unsupportive central offices, a lack of resources, harmful state and federal regulations, and the physical and emotional tolls of the job (Theoharis, 2008).

Despite being essential to school success, principals now, and more than ever, face extensive responsibilities with only limited control in the crucible of

relentless accountability (West, Peck, & Reitzug, 2010). Further, schools must confront a declining interest in principalships as such vocations have become increasingly subject to intensely unreasonable pressures to solve a bevy of educational, social, and personal problems (Shoho & Barnett, 2010).

Owens & Valesky (2011) stressed the educational primacy of school culture, which turns attention to site leaders (i.e., principals) whose leadership strength depends upon a range of power sources. Against these aforementioned pressures, how do current principals and future principals define issues and make decisions? According to the measures of James Rest's Defining Issues Test (Thoma, 2002), where do current and future school leaders place on Lawrence Kohlberg's moral development scale (Swanson, 1995)? Such questions about the molders of school cultures provide the backdrop for this study.

Statement of the Problem

To date, no study has analyzed how principals' levels of moral reasoning and decision-making compare across years of experience in the principalship. Further, studies have not compared moral reasoning and decision-making along the continuum of the educational-leadership track (i.e., from master's student, to assistant principal, to principal). This study makes these comparisons.

Despite federal, state, and district mandates, and other directives in K-12 education, site leaders, namely principals, remain the primary leaders of schools

and those specifically charged with effectuating positive and powerful cultures and climates (Marzano, Waters, & McNulty, 2005). Colleges of education, certification standards and processes, professional development for existing and future leaders, and mentoring relationships within educational entities may purport to support principals and to improve their leadership, but do principals' moral reasoning and decision-making processes improve across the years as they receive these supports and interventions? Such was the focus of this research.

Lawrence Kohlberg posited the moral development scale (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995), and James Rest subsequently developed the Defining Issues Tests ("DIT" and "DIT-2") to measure individual moral development (Rest & Narvaez, 1998). How do principals, assistant principals, and master's students in educational leadership fare against these standards and measurements?

Purpose of the Study

The purpose of this study was to examine and compare the moral reasoning and decision-making of school principals, assistant principals, and current master's degree students in educational leadership as measured by the second Defining Issues Test ("DIT-2"). In addition, the moral reasoning and decision-making of principals was compared across years of experience as measured by the DIT-2.

Significance of the Study

Strike and Temasky insisted upon examinations of principals' reasoning and decision-making given that principals routinely make decisions on behalf of children in place of those children's parents (Vitton & Wasonga, 2009). Heretofore, research had not examined the progression or regression of moral reasoning and decision-making of school leaders across levels of advancement along the principalship track and across years of experience in the principalship. This study set out to do so, as the moral judgment of school leaders stands as a legitimate subject of critical inquiry (Vitton & Wasonga, 2009).

In accordance with the works of Kohlberg and Rest, insight was gained as to the levels of moral reasoning and decision-making of principals, assistant principals, and master's students in educational leadership. The level at which school leaders operate in moral reasoning and decision-making has become known in this study. In addition, whether levels of moral reasoning and decision-making increase, decrease, or remain constant across the years of principals' experience has also become known in this study by way of the Kohlberg scale and the Rest DIT-2.

Implications of such levels of moral reasoning and decision-making have also been explored. For instance, this study's findings shall impact the educational industry itself. With school principals being educated, prepared, screened, selected, and trained according to carefully crafted programs and certification benchmarks, this research sheds light on whether principals' moral reasoning and decision-making trend positively with the chronology of professional advancement up to and

including the principalship. Further, this study similarly determines whether years of experience as a principal actually enhance, reduce, or have no effect upon the moral reasoning and decision-making of principals.

Definition of Terms

Decision-Making: The ability to define issues and resolve dilemmas as measured by and reflected in various scores on the DIT-2 (Rest, Narvaez, Bebeau, & Thoma, 1999).

Defining Issues Test (DIT and DIT-2): The moral reasoning and decision-making instruments developed by James Rest and administered to respondents in this study (Rest, Narvaez, Bebeau, & Thoma, 1999).

Florida Public-School Principals: All principals of publicly funded elementary, middle, high, and multi-level schools in Florida, including regular, charter, and alternative schools, but not including virtual schools.

Maintaining-Norms Schema/Scores: the proportion by which the respondent employed reasoning geared toward maintaining norms (a mid-level reasoning, along the lines of Kohlberg's stage four) on the DIT-2 (Bebeau & Thoma, 2003).

Moral Development Scale: Lawrence Kohlberg's theoretical scale by which the moral development of individuals is gauged (Baxter & Boblin, 2007).

Moral Reasoning: The Kohlbergian stage at which DIT-2 scores place a respondent (Swanson, 1995).

N-2 Scores: a composite tally measuring the proportion by which the respondent employed the highest level of Postconventional reasoning and avoided the lowest level of Personal-Interest reasoning on the DIT-2 (Bebeau & Thoma, 2003).

Personal-Interest Scores: the proportion by which the respondent employed Personal-Interest reasoning (the lowest level of reasoning along the lines of Kohlberg's stages two and three) on the DIT-2 (Bebeau & Thoma, 2003).

Postconventional (P-Score) Scores: the proportion by which the respondent employed Postconventional reasoning (the highest level of reasoning along the lines of Kohlberg's stages five and six) on the DIT-2 (Bebeau & Thoma, 2003).

Delimitations

The sample for this research was delimited to:

1. Principals of non-virtual, regular-education, public K-12 schools in Florida (including those in regular and charter schools, but excluding those in adult-education, alternative-education, special-education, and vocational/technical schools) as reported by the Florida Department of Education (2013).
2. Assistant principals of non-virtual, regular-education, public K-12 schools in Florida (including those in regular and charter schools, but excluding those in adult-education, alternative-education, special-education, and vocational/technical schools) as reported by the Florida Department of Education (2013).

3. Master's degree students enrolled in educational leadership programs at one large, public university in Florida.

Limitations

This study contains the following limitations, assumptions, and expectations:

1. Voluntary, non-random, and sparse participation in this study featuring only a 3% response rate limits the generalizability of the results, and may overlook systemic differences between the populations and those sampled.

2. A convenience sample of master's students enrolled in educational leadership programs was taken solely from a large, public university in Florida to represent master's students in educational leadership. However, this sample may not necessarily represent future principals across Florida or any region thereof.

Theoretical Framework

Lawrence Kohlberg's theory of moral development and his moral development scale (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995), and James Rest's Defining Issues Tests of moral leadership (Rest & Narvaez, 1998) provided the theoretical framework upon which this study's questions were asked and answered. Despite divergence on some outside theoretical matters, both Kohlberg and Rest accept moral advancement as developmental and they agree on the Kohlberg stages delineated below (Bailey, 2011).

Kohlberg assumes a relationship between cognitive development and the wherewithal to reason morally (Cummings, Dyas, Maddux, & Kochman, 2001). Also key to the Kohlberg's theory are the *reasons given why* individuals see certain actions as morally right and the *identification of moral principals being used* in moral reasoning (Elm & Weber, 1994).

Kohlberg sought to understand the moral development of individuals from childhood to adulthood, and his observations led to the development of his scale (Elm & Weber, 1994). Kohlberg's moral development scale posits three levels and six stages (i.e., two stages per level) of moral standing (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995), with each level and stage capturing different moral rationales (Elm & Weber, 1994). As set out in Kohlberg (1981), Kohlberg (1984), and Wren (1995), level 1, the pre-conventional level generally associated with children, contains the motivations of stage 1 (fear of punishment) and stage 2 (opportunism); level 2, the conventional level generally associated with most adults, contains the reasoning of stage 3 (approval-seeking) and stage 4 (dutiful); and level 3, the post-conventional level associated with a few highly developed adults, contains the capacity of stage 5 (socially contractual) and stage 6 (principled).

Kohlberg's moral development stages and overall theory have received substantial research-based support for their cross-cultural universality and their application to both genders (Elm & Weber, 1994). Additionally, Kohlberg's cognitive-development theory of ethical judgment has emerged as the premier model in ethics-related studies for the past half century (Bailey, 2011).

In light of increasing pressures and complexities being brought to bear against principals of public schools, this study applied Kohlberg's theories in order to examine whether and how well school leaders were weathering their principalships in now measurable terms of moral reasoning and decision-making.

Kohlberg, a Harvard psychologist, expanded Piaget's theory and proposed a cognitive-developmental theory of moral reasoning, which suggested the universality of moral principles (Baxter & Boblin, 2007). Kohlberg's theory soon revolutionized the study of morality, and his moral stage theory has been generally acknowledged as dominant in the field ever since (Arnold, 2000).

Broadly, Kohlberg's theory of moral development describes the principles of justice and its development over time as individuals interact with their environment (Baxter & Boblin, 2007). And in crafting the highest of moral-reasoning stages, Kohlberg employed the philosophy of John Rawls set out in *A Theory of Justice* in 1971, and ingeniously incorporated Rawl's moral philosophy into a Piagetian psychological theory of Six Stages of moral development (Rest, Narvaez, Bebeau, & Thoma, 1999). Quite distinctly, Kohlberg's view of moral maturity was to be determined by the reasons an individual gives for why something is right or wrong (Baxter & Boblin, 2007). Ultimately, Kohlberg's theory posits moral development as proceeding through a stage hierarchy in a step-wise, invariant sequence, regardless of cultural variations in moral norms and beliefs (Levine, Kohlberg, & Hower, 1985).

The Essence

Following philosopher Kant, Kohlberg believed morality to be an experiential domain that is differentiated from others by its dependence on a person's capacity to reason (Arnold, 2000). In fact, one of the most distinctive marks of Kohlberg's pioneering work is its demonstration that there is such a thing as moral reasoning with its undeniably cognitive features, and that it plays a fundamental role in framing moral judgments (Pritchard, 1999).

Kohlberg's defense of his approach was twofold: first, on both philosophical and psychological grounds, higher stages lead to more adequate solutions to moral problems because they better satisfy the formal criteria of justice; and second, knowledge itself motivates a person to act in accordance with his or her judgment where perceived injustice is dis-equilibrating and action toward justice equilibrating (Arnold, 2000). Thus, better moral reasoning more aptly settles the concerns of those seeking solutions.

Stages

Baxter & Boblin (2007) and Swanson (1995) have set forth Kohlberg's levels and stages of moral-reasoning development. The Preconventional Level contains Stage One (a stage of punishment and obedience) and Stage Two (a stage of individual instrument purpose and exchange). In Stage One, "right" is represented by literal obedience to rules and authority, avoidance of punishment, and doing no physical harm. The reasons for doing right are avoidance of punishment and the superior power of authorities. In Stage Two, "right" means following rules when in

someone's immediate interest, acting to meet one's own interests and needs, and letting others do the same. The reason for doing right is to serve one's own needs or interests in a world where one must recognize that other people have interests, too.

The Conventional Level contains Stage Three (a stage of mutual interpersonal expectations, relationships, and conformity) and Stage Four (a stage of social-system and conscience maintenance). In Stage Three, "right" is playing a good (nice) role, being concerned about others and their feelings, keeping loyalty and trust with partners, and being motivated to follow rules and expectations. In Stage Four, "right" is doing one's duty in society, upholding the social order, and maintaining the welfare of society or the group.

The Postconventional Level contains Stage Five (a stage of prior rights and social contract or utility) and Stage Six (a stage of universal ethical principles). In Stage Five, "right" is upholding the basic rights, values, and legal contracts of a society, even when they conflict with the concrete rules and laws of the group. And in Stage Six, those belonging assume guidance by universal ethical principles that all humanity should follow.

Across these stages and levels, individuals can neither leapfrog forward (i.e., skip any stages or levels) nor can they move backward in their reasoning after reaching more advanced stages (Baxter & Boblin, 2007). Further, individuals cannot fake their way forward in the Kohlberg development scale (Mason & Mudrack, 1997).

Intelligence and Education

The superior intellectual ability of gifted students seems to affect moral and ethical sensitivity from an early stage of development, and higher intelligence and cognitive abilities relate positively to advanced moral reasoning skills (Lee & Olszewski-Kubilius, 2006). For example, Lee & Olszewski-Kubilius (2006) found that highly gifted elementary school children performed at the Postconventional stage in moral reasoning, a level that involves concerns about human rights and disenfranchisement and one that is generally, according to Kohlberg, reached by only 10% of adults.

Age and education lead to significant differences in moral reasoning (Windsor & Cappel, 1999). This continues particularly noticeably in the collegiate years. The impact of higher education on student's moral reasoning is well documented with significant gains in both principled moral reasoning and overall stage growth being related to age and educational level (Bruess & Pearson, 2002). And, in a major review of 2600 articles, Pascarella and Terenzini noted that there exists impressive evidence of moral development in college years, both in terms of the sheer numbers of studies conducted and in the diversity of the samples tested (King & Mayhew, 2002).

Role of Experiences

The experiences of individuals have great impact on moral reasoning as well. Kohlberg even contemplated individual's inability to develop morality without challenging their own reasoning, particularly by the thinking of those who have

achieved a higher level of moral reasoning. Without such challenging interactions from others, individuals could not ever encounter disequilibrium and would not ever move to the next stage of reasoning (Baxter & Boblin, 2007). L.C. Jensen even more declaratively posited that growth in moral reasoning results from exposure to levels of moral reasoning that are higher than one's own (Windsor & Cappel, 1999).

Criticism

Rest, Narvaez, Bebeau, and Thoma (1999) concede that many challenges have arisen against Kohlberg's approach: some have called it sexist (Gilligan); some say it confuses moral domain with the social-conventional domain (Turiel); some claim it to be culturally biased (Shweder, Vine); some claim it to be a political ideology masquerading as cognitive development (Emler); some see it as philosophically naïve (Locke), and others dismiss it as out of touch with everyday, experiential morality. Perhaps the most scathing criticism of Kohlberg was from Straughn, who framed the issues as: "How to Reach Stage 6 and Remain a Bastard" (Arnold, 2000).

Despite overwhelming interest in Kohlberg's theory, it has endured its criticisms, such as being biased against women (Bruess & Pearson, 2002). Of course, the more specific and offending these models of moral development seem, the more controversial they become (Rossouw & Vuuren, 2003). And while Kohlberg tenaciously defended his approach, he also heard his critics and revised and reformulated his theory throughout his career (Arnold, 2000).

Implications

For educational leaders, implications of the Kohlberg development scale abound. Most prominently, how accommodative will schools and districts be toward those individuals capable of more complex moral reasoning? Mason & Mudrack (1997) claim that schools and districts would not be too friendly to those on the higher end of the scale given traditional notions of organizational loyalty and commitment defined by placement of the organization's welfare as first and foremost. A study of Canadian business students showed the potential antagonism (intended or not) between organizations and morally complex reasoners, and gave credence to this dynamic as pressuring high degrees of turnover (Mason & Mudrack, 1997).

Conclusion

Ethics has surfaced in virtually all professional areas, including accounting, computer science, education, engineering, journalism, law, management, medicine, psychology, scientific research, and social work (Pritchard, 1999). For educational leaders, the issues of ethics and moral reasoning have also now come to the fore.

Research Questions and Hypotheses

The following research questions and hypotheses guided this study:

1. At what levels of moral reasoning and decision-making are principals, assistant principals, and master's students in educational leadership programs currently operating as measured by the second Defining Issues Test ("DIT-2")?

H₀1: There exists no null hypothesis for this research question of descriptive statistics.

2. Is there a difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2")?

H₀2: There is no difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2").

3. Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2")?

H₀3: There is no difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2").

Methodology

The purpose of this study was to examine and compare the moral reasoning and decision-making of school principals, assistant principals, and current master's

degree students in educational leadership. In addition, principals were compared with each other across years of experience.

This study sought out to sample as many participants as possible within its design. With regard to school principals, the entire population of public, regular-education, non-virtual K-12 school principals in Florida (Florida Department of Education, 2013) were invited to participate in this research. These principals were also asked to forward this study's invitations to participate to their assistant principals, thereby providing a referred sample of assistant principals for this research. With regard to master's students in educational leadership, a convenience sample of that population was drawn from one large, public University in Florida.

The first research question was answered using descriptive statistical analyses of participants' DIT-2 scores (including various sub-scores). This showed the levels of moral reasoning and decision-making at which principals, assistant principals, and master's students in educational leadership were currently operating.

The second research question was answered using a three-celled, one-way ANOVA and independent-samples t-tests, which compared the DIT-2 scores (including various sub-scores) for participants across the three groups (i.e., principals, assistant principals, and master's students in educational leadership). The dependent variable was DIT-2 scores and the independent variable was the leadership level (i.e., principal, assistant principal, or master's student). Statistical significance was set at an alpha level of .05. A power analysis based on reported

effect sizes (Rest, Narvaez, Bebeau, & Thoma, 1999) required that a sample of at least 34 participants per cell be drawn to run this three-way ANOVA with an alpha level of .05 and a moderate effect size presumption of 0.4 (Faul, Erdfelder, Lang, & Buchner, 2009). This analysis, and a Tukey's post-test, answered the second research question as to whether there was a difference between principals, assistant principals, and master's level students in educational leadership in their moral reasoning and decision-making.

The third research question was answered using a four-celled, one-way ANOVA comparing DIT-2 scores (including various sub-scores) for principal participants across years of experience. In business, moral reasoning and decision-making develop across broadly defined stages in a life-span process (MacLagan, 1992). Therefore, groups of principals were compared across each of four levels of principal experience (i.e., zero to two years of experience, three to five years of experience, six to eight years of experience, and nine or more years of experience) where the dependent variable was DIT-2 scores and the independent variable was level of principal experience. Statistical significance was set at an alpha level of .05. A power analysis based on reported effect sizes (Rest, Narvaez, Bebeau, & Thoma, 1999) required that a sample of at least 28 participants per cell be drawn to run this four-way ANOVA with an alpha level of .05 and a moderate effect size presumption of 0.4 (Faul, Erdfelder, Lang, & Buchner, 2009). This analysis answered research question number three as to whether there was a difference in moral reasoning and decision-making between principals across years of experience.

Population

Generally, Florida's public school K-12 principals and assistant principals, and master's students in educational leadership programs represented the populations for the first and second research questions of this study. These same principals with zero to two years of experience, with three to five years of experience, with six to eight years of experience, and with at least nine years of experience represented the populations compared in the third research question based on Maclagan's (1992) broad stages of moral development observed in professional work.

Specifically, Florida's public, non-virtual, regular-education, K-12 school (charter and non-charter) principals with reported online contact information represented the principal population for this study as disseminated by the Florida Department of Education (2013). This population specifically excluded principals of schools of adult education, alternative education, special education, and vocational and/or technical education. A sample of assistant principals was drawn through referrals made by surveyed principals to represent the population of assistant principals. And, a convenience sample of master's students in educational leadership programs were drawn from a large, public university in Florida to represent the population of master's students in educational leadership.

Organization of the Dissertation

This dissertation has been presented across five distinct chapters. Chapter One, the introduction, sets out the background of the study, the statement of the problem, the purpose of the study, the significance of the study, the definition of terms, delimitations, limitations, the theoretical framework, research questions and hypotheses, methodology, population, and the organization of the dissertation. Chapter Two provides a review of literature. Primarily, this chapter surveys research concerning principals' environments and responsibilities, and examines Rest's Defining Issues Test. Chapter Three describes the methodology employed in the study, including an introduction, framework, statement of the problem, purpose of the study, population, research questions and hypotheses, procedures, instrumentation, analysis of data, and a summary. Chapter Four shares and analyzes the results of the study. These results are disseminated across the chapter's sections including introduction, population, analysis of research questions, additional analyses, and a summary. The chapter sets forth the data upon which the three research questions were answered. Chapter Five offers analysis and discussion of the findings set forth in the following sections: introduction, summary of the study, discussion, implications for practice, recommendations for further research, and conclusions.

CHAPTER 2: REVIEW OF LITERATURE

The role of educational leaders and the environments in which they operate remain critical areas of scholarly inquiry (Armstrong, 2010). For such investigations, Lawrence Kohlberg's moral-development theory has long been recognized as offering the major cognitive-structural perspective on moral development (Levine, Kohlberg, & Hower, 1985; Arnold, 2000). In addition to researching Kohlberg's theory (set out already in this study's theoretical framework in chapter one), literary inquiries were made into the texture of the K-12 principalship and into James Rest's Defining Issues Test. With Rest's Defining Issues Test still seeing usage in over 500 research projects annually (Bailey, 2011), the review of literature provided ample background and support of the great importance of this study and the stakes involved in it.

The Principalship

The world in which educational leaders operate has been changing (Starratt, 2005). School accountability mechanisms began in the 1980s in response to 1983's *A Nation at Risk*, a report on America's mediocre schools, and continued in 2002 with No Child Left Behind ("NCLB") mandating performance accountability systems for shares of federal funding. These developments have effectively left the principal as the person held publicly responsible for a school's success or failure (West, Peck, & Reitzug, 2010). In light of this, Hall, Berg, and Barnett concluded that the

principal's job has become increasingly complex, and beset by intense and unreasonable pressures to solve a broad menu of educational, social, and personal problems, raises the question as to how long principals can survive in such a pressure cooker (Shoho & Barnett, 2010).

Any application of power or influence by school leaders suggests a host of ethical issues (Reitzug, 2008). Thus, perhaps separating moral leadership from leadership no longer makes sense. In fact, the normative dimensions of leadership have become a fast-growing area of leadership study, and those opining on moral leadership argue that values remain a central part of all leadership and administrative practice. (Leithwood & Duke, 1998).

In this era of educational accountability, the notion of "success" has been improperly narrowed to the point where test scores, grades, attendance rates, and other markers of productivity have become proxies for success and school achievement (Scribner, Crow, Lopez, & Murtadha, 2011). This environment for leaders bodes poorly for education, as a recently conducted empirical qualitative study found that as a growing number of principals resign and/or retire, fewer qualified people are applying to fill the void (Shoho & Barnett, 2010).

Pressures and Challenges

According to Scott and Wong, the pressures of the principalship lead directly to moral dilemmas requiring moral judgments (Vitton & Wasonga, 2009). West, Peck, & Reitzug (2010) wonder just how much pressure principals will be expected to endure in the name of systematic reform. A study involving 17 urban principals

found several stressors that have only accentuated pressurizing demands: extensive responsibilities, limited control, lack of personal and professional time, increased school academic performance pressures, technology communication developments, and new urban political power dynamics (West, Peck, & Reitzug, 2010).

With regard to limited control, principals regularly deal with anything from constituent demands to high-intensity events, which generate formidable pressures because even a single episode can place schools and their personnel under significant duress (West, Peck, & Reitzug, 2010). On the lack of personal and professional time, one urban principal confessed to working 70 hours per week with little previous idea how many balls he would have to juggle at any one time (West, Peck, & Reitzug, 2010).

This working environment cannot be long endured as M. Gonzalez found that long-term stress makes workers twice as likely to be depressed and that all 10 workplace stressors obtain in the lives of principals: lack of control over daily tasks, office politics, lack of communication, inconsistent or unreliable performance reviews, lack of appreciation (whether perceived or real), work-life conflicts, lack of company leadership, unclear job expectations, random interruptions, and unreasonable workloads (West, Peck, & Reitzug, 2010).

Fresh principals in their first three years are reporting four types of challenges: conflicts and tensions with staff members; being compared with their predecessors; overwhelming workload demands, particularly with paperwork and

time management; and mounting pressure from a variety of stakeholders to increase student performance (Shoho & Barnett, 2010). One new principal confessed the new position represented a huge leap, and could not even quantify the vast difference between the assistant principalship and the principalship (Shoho & Barnett, 2010).

Up against it, several principals shared the relentless challenges against high demands and lack of support from superiors, long work hours, lack of sleep, pressure from parents, overcrowding, building management demands, inadequate budgets, unscheduled meetings in central office, media pressures, teacher assessments, meaningless tasks from central office, no time for professional development, demanded student test achievement improvement, fear of lawsuits, fear of losing the job, little time to spend with students, accountability for things beyond control, personal health issues, finding time to be in classroom, responding to ongoing volume of email, the constant flow of forms and reports, finding time to be visionary leader, daily unpredictability, and micromanaging calls from the school board (West, Peck, & Reitzug, 2010). An uncanny evolution in the responsibilities of today's principals has exacted complex and demanding responsibilities (Lynch, 2012).

Against the backdrop of these challenges and responsibilities, many principals have complained about the needless waste of time and resources. One principal confided his frustrations with the bureaucracy and its compliance culture wherein he found reporting structures confusing, authorities blurred, and even a

confusion over which forms were to be printed on which color of paper (Theoharis, 2008). For veteran teachers and administrators, there is long-running resignation to such processes as burdensome bureaucratic tasks and colossal wastes of everyone's time (Starratt, 2005). Principal educators have been long weary from endless accountability measures, wasted resources, and the inevitable paperwork that cuts into time for instructional leadership (Boris-Schacter, 2008). In fact, principals now cite paperwork as the number one obstacle to instructional leadership, including paperwork generated from teacher evaluations and paperwork from mandated standardized testing in an age of hyper-accountability, which not only challenges the sustainability of current principals, but deters aspirants (Boris-Schacter, 2008).

Asked about their work hours, principals offered uneasy storylines: "I do a lot of paperwork at home"; "I'm still working 6 days a week, 12-hour days"; "And then I spend all afternoon Sunday here"; "I'm up at 3:30 every morning"; "It's easy for me to spend 20 hours a day up here and not think anything about it"; "This job can consume you! It can absolutely consume you" (West, Peck, & Reitzug, 2010).

Surprisingly, technology has become a negative aspect of the principalship. With onset of email, the school leader's job has moved closer to becoming a 24-hour-per-day, 7-days-per-week position, where constant email access can prove hazardous (West, Peck, & Reitzug, 2010). Principals begin to loathe conferences because 200 emails are piling up per day (West, Peck, & Reitzug, 2010).

This pressurized environment proves costly for principals. Serious psychological and other health-related effects (e.g., burnout syndrome) can be seen in school leaders, making one wonder just how much stress the human psyche can tolerate without it negatively affecting job performance (West, Peck, & Reitzug, 2010).

Given these debilitated leaders, R.D. Ramsey points out that most school administrators are stuck and usually limited to the functionality of mere managers and not of the transformational leadership perhaps once contemplated (Msila, 2012). In fact, the real meta-narrative may actually reduce school leaders to being technical bureaucrats and lockstep managers of the status quo (Theoharis, 2008).

Despite these demands, climates, and drawbacks, in the 21st-century principalship, new principals were largely satisfied with their jobs, finding satisfaction in student-oriented issues (watching students grow, develop, and achieve) while enduring adult-oriented issues (conflicts with teachers, staff members, and parents)(Shoho & Barnett, 2010). Ironically, despite stress and pressure, many studied principals expressed their love for their positions, for their teachers, for their students, and for the tremendous variety and challenge of their work (West, Peck, & Reitzug, 2010).

Heads of schools have seen a tumultuous change in their profession. In 1991, independent-school heads viewed their top responsibility as teaching, but just ten years later teaching had fallen to number 14 on a list of 14 key responsibilities, while “providing vision and moral leadership” moved to number one (Orem, 2002).

Thus, the demands upon principals continue to mount, and this study becomes paramount.

Climate and Responsibility

Sergiovanni (1994) advised that “things” have been done in schools in particular ways because they are supposed to be done that way; and that changing this intransigence remains most difficult. Of course, this observation conflicts with principals’ responsibilities to effectuate and fashion better school climates (Owens & Valesky, 2011).

21st century school principals are confronted by moral and ethical dilemmas, and arguably, morality and values should be at the core of education in general, as T. Sobol contends that troubled and dysfunctional schools arise where justice and equity are absent and ethical thought and action are needed (Msila, 2012). School climates are such that some students present themselves as dead—dead to thought, dead to feeling, and dead to relationships (Palmer, 1998). In this, L. Wharton points out that immoral behavior persists in organizations for two reasons: 1) a failure to see that the essence of leadership is moral behavior; and 2) a misunderstanding of how moral actions arise and are inculcated in the workplace (Msila, 2012). As principals are charged with building a strong school climate, moral leadership more and more comes to the fore in the leadership research.

Daily, school administrators must make decisions on the fly, employing whatever evidence they have on hand (Pauken, 2012). Beyond that, conflicts abound. And while educational leaders often focus on curriculum, policy making,

and other bureaucratic functions, they exclude the truly vital function of education—assisting others to become the very best people they can be (Quick & Normone, 2004). And while the educational landscape has become dominated by political concerns and bureaucratic efficiency, the system-world is overwhelming the life-world of schools (Quick & Normone, 2004).

Leithwood and Riehl summarized the research-based evidence surrounding successful school leadership, enumerating the following claims:

1. Leadership affects learning second only to good curriculum and teaching;
2. There are many potential sources of leadership at a school, including but not limited to teachers, parents, students, and administrators;
3. Leaders set direction, develop people, and develop the school organization, while inspiring and communicating a vision, modeling support for others, and promoting school cultures and environments focused on teaching and learning;
4. Leaders respond to policy demands and foster processes and actions that can be successful in an accountability-driven environment;
5. Leaders respond to diversity challenges and foster strong communities in schools that respect and build on the cultural capital of all students to create powerful forms of teaching and learning (Scribner, Crow, Lopez, & Murtadha, 2011).

Thus, the principal is the key player in a school, as the climate of the school will come from the values that the principal advocates and makes actionable (Quick & Normone, 2004). To live up to such a task, principals must know themselves and their values, and must translate that knowledge into action, demonstrating integrity

and practicing authenticity (Quick & Normone, 2004). Ultimately, in a task that cannot be overstated and one at the very foundation for schools, principals develop a community where adults exemplify moral values and model behavior (Quick & Normone, 2004).

Becoming an ethical leader begins with claiming one's core values, finding one's personal voice, developing a vision, and consciously aligning one's attitudes and beliefs with one's actions and behaviors (Dufresne & McKenzie, 2009). Accordingly, leaders must focus their attention on activities that enhance the sense of community within the school, as bureaucratic initiatives, policies, and procedures will never be enough (Quick & Normone, 2004).

Fullan (2002) insisted that characterizing instructional leadership as the principal's central role does not go far enough, as such represents a concept too narrow to carry the weight of the kinds of reforms that will create the schools needed for the future. Schools and students and teachers depend upon principals surviving the modern-day principalship. Case in point, the principals' support of first-year teachers is a key factor in those teachers' overall perception of support at the school level, especially as these teachers have high expectations of their principals and see their principals as the central figure in their burgeoning careers (Anhorn, 2008).

Principal Education

Given the pressures of the principalship, educational leadership curricula and programs have begun to come under scrutiny. One principal reported: "My

administrator preparation left me to believe that the field of educational leadership was disconnected from issues of equity and justice and that it was only the work and interest of a few isolated people” (Theoharis, 2008). In light of moral reasoning and decision-making, this kind of preparation lacks according to some in the field.

Pauken (2012) shares that he and his master’s-level law students at Bowling Green State University begin with two important and exploratory items—an individually written code of ethics and the *Tinker v. Des Moines Independent Community School District* case from 1969 where students challenged school rules that had forbidden the wearing of black armbands in protest of the Vietnam War. These preliminary assignments firmly directed educational leadership students toward contemplation and decision-making in terms of ethics and morality. Pauken made the personal code of ethics assignment very open-ended for the students, offering a few prompts (e.g., for students to think about who they are and how they make decisions; to think about their ideas regarding morals and ethics and how they have come to the set of values with which they carried their personal lives; to prepare to share aspects of these codes in class during the first week; and to prepare to revisit and perhaps revise their codes throughout the course; and to be creative) (Pauken, 2012).

Pauken’s emphasis on ethics and morality in educational leadership appears to be rare.

Compliance

Today’s principals are charged with *transforming* their schools while being saddled within an accountability system presenting the grand obstacles of a

transactional world (Ibarra, Lindsey, & Daly, 2010). Most of this accountability system over the past decade-plus has served the dictates of NCLB, which has placed the most stress of compliance in the daily lives of principals (O'Shea, 2006).

To emerge from this grip of compliance, a shift in thinking toward moral and professional responsibility remains key for principals (Ibarra, Lindsey, & Daly, 2010). Hence, this study of principals' moral reasoning and decision-making takes on greater weight and is completely appropriate (Viton & Wasonga, 2009).

Armstrong (2010) found, consistent with rites of passage, an intensification of socializing pressures upon newcomers crossing boundaries into educational leadership. In her 1992 book on the assistant principalship, author C. Marshall found that those who raised questions and challenged the system were more likely to be discounted as misfits than as potential leaders, and were less likely to be viewed as trustworthy or loyal (Armstrong, 2010). Marshall warned of the groupthink of such a system, and accordingly warned of school cultures that avoid value conflicts (Armstrong, 2010).

Courage

Principals have special obligations that go along with their stewardship (Sergiovanni, 1994). And in stepping forward, the first thing that people fear is unpopularity (Heischman, 2002). Against this, Palmer (2008) aims to help educators to reclaim their soul-deep identities and the courage to act from that place, noting that as long as institutions define identities, educators will be powerless to change those institutions. Along those lines, studies do demonstrate

that people with firm beliefs are more courageous than those who simply act impulsively (Glanz, 2008). Though there is a gutsiness to courage, there must also be knowledge and wisdom because educators must know what they are doing and what risks they are taking (Heischman, 2002). Having a strong set of beliefs often backfires without the courage and humility to share and connect with others (Mirk, 2009).

The journey Palmer (2008) espouses requires courage on the part of educators, and calls them to go deeper within themselves, beyond where data points and theories can take them, and past the quick fixes that cheerleading might evoke. Hemingway identified courage as “grace under pressure,” while Stevenson echoed Aristotle in claiming courage to be the footstool of all virtues and the one upon which the rest stand (Heischman, 2002). In the challenge of the principalship, courage emerges as indispensable.

Moral Leadership

To steer through the many distractions that assail principals from all sides, the need for moral leadership is incalculable (Shields , 2004). Principals seeking to effect cultural change must especially have a moral purpose, including a social responsibility to others and to the environment (Fullan, 2002). C. Hodgkinson noted that values constitute the essential problem of leadership because if there were no value conflicts then there would be no need for leadership (Leithwood & Duke, 1998). But this moral leadership cannot be phony. As Sergiovanni (2005)

implored, the heartbeats of leadership and of schools are strengthened when word and deed remain one, and this happens when leadership and virtue work together.

When leaders fail to honor the deepest questions in their lives, educational campuses remain mired in technical triviality, cultural banality, and worse, giving rise to a grief that may mask itself as boredom, sullenness, or anger, but that is, in reality, a cry for meaning (Palmer, 1998). Accordingly, Mirk (2009) offers his primary recommendation that educators lead from core, deeply held values, which become an operating platform that compels constant internal alignment and drives outward action. So how should school leaders lead in tough times? They should ground themselves in the bedrock moral principles of social justice and academic excellence for all students and pay careful attention to relationships, understanding, and dialogue (Shields , 2004).

Surveying his master's students in educational leadership, Pauken (2012) found commonalities across the following most commonly professed virtues: honesty, respect, care, compassion, integrity, justice, fairness, loyalty, and responsibility. Meanwhile, the Council of Chief State School Officers ("CCSSO") fifth standard for school leaders states, "A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner" (Holloway, 2006). Across these surveys and standards, the pre-requisites for moral reasoning and decision-making abound.

Digging more deeply, the components of CCSSO's fifth standard, grounded upon a firm foundation of moral beliefs, calls for the demonstration of a personal

and professional code of ethics, an understanding of one's proper impact on the school and community, a respect for the rights and dignity of all, and an inspiration of integrity and ethical behavior in others (Holloway, 2006). Similarly, Sergiovanni (2005) called for the four leadership virtues of hope, trust, piety, and civility. Certain virtues are particularly important and relevant to the work of principals, including exhibitions of courage, maintenance of impartiality, demonstrations of empathy, ethical judgments, and an abiding humility (Glanz, 2008).

For educational leaders, Starratt (2005) set out three morally reasoned requirements: 1) consider the humanly ethical thing to do as human beings must observe considerable delicacy and diplomacy in dealing with one another; 2) respect the public order and the rights of fellow citizens as school leaders represent their state authorities along the lines that Olympians represent their countries; and 3) employ a *transformational* ethic beyond a mere *transactional* ethic, calling students and teachers toward an ideal beyond self-interest and toward something heroic, and bringing the domains of ethical responsibility to new heights.

Undoubtedly, leadership within any endeavor stands as a moral task, but is even more so in the case of educational leaders (Quick & Normone, 2004). The work of Thomas Sergiovanni and Roland Barth helped educators think of ways to highlight the moral dimensions of leadership for education in a democracy and to emphasize how such moral leadership serves to bring about renewal within the school (Smith, 1999). And now, these principles of moral leadership have become more and more urgent. In fact, in order to retain their most promising teachers and

to combat teacher flight, Jacob Easley insists that principals must have good moral leadership that improves the human condition (Flores, 2012). Going further, Berreth and Berman maintain that adults must be moral role models to youth, must demonstrate that it is possible to live one's values, and must advocate for a more just and responsible society through role-modeling (Quick & Normone, 2004).

Public education professionals have an ethical obligation to help transform the toxic settings in which their work is done (Palmer, 2008). To this end, there stand five domains of responsibility central to educational leadership: responsibility as a human being; responsibility as a citizen and public servant; responsibility as an educator; responsibility as an educational administrator; and responsibility as an educational leader (Starratt, 2005).

Implications

Given the pressures and stakes in the principalship, a multitude of implications flow forth. Several of these have found voices in the literature. One principal recounted being tormented by being unable to change things quickly enough, seeing the pain inflicted on the students, being the one ultimately responsible for that pain, and wondering, "Who am I?" and, "What happened to me?" (Theoharis, 2008). With some regularity, the educational institutions violate the deepest needs of the human soul by being so fearful of things spiritual that they fail to address real issues in real lives (Palmer, 1998).

The school system alienates and dulls its inhabitants, graduating young people who have had no mentoring in the questions that both enliven and vex the human

spirit (Palmer, 1998). At the same time, for educational leaders willing to lead, the resistance at every turn and the resulting toll and discouragement render the principalship a position moving into the direction of “impossibility” (Theoharis, 2008).

Most new principals do not envision themselves remaining in the principalship beyond five to ten years, and legacy principals who would stay in the position or at the same school for long periods are becoming a thing of the past (Shoho & Barnett, 2010). The anticipated reasons for new principals’ exodus include a disenchantment with the job, sensing the need for a change, and wanting to move on to other challenges (Shoho & Barnett, 2010). Perhaps surprisingly, these new educational leaders not only did not for long want their own jobs, but they did not want to become superintendents either (Shoho & Barnett, 2010).

These findings reflect major concerns for school systems as high turnover at the principal-level has become evident. In Texas, 53% of principals leave their current positions within 3 years, and 71% leave within 5 years, with those principals leading high schools faring even worse than these numbers would suggest (Shoho & Barnett, 2010). H.F. Ladd found that before the implementation of NCLB, Dallas’ yearly principal turnover rate was 4.7%; but after NCLB, the rate has risen to 28.5% (West, Peck, & Reitzug, 2010). NCLB has placed such undue stress on principals, that many leaders have been forced by the accountability system to employ “drill and test” methods rather than actually effective programming (Viton

& Wasonga, 2009). Aggravating matters further, research already indicates a shortage of principals in the US (West, Peck, & Reitzug, 2010).

Turnover has dramatic effects on the stability and outcomes of schools, including a domino effect where many teachers leave when principalships change, resulting in disastrous blows to morale, stability, and student learning (Shoho & Barnett, 2010). Bottom line, given the attendant stress of the position, increasing numbers of principals throughout the U.S. are leaving the principalship (West, Peck, & Reitzug, 2010).

Few professionals would confess that they leave their personal ethics at home when they go to work (Pauken, 2012). So what are these ethics, and can they give schools better-reasoned leaders? Msila (2012) openly wonders if moral leadership might be an overlooked panacea for ineffective schools, given the desperate need of truthful and visionary leaders. The leadership-succession crisis underscores the importance of determining what happens to principals as they assume leadership roles for the first time (Shoho & Barnett, 2010). This study aims to investigate this very question.

Conclusion

American education has been coming full circle as character building, moral education, and citizenship regain prominence as viable subject areas (Swanson, 1995). And yet, seventy-five percent of teacher education students confess the propensity to engage in academic misconduct, which is about the same rate of cheating behaviors that have been found with college students in other majors

(Cummings, Maddux, Harlow, & Dyas, 2002). Amid this conflicting climate, Pauken (2012) asks whether leaders are prepared to defend the decisions that they have made, and recommends that principals start with their strongest convictions of what is right and wrong, and then move toward generating principles for behavior that can be used for decision-making going forward. Perhaps the frustration of the principalship will eventually boil over. Palmer (2008) insists that every movement begins with isolated individuals discovering their most fundamental commitments and convictions, and deciding to live “divided no more”.

Rest and the Defining Issues Test

James Rest, the son of a minister in the Deep South at the height of the Civil Rights movement, witnessing the tension between his family’s progressive views and the congregation’s more conservative views, disappointedly attempted to resolve this quandary through philosophy, theology, and clinical psychology (Thoma, 2002). Rest acknowledged and admired the work of Lawrence Kohlberg. In fact, Rest, Narvaez, Bebeau, and Thoma (1999) joined Kohlberg in emphasizing cognition, highlighting the personal construction of basic epistemological categories (i.e., rights, duty, justice, social order, reciprocity), portraying change over time in terms of development, and characterizing the developmental change of adolescents and adults in terms of a shift from conventional to postconventional moral thinking. Rest and his team called their own efforts to be the neo-Kohlberg approach.

Rest's group characterized the developmentally advanced structures of moral judgment in more general terms (looser, less daring, more tepid) than Kohlberg did, and their standards for "Postconventional" would include nearly all modern philosophers, conservative and liberal, left-wing and right-wing (Rest, Narvaez, Bebeau, & Thoma, 1999).

The major difference between Kohlberg and Rest arose in their approaches toward assessments of moral reasoning. Kohlberg's labor-intensive and subjective Moral Judgment Interview (MJI) and coding system was ultimately supplanted by Rest's newer instrument (Walker, 2002). In 1974, Rest's Defining Issues Test ("DIT") was published in *Developmental Psychology*, and soon became the most widely used measure of moral judgment development (Thoma, 2002). A quarter century later, the Rest team still knew of no other construct like the DIT that accounted as well for measuring moral reasoning and judgment (Rest, Narvaez, Bebeau, & Thoma, 1999). Given the relatively advanced population tested by the DIT, the emphasis of the neo-Kohlbergian approach and the DIT has been explicitly on the conventional to postconventional advancements in moral thinking (Walker, 2002). Accordingly, Rest, Narvaez, Bebeau, and Thoma (1999) confess that the DIT does not track the beginnings of moral judgment development in childhood, as the DIT requires at least a 12-year-old's reading level.

Decision-Making, Generally

Apart from Kohlberg's theory and Rest's instrument, Gordon (1999) provides a necessary background on the general topic of decision-making. According to

Gordon, a decision's goodness is measured by its quality (achieving a desired outcome within set criteria and constraints), its timeliness, its acceptance (where those affected understand, accept, and implement the decision), and its ethical appropriateness.

The rational decision-making process includes: analysis (of elements, resources, and constraints); setting objectives (with a clear problem statement and criteria for judging); searching for alternatives (where brainstorming is encouraged); evaluation of alternatives (where differences of opinion are included); the making of decisions; and the evaluating of decisions (Gordon, 1999). In this, for better decision-making, Gordon encourages brainstorming, and creative problem solving.

Beyond this, Gordon also outlined four other types of decision-making, including: Herbert Simon's "bounded rationality" (where the decider scans the environment, designs possible solutions, and chooses among the alternatives); "intuitive decision-making" (where gut feelings and good intuitions from years of experience employ values, morals, beliefs, goals, and plans); "decision-making by objection" (where deciders choose the least objectionable alternative and refine the choices until all objections have been reduced or eliminated); and "garbage-can model" (where problems and solutions are linked from an array of options, and then resolved in tandem). In light of the traditional and general models of decision-making, this discussion now turns to James Rest's Defining Issues Test.

The DIT

Rest's DIT morally grades respondents by setting forth morally challenging scenarios and offering a set of choices. The DIT is geared toward placing respondents on Kohlberg's moral development scale. And, for the past 15 years, about 500 researchers annually have utilized the DIT in their projects (Bailey, 2011). Development of the DIT-2 provided contemporary ethical scenarios and enhanced reliability, efficiency, and validity (Bailey, 2011).

In a sense, the DIT is a "projective test" in that the fragmented nature of the items mentioned in the instrument requires the participant to supply meaning to the items to be rated (Rest, Narvaez, Bebeau, & Thoma, 1999). In this, Rest, Narvaez, Bebeau, and Thoma (1999) claim the DIT to be especially sensitive to the shift from the Maintaining Norms schema to the Postconventional schema.

Upon development of the DIT-2, a new sub-score, N-2, was designed to replace the prominence of the P-score, where N-2 would represent a combination of various elements (Rest, Narvaez, Bebeau, & Thoma, 1999). There were hints in the data that the P-score could be improved and that work led to the N-2, where the degree to which the individual discriminates clearly between lower and higher stage items would be better reflected (Thoma, 2002). Historically, the P-score overlooked much informative data, but the N-2 score now uses two types of data from the DIT (the ranking of Postconventional items and the difference in ratings between the Personal Interest and the Postconventional items), yielding a demonstrably superior score in terms of construct validity and reliability (Walker, 2002).

Schema

Rest and his team acknowledged that in adolescence, individuals typically experience the “discovery of society.” For purposes of the DIT, this societal awakening represents fertile ground for testing. The DIT presumes that people make sense of moral situations in terms of three developmentally ordered schemas—Personal Interests, Maintaining Norms, and Postconventional thinking—where Personal Interests takes place in childhood, and Maintaining Norms and Postconventional schema are typical in adolescence and adulthood (Rest, Narvaez, Bebeau, & Thoma, 1999; Derryberry, Jones, Grieve, & Barger, 2007).

Whereas stages (ala Kohlberg) are defined in terms of cognitive operations, schemas are highly contextual and represent a network of knowledge that is organized around particular life events, existing to help individuals understand new information based on previous experiences (Thoma, 2002). Rest’s schemas approach, upon which the DIT is based, retains many of Kohlberg’s essential insights about moral judgment development, but the definitions are somewhat different in that schemas are not defined in terms of cognitive operations (Walker, 2002). The DIT activates or triggers moral schemas, then allows for assessment of how these schemas represent moral reasoning and judgment (Walker, 2002). Following the classic theorists, schemas (i.e., expectations, hypotheses, concepts, regularities) are understood to be general knowledge structures residing in long-term memory, formed as people notice similarities and recurrences in experiences (Rest, Narvaez, Bebeau, & Thoma, 1999).

Informed by schema theory, the DIT works thus: the reading of moral dilemmas and DIT issue statements activates moral schemas (to the extent that a person has developed them), and as the participant encounters an item that both makes sense and also activates a *preferred* schema, that item is given a high rating and is ranked of high importance, while alternatively, when the participant encounters an item that either does not make sense or seems simplistic and unconvincing (is not activating a preferred schema), the item receives a low rating (Rest, Narvaez, Bebeau, & Thoma, 1999). As Rest, Narvaez, Bebeau, and Thoma (1999) sought to know which schemas participants bring to tasks (already in the person's head or in long-term memory), these schemas are presumably revealed in the structure and responsiveness of people's moral thinking and judgments. With this DIT-based model of moral development (involving shifting distributions of schemas), there are no "pure" types of people, but rather all people are mixes of schemas (Rest, Narvaez, Bebeau, & Thoma, 1999).

Personal Interest schema appeals to the personal stake that individuals have in the consequences of an action (Walker, 2002). And for non-child participants operating from the Personal Interest schema, the DIT recognizes the fusion of Kohlberg stages two and three to form a single factor (the Personal Interest schema), representing more primitive forms of thinking (Rest, Narvaez, Bebeau, & Thoma, 1999).

The Maintaining Norms schema is the first solution that typically occurs to adolescents for problems involving cooperation on a society-wide basis, and it

contains the following elements: a need for norms, a society-wide scope, uniform application, partial reciprocity, and a duty orientation (Rest, Narvaez, Bebeau, & Thoma, 1999). Rest, Narvaez, Bebeau, and Thoma (1999) contend that for those operating under this schema, the maintenance of the established social order defines morality, even though the schema commits the naturalistic fallacy by inferring that what “is” also “ought” to be. In broader terms, the Maintaining Norms schema appeals to generally accepted social norms and hierarchical role structures for governing a society, recognizing the need for norms that have society-wide scope and uniform application (Walker, 2002).

Postconventional schema underwent the most extensive definitional departures from Kohlberg’s description of principled reasoning, in that rather than focusing on a system of justice and fairness, the Postconventional schema describes a set of criteria that define a Postconventional system, which includes: a) the central role of moral criteria in the formulation of, and understanding of laws and norms; b) the appeal that the system must convey some idealized view of how the community ought to be ordered; c) the clear sense that moral ideals are open, subject to critique, and thus sharable with the larger community; and d) the notion that the system must be fully reciprocal, and thereby developed to address the community as a whole with uniform application (Thoma, 2002). In regard to the DIT, Postconventional items are those found highly regarded by relatively mature and sophisticated people (Walker, 2002).

In Postconventional thinking, reciprocal moral obligations are open to debate and to tests of logical consistency while being based on shared ideals (Rest, Narvaez, Bebeau, & Thoma, 1999). This Postconventional schema perhaps diverges the most from Kohlberg (and his stages five and six), and appeals to ideals arising from the experience of the community, ideals which are fully logically coherent in fostering consensus (Walker, 2002). In summary, Rest, Narvaez, Bebeau, and Thoma (1999) propose four elements in the Postconventional schema: primacy of moral criteria (subject to negotiation and renegotiation), appeal to an ideal, sharable ideals, and full reciprocity.

Types

Beyond identifying the schemas at work in DIT-participants' results, the Rest team categorizes respondents according to "type." The types are developmentally ordered from lowest to highest just as are the P-score and the N-2 index, but because the N-2 index does not convey information about the extent of schema mixture (i.e., whether one schema predominates over the others to a great degree or whether the three schemas are rated more equally), the "type" distinction was developed (Rest, Narvaez, Bebeau, & Thoma, 1999).

Rest, Narvaez, Bebeau, and Thoma (1999) explain the types (which are defined as groups of participants who have two characteristics in common): first, each person is grouped according to which schema has the highest average rating (one of three: Postconventional, Maintaining-Norms, or Personal-Interest); second, persons are also grouped according to the extent of schema mix (one of two, either

“consolidated” or “transitional”); third, the double classification (predominance and mix) creates a three-by-two grid, producing six types; fourth, types 1, 4, and 6 are consolidated types, whereas types 2, 3, and 5 are transitional types; fifth, type data was accumulated from a mega-sample consisting of over 40,000 DIT examinations; and sixth, although every type is a mix of three schemas, types 1, 4, and 6 are more peaked than types 2, 3, and 5.

Ultimately, the three novel phenomena from type development include: 1) that the types are developmentally ordered; 2) that consolidation (low mix) facilitates information processing whereas transitional (high mix) hinders information processing; and 3) that the schemas guide different decision-making (Rest, Narvaez, Bebeau, & Thoma, 1999).

Validity and Reliability

Rest, Narvaez, Bebeau, and Thoma (1999) set out seven validity and reliability criteria whereby the DIT proves itself robust: 1) differentiation of various age/education groups (e.g., in studies of large composite samples across thousands of subjects, 30-50% of variance of DIT scores is attributable to level of education in samples ranging from junior high to Ph.D.); 2) longitudinal gains (e.g., a 10-year longitudinal study shows significant gains for men and women from diverse walks of life who did or did not attend college, but a review of those students attending college from freshmen year to senior year (n=755) showed effect sizes of .80 (“large” gains), and revealed the DIT gains to be of the most dramatic longitudinal gains of any variable studied in college students); 3) correlation with cognitive

capacity measures (e.g., $r=.60$ s in correlation studies between DIT scores and moral comprehension, recall, reconstruction of postconventional moral argument); 4) sensitivity to moral education interventions (e.g., a review of 50 intervention studies reports effect size for dilemma discussion interventions to be .41 (“moderate” gains) whereas effect size for comparison groups was only .09 (“small” gains)); 5) links to pro-social behavior and preferred professional decision-making (e.g., one review reports that 32 of 47 measures were statistically significant comparing the DIT and this positive moral decision-making); 6) predicting political choice and attitude (e.g., in multiple regression analyses with measures of cultural ideology, the DIT predicts up to .67 of the variance in opinions about controversial public-policy issues such as abortion, religion in public schools, and rights of the accused); and 7) reliability (e.g., Cronbach’s alpha is in the upper .70s/low .80s, and test-retest reliability is about the same).

There exists fairly decisive support for the construct validity and psychometric properties of the DIT, and for the DIT’s discriminant validity indicating that it is not simply a mere reflection of other variables such as verbal ability or political attitudes (Walker, 2002). Specifically, information in the DIT scores predicts the seven validity criteria above and beyond that accounted for by scores of verbal ability, general intelligence, or political attitude, and the DIT does this equally validly for males and females (as gender accounts for less than 0.5% of variance of the DIT)(Rest, Narvaez, Bebeau, & Thoma, 1999).

Limitations and Critiques

Although many scholars have raised numerous challenges to Kohlberg's model and methodology, Rest and his colleagues believed that the approach was still generally useful and largely valid, while subject to some modification (Walker, 2002). And while the Rest group developed the DIT-2, attention was given to the difficulties that had been noted by reviewers, users and critics, including awkward syntax, and dated dilemmas and word usage (Thoma, 2002).

Unfortunately, as powerful as the DIT may prove itself to be, much information remains un-captured by the instrument. Neither the DIT nor the DIT-2 assesses moral Stage One, and by the time participants have the requisite cognitive and verbal ability to respond to the DIT, the Personal Interest schema is oftentimes no longer in play (Walker, 2002). Also, the DIT only measures *perceptions* about ethical issues, and these perceptions do not necessarily translate to *behaviors* as other factors like motivation and execution mediate (Windsor & Cappel, 1999).

In addition, existent norms that are claimed to be God's Will, that are in principle beyond human comprehension and are not subject to scrutiny, are ipso facto not considered to be Postconventional on the DIT regardless of the specificity of reasoning (Rest, Narvaez, Bebeau, & Thoma, 1999). Accordingly, Pritchard (1999) highlights a concern in DIT scoring: for instance, on the Heinz/Drug dilemma, a response indicating that Heinz ought not steal the drug may appear as Maintaining Norms when in fact the response could reflect a more elevated reasoning (e.g., druggists will not continue in this type of society of thievery;

someone else will be deprived who has just as much right to the drug). Pritchard contests that the “life is more valuable than property” argument is not really in play here, and the DIT respondent being scored as Maintaining Norms may in reality be reasoning at far more principled and Postconventional levels. Pritchard accordingly concludes that some Postconventional thinkers may thereby score more lowly on the DIT than their reasoning level would suggest.

Conclusion

The DIT has been the most common way to measure moral reasoning according to the ethics literature (Windsor & Cappel, 1999). And, intentionally or not, moral development is an outcome of higher education, at least as measured by the DIT, as college students tend to decrease their preference for conventional-level reasoning and increase their preference for Postconventional moral reasoning (King & Mayhew, 2002). Accordingly, academically gifted students are more morally sensitive and advanced in moral reasoning, and possess greater leadership potential than heterogeneous groups of youngsters (Lee & Olszewski-Kubilius, 2006).

King & Mayhew (2002) reference the Rest and Thoma study where longitudinal data were employed to examine moral judgment development and formal education, tracking the course of moral judgment development of participants from the end of high school to six years beyond high school. In this study, some attended college, while others did not. At the third time of testing, a difference was found that the course of development for the 38 college students was different from the 18 participants not in college. For those attending college, DIT

scores continued to increase, but scores were stable for those not in college. King & Mayhew agreed with the balance of the literature that colleges offer excellent contexts to stimulate moral reasoning. However, with a fair amount of overlap among the constructs of the DIT and fluid and crystallized intelligence, intelligence appears to be a necessary but not sufficient condition for development in this moral reasoning (Derryberry, Jones, Grieve, & Barger, 2007).

CHAPTER 3: METHODOLOGY

Introduction

This study sought to answer the research questions related to school principals, assistant principals, and master's students in educational leadership, and their moral reasoning and decision-making. Methods employed to measure such are described in this chapter, which contains the theoretical framework of the study, statement of the problem, purpose of the study, population, research questions and hypotheses, procedures, instrumentation, analysis of data, and a summary.

Theoretical Framework

Lawrence Kohlberg's theory of moral development and his moral development scale (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995), and James Rest's Defining Issues Tests of moral leadership (Rest & Narvaez, 1998) provided the theoretical framework upon which this study's questions were asked and answered. Despite divergence on some outside theoretical matters, both Kohlberg and Rest accept moral advancement as developmental and they agree on the Kohlberg stages delineated below (Bailey, 2011).

Kohlberg assumes a relationship between cognitive development and the wherewithal to reason morally (Cummings, Dyas, Maddux, & Kochman, 2001). Also key to the Kohlberg's theory are the *reasons given why* individuals see certain

actions as morally right and the *identification of moral principals being used* in moral reasoning (Elm & Weber, 1994).

Kohlberg sought to understand the moral development of individuals from childhood to adulthood, and his observations led to the development of his scale (Elm & Weber, 1994). Kohlberg's moral development scale posits three levels and six stages (i.e., two stages per level) of moral standing (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995), with each level and stage capturing different moral rationales (Elm & Weber, 1994). As set out in Kohlberg (1981), Kohlberg (1984), and Wren (1995), level 1, the pre-conventional level generally associated with children, contains the motivations of stage 1 (fear of punishment) and stage 2 (opportunism); level 2, the conventional level generally associated with most adults, contains the reasoning of stage 3 (approval-seeking) and stage 4 (dutiful); and level 3, the post-conventional level associated with a few highly developed adults, contains the capacity of stage 5 (socially contractual) and stage 6 (principled).

Kohlberg's moral development stages and overall theory have received substantial research-based support for their cross-cultural universality and their application to both genders (Elm & Weber, 1994). Additionally, Kohlberg's cognitive-development theory of ethical judgment has emerged as the premier model in ethics-related studies for the past half century (Bailey, 2011).

In light of increasing pressures and complexities being brought to bear against principals of public schools, this study applied Kohlberg's theories in order

to examine whether and how well school leaders were weathering their principalships in now measurable terms of moral reasoning and decision-making.

Kohlberg, a Harvard psychologist, expanded Piaget's theory and proposed a cognitive-developmental theory of moral reasoning, which suggested the universality of moral principles (Baxter & Boblin, 2007). Kohlberg's theory soon revolutionized the study of morality, and his moral stage theory has been generally acknowledged as dominant in the field ever since (Arnold, 2000).

Broadly, Kohlberg's theory of moral development describes the principles of justice and its development over time as individuals interact with their environment (Baxter & Boblin, 2007). And in crafting the highest of moral-reasoning stages, Kohlberg employed the philosophy of John Rawls set out in *A Theory of Justice* in 1971, and ingeniously incorporated Rawl's moral philosophy into a Piagetian psychological theory of Six Stages of moral development (Rest, Narvaez, Bebeau, & Thoma, 1999). Quite distinctly, Kohlberg's view of moral maturity was to be determined by the reasons an individual gives for why something is right or wrong (Baxter & Boblin, 2007). Ultimately, Kohlberg's theory posits moral development as proceeding through a stage hierarchy in a step-wise, invariant sequence, regardless of cultural variations in moral norms and beliefs (Levine, Kohlberg, & Hower, 1985).

The Essence

Following philosopher Kant, Kohlberg believed morality to be an experiential domain that is differentiated from others by its dependence on a person's capacity to reason (Arnold, 2000). In fact, one of the most distinctive marks of Kohlberg's

pioneering work is its demonstration that there is such a thing as moral reasoning with its undeniably cognitive features, and that it plays a fundamental role in framing moral judgments (Pritchard, 1999).

Kohlberg's defense of his approach was twofold: first, on both philosophical and psychological grounds, higher stages lead to more adequate solutions to moral problems because they better satisfy the formal criteria of justice; and second, knowledge itself motivates a person to act in accordance with his or her judgment where perceived injustice is dis-equilibrating and action toward justice equilibrating (Arnold, 2000). Thus, better moral reasoning more aptly settles the concerns of those seeking solutions.

Stages

Baxter & Boblin (2007) and Swanson (1995) have set forth Kohlberg's levels and stages of moral-reasoning development. The Preconventional Level contains Stage One (a stage of punishment and obedience) and Stage Two (a stage of individual instrument purpose and exchange). In Stage One, "right" is represented by literal obedience to rules and authority, avoidance of punishment, and doing no physical harm. The reasons for doing right are avoidance of punishment and the superior power of authorities. In Stage Two, "right" means following rules when in someone's immediate interest, acting to meet one's own interests and needs, and letting others do the same. The reason for doing right is to serve one's own needs or interests in a world where one must recognize that other people have interests, too.

The Conventional Level contains Stage Three (a stage of mutual interpersonal expectations, relationships, and conformity) and Stage Four (a stage of social-system and conscience maintenance). In Stage Three, “right” is playing a good (nice) role, being concerned about others and their feelings, keeping loyalty and trust with partners, and being motivated to follow rules and expectations. In Stage Four, “right” is doing one’s duty in society, upholding the social order, and maintaining the welfare of society or the group.

The Postconventional Level contains Stage Five (a stage of prior rights and social contract or utility) and Stage Six (a stage of universal ethical principles). In Stage Five, “right” is upholding the basic rights, values, and legal contracts of a society, even when they conflict with the concrete rules and laws of the group. And in Stage Six, those belonging assume guidance by universal ethical principles that all humanity should follow.

Across these stages and levels, individuals can neither leapfrog forward (i.e., skip any stages or levels) nor can they move backward in their reasoning after reaching more advanced stages (Baxter & Boblin, 2007). Further, individuals cannot fake their way forward in the Kohlberg development scale (Mason & Mudrack, 1997).

Intelligence and Education

The superior intellectual ability of gifted students seems to affect moral and ethical sensitivity from an early stage of development, and higher intelligence and cognitive abilities relate positively to advanced moral reasoning skills (Lee &

Olszewski-Kubilius, 2006). For example, Lee & Olszewski-Kubilius (2006) found that highly gifted elementary school children performed at the Postconventional stage in moral reasoning, a level that involves concerns about human rights and disenfranchisement and one that is generally, according to Kohlberg, reached by only 10% of adults.

Age and education lead to significant differences in moral reasoning (Windsor & Cappel, 1999). This continues particularly noticeably in the collegiate years. The impact of higher education on student's moral reasoning is well documented with significant gains in both principled moral reasoning and overall stage growth being related to age and educational level (Bruess & Pearson, 2002). And, in a major review of 2600 articles, Pascarella and Terenzini noted that there exists impressive evidence of moral development in college years, both in terms of the sheer numbers of studies conducted and in the diversity of the samples tested (King & Mayhew, 2002).

Role of Experiences

The experiences of individuals have great impact on moral reasoning as well. Kohlberg even contemplated individual's inability to develop morality without challenging their own reasoning, particularly by the thinking of those who have achieved a higher level of moral reasoning. Without such challenging interactions from others, individuals could not ever encounter disequilibrium and would not ever move to the next stage of reasoning (Baxter & Boblin, 2007). L.C. Jensen even

more declaratively posited that growth in moral reasoning results from exposure to levels of moral reasoning that are higher than one's own (Windsor & Cappel, 1999).

Criticism

Rest, Narvaez, Bebeau, and Thoma (1999) concede that many challenges have arisen against Kohlberg's approach: some have called it sexist (Gilligan); some say it confuses moral domain with the social-conventional domain (Turiel); some claim it to be culturally biased (Shweder, Vine); some claim it to be a political ideology masquerading as cognitive development (Emler); some see it as philosophically naïve (Locke), and others dismiss it as out of touch with everyday, experiential morality. Perhaps the most scathing criticism of Kohlberg was from Straughn, who framed the issues as: "How to Reach Stage 6 and Remain a Bastard" (Arnold, 2000).

Despite overwhelming interest in Kohlberg's theory, it has endured its criticisms, such as being biased against women (Bruess & Pearson, 2002). Of course, the more specific and offending these models of moral development seem, the more controversial they become (Rossouw & Vuuren, 2003). And while Kohlberg tenaciously defended his approach, he also heard his critics and revised and reformulated his theory throughout his career (Arnold, 2000).

Implications

For educational leaders, implications of the Kohlberg development scale abound. Most prominently, how accommodative will schools and districts be

toward those individuals capable of more complex moral reasoning? Mason & Mudrack (1997) claim that schools and districts would not be too friendly to those on the higher end of the scale given traditional notions of organizational loyalty and commitment defined by placement of the organization's welfare as first and foremost. A study of Canadian business students showed the potential antagonism (intended or not) between organizations and morally complex reasoners, and gave credence to this dynamic as pressuring high degrees of turnover (Mason & Mudrack, 1997).

Conclusion

Ethics has surfaced in virtually all professional areas, including accounting, computer science, education, engineering, journalism, law, management, medicine, psychology, scientific research, and social work (Pritchard, 1999). For educational leaders, the issues of ethics and moral reasoning have also now come to the fore.

Statement of the Problem

To date, no study has analyzed how principals' levels of moral reasoning and decision-making compare across years of experience in the principalship. Further, studies have not compared moral reasoning and decision-making along the continuum of the educational-leadership track (i.e., from master's student, to assistant principal, to principal). This study makes these comparisons.

Despite federal, state, and district mandates, and other directives in K-12 education, site leaders, namely principals, remain the primary leaders of schools and those specifically charged with effectuating positive and powerful cultures and climates (Marzano, Waters, & McNulty, 2005). Colleges of education, certification standards and processes, professional development for existing and aspiring leaders, and mentoring relationships within educational entities may purport to support principals and to improve their leadership, but do principals' moral reasoning and decision-making processes improve across the years as they receive these supports and interventions? Such was the focus of this research.

Lawrence Kohlberg posited the moral development scale (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995), and James Rest subsequently developed the Defining Issues Tests ("DIT" and "DIT-2") to measure individual moral development (Rest & Narvaez, 1998). How do principals, assistant principals, and master's students in educational leadership fare against these standards and measurements?

Purpose of the Study

The purpose of this study was to examine and compare the moral reasoning and decision-making of school principals, assistant principals, and current master's degree students in educational leadership as measured by the second Defining Issues Test ("DIT-2"). In addition, the moral reasoning and decision-making of principals was compared across years of experience as measured by the DIT-2.

Population

Generally, Florida's public school K-12 principals and assistant principals, and master's students in educational leadership programs represented the populations for the first and second research questions of this study. These same principals with zero to two years of experience, with three to five years of experience, with six to eight years of experience, and with at least nine years of experience represented the populations compared in the third research question based on Maclagan's (1992) broad stages of moral development observed in professional work.

Specifically, Florida's public, non-virtual, regular-education, K-12 school (charter and non-charter) principals with reported online contact information represented the principal population for this study as disseminated by the Florida Department of Education (2013). This population specifically excluded principals of schools of adult education, alternative education, special education, and vocational and/or technical education. A sample of assistant principals was drawn through referrals made by surveyed principals to represent the population of assistant principals. And, a convenience sample of master's students in educational leadership programs were drawn from a large, public university in Florida to represent the population of master's students in educational leadership.

Research Questions and Hypotheses

The following research questions and hypotheses guided this study:

1. At what levels of moral reasoning and decision-making are principals, assistant principals, and master's students in educational leadership programs currently operating as measured by the second Defining Issues Test ("DIT-2")?

H₀1: There exists no null hypothesis for this research question of descriptive statistics.

2. Is there a difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2")?

H₀2: There is no difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2").

3. Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2")?

H₀3: There is no difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2").

Procedures

Data collection aimed toward answering the three research questions took place along a series of steps. The first three preliminary steps are outlined initially.

First, written permission for usage of the DIT-2 was secured from the University of Alabama (see appendix A). Second, Institutional Review Board (“IRB”) permissions from the University of Central Florida were secured through that University’s promulgated process (see Appendix C). This step sought approval to communicate with and to administer an online DIT-2 to selected principals, assistant principals, and master’s students. Third, an effort was made to determine whether the Florida Association of School Administrators (“FASA”) would consider endorsing this study to its membership, and whether such endorsement could be referenced in this researcher’s communications to participants in this study. These efforts to procure FASA’s support were at the direction of a professor of the researcher who had recently become a member of the FASA board. However, as the data collection process became more urgent, there was not enough time to secure any FASA endorsement

In securing a sample of *principals*, all public, non-virtual, regular-education, K-12 principals in Florida (including those in regular and charter schools, but excluding those in adult-education, alternative-education, special-education, and vocational/technical schools) as reported by the Florida Department of Education (2013) were contacted via email and invited to participate in this study’s survey featuring the DIT-2 questionnaire. The contact emails contained a personal salutation, a letter explaining this study, an opt-out provision, and an online link to the DIT-2 administered through the Qualtrics survey-engine. The DIT-2 instruments were downloaded from Qualtrics and submitted to the University of

Alabama's Office for the Study of Ethical Development per its protocols for scoring online DIT-2 questionnaires. Data obtained in this process helped to answer: the first research question regarding principals' levels of moral reasoning and decision-making as a group; the second research question concerning any differences between principals, assistant principals, and master's students in moral reasoning and decision-making; and the third research question about any differences in moral reasoning and decision-making between principals across years of experience.

The sample of *assistant principals* was drawn from the direct referrals by selected principals in this study. These principals were asked to forward the emails they had received from this researcher to their assistant principals. This method provided a sample of assistant principals for this study, and these DIT-2 instruments completed by assistant principals were also submitted to the University of Alabama's Office for the Study of Ethical Development per its protocols for scoring. Data obtained from assistant principals helped to answer: the first research question regarding assistant principals' levels of moral reasoning and decision-making as a group; and the second research question concerning any differences between principals, assistant principals, and master's students in moral reasoning and decision-making.

A convenience sample of students currently enrolled in master's level educational leadership programs at a large, public Florida university were drawn to represent the population of *master's students* in educational leadership. In the

spring semester of 2014, in-person invitations to participate in this research were explained and extended to students in six distinct classes within the university's educational leadership master's degree program. The same email communications and links sent to principals in this study were also sent to those master's students who provided their email addresses to this researcher upon the six distinct classroom visits. The DIT-2 instruments completed by these master's students were also submitted to the University of Alabama's Office for the Study of Ethical Development per its protocols for scoring. Data obtained in this process helped to answer: the first research question regarding master's students' levels of moral reasoning and decision-making as a group; and the second research question concerning any differences between principals, assistant principals, and master's students in moral reasoning and decision-making.

Several universal procedures applied to the direct interactions with contacted principals and master's students. These procedures are now outlined in the remainder of this section. In accordance with suggestions from Dillman, Smyth, and Christian (2009), prospective participants were sent a series of four email communications in order to elicit the greatest possible response. These participants received an *initial* contact email advising of their selection and advising of the study's forthcoming explanatory letter and DIT-2 online link. Several days thereafter, they received the explanatory letter and DIT-2 online link in a *second* email. Thereafter, they received reminders and thanks in *third* and *fourth* emails. The last two communications were designed to prompt those yet to respond and to

express gratitude to those who had already responded. Participants were provided information about informed consent, and were ensured of anonymity as the individual participation status of respondents could not be tracked or known by the researcher.

Along with the DIT-2 instrument itself, the University of Alabama sought various demographic data from respondents, including: age; gender; ethnicity; level of education; political views; U.S. citizenship status; and an indication whether English was each respondent's primary language. The specifics of these inquiries can be examined in the DIT-2 questionnaire in Appendix D of this dissertation.

In addition to the DIT-2 instrument and the demographic questions from the University of Alabama, this study also sought additional information from respondents, including: participant grouping (i.e., principal, assistant principal, or master's student); for principals, the number of years of experience as principal prior to the current year; for principals, the level of current principalship (i.e., elementary school, middle school, high school, or multi-level school); for assistant principals and master's students, a yes/no response to "Is becoming a principal of a school one of your possible aspirations?"; and for principals and assistant principals, whether their schools were charter or regular public schools.

Instrumentation

The most common vehicle used in ethics literature to measure moral reasoning and decision-making has been Rest's DIT and DIT-2, whereby assessments are made as to how respondents justify or support their ethical decisions in terms of Kohlberg's stages of moral development (Windsor & Cappel, 1999). In this study, Rest's DIT-2 was employed to measure the moral reasoning and decision-making of principals, assistant principals, and master's students in educational leadership.

The DIT-2 addresses how respondents define issues as the instrument's questions prompt respondents to judge and discern the relevance and importance of issues surrounding briefly stated social dilemmas (Rest & Narvaez, 1998). The DIT-2 thereby assesses respondents' moral reasoning and decision-making as it presents five short (i.e., one paragraph each) dilemmas, prompts respondents to assign Likert-scale weights (i.e., "great," "much," "some," "little," and "no") to the importance of twelve distinct issues relating to the dilemma, and then asks respondents to prioritize what they consider to be the four most important issues of the twelve listed. The entirety of the DIT-2 instrument administered to respondents has been included in Appendix D. Specific dilemmas include: *famine* (should a poor man steal from a rich man's warehouse in order to feed the poor man's family, which is nearing starvation?); *news reporting* (should a journalist write a story of one political candidate's minor transgression from 20 years ago?); *school board leadership* (should a school board cancel an upcoming meeting in light of the

previous meeting reaching the precipice of violence without any resolution?); *cancer treatment* (should a physician administer a lethal dose of pain killers as desired by a patient suffering the final stages of terminal cancer?); and *demonstrations* (should college students demonstrate against U.S. troops policing instability in South America to the point of shutting down the operation of college towns and campuses?).

This study utilized the online version of the DIT-2 through the Qualtrics survey engine compatible with the University of Alabama (University of Alabama, 2013). This online version of the DIT-2 is as reliable and valid as its pencil-and-paper predecessor (Xu, Iran-Nejad, & Thoma, 2007).

The DIT-2 was scored by the University of Alabama's Office for the Study of Ethical Development, and a host of continuous variables were produced from the examination. Most notably, four distinct sub-scores provided indicia of various types of moral reasoning and decision-making as set forth in Bebeau & Thoma (2003). The P-Score indicated the proportion of items upon which respondents applied Kohlberg's highest levels of moral development—the Postconventional stages five and six. Scores identifying the priorities of personal interest ("Stage 23" also called the "Personal-Interest Schema Score") and scores indicative of respondents' operating in Kohlberg's stage four ("Stage 4P" also called the "Maintaining Norms Schema Score") were also obtained from DIT-2 data. The hybrid N-2 score represented the degree to which respondents prioritized post-conventional reasoning and de-emphasized items of personal interest. Each of these

sub-scores was utilized to answer the three research questions. Therefore, they are explained in greater detail now.

Rest and his team acknowledged that, in adolescence, individuals typically experience the “discovery of society.” For purposes of the DIT, this societal awakening represents fertile grounds for testing. The DIT presumes that people make sense of moral situations in terms of three developmentally ordered *schemas*—Personal Interests, Maintaining Norms, and Postconventional thinking—where Personal Interests takes place in childhood, and Maintaining Norms and Postconventional *schema* are typical in adolescence and adulthood (Rest, Narvaez, Bebeau, & Thoma, 1999; Derryberry, Jones, Grieve, & Barger, 2007).

Whereas levels and stages (ala Kohlberg) are defined in terms of cognitive operations, *schemas* are highly contextual and represent a network of knowledge that is organized around particular life events, existing to help individuals understand new information based on previous experiences (Thoma, 2002). Rest’s schema approach, upon which the DIT is based, retains many of Kohlberg’s essential insights about moral judgment development, but the definitions are somewhat different in that schemas are not defined in terms of cognitive operations (Walker, 2002). The DIT activates or triggers moral schemas, then allows for assessing how these schemas represent moral reasoning and judgment (Walker, 2002). Following the classic theorists, schemas (i.e., expectations, hypotheses, concepts, regularities) are understood to be general knowledge structures residing in long-term memory,

formed as people notice similarities and recurrences in experiences (Rest, Narvaez, Bebeau, & Thoma, 1999).

Informed by schema theory, the DIT works thus: reading the moral dilemmas and the DIT issue statements activates moral schemas (to the extent that a person has developed them), and as the participant encounters an item that both makes sense and also activates a *preferred* schema, that item is given a high rating and ranked of high importance, while alternatively, when the participant encounters an item that either does not make sense or seems simplistic and unconvincing (is not activating a preferred schema), the item receives a low rating (Rest, Narvaez, Bebeau, & Thoma, 1999). As Rest, Narvaez, Bebeau, and Thoma (1999) sought to know which schemas participants bring to tasks (already in the person's head or in long-term memory), these schemas are presumably revealed in the structure and responsiveness of people's moral thinking and judgments. With this DIT-based model of moral development (involving shifting distributions of schemas), there are no "pure" types of people, but rather all people are mixes of schemas (Rest, Narvaez, Bebeau, & Thoma, 1999).

Personal-Interest schema appeals to the personal stake that individuals have in the consequences of an action (Walker, 2002). And for non-child participants operating from the Personal-Interest schema, the DIT recognizes the fusion of Kohlberg stages two and three to form a single factor (the Personal-Interest schema), representing more primitive forms of thinking (Rest, Narvaez, Bebeau, & Thoma, 1999).

The Maintaining-Norms schema is the first solution that typically occurs to adolescents for problems involving cooperation on a society-wide basis, and it contains the following elements: a need for norms, a society-wide scope, uniform application, partial reciprocity, and a duty orientation (Rest, Narvaez, Bebeau, & Thoma, 1999). Rest, Narvaez, Bebeau, and Thoma (1999) contend that for those operating under this schema, the maintenance of the established social order defines morality, even though the schema commits the naturalistic fallacy by inferring that what “is” also “ought” to be. In broader terms, the Maintaining-Norms schema appeals to generally accepted social norms and hierarchical role structures for governing a society, recognizing the need for norms that have society-wide scope and uniform application (Walker, 2002).

Postconventional (P-score) schema underwent the most extensive definitional departures from Kohlberg’s description of principled reasoning, in that rather than focusing on a system of justice and fairness, the Postconventional schema describes a set of criteria that define a Postconventional system, which includes: a) the central role of moral criteria in the formulation of, and understanding of laws and norms; b) the appeal that the system must convey some idealized view of how the community ought to be ordered; c) the clear sense that moral ideals are open, subject to critique, and thus sharable with the larger community; and d) the system must be fully reciprocal, and thereby developed to address the community as a whole with uniform application (Thoma, 2002). In

regard to the DIT, Postconventional items are those found highly regarded by relatively mature and sophisticated people (Walker, 2002).

In Postconventional thinking, reciprocal moral obligations are open to debate even as they are based on shared ideals (Rest, Narvaez, Bebeau, & Thoma, 1999). This Postconventional schema perhaps diverges the most from Kohlberg (and his stages five and six), and appeals to ideals arising from the experience of the community—ideals which are fully and logically coherent in fostering consensus (Walker, 2002). In summary, Rest, Narvaez, Bebeau, and Thoma (1999) propose four elements in the Postconventional schema: primacy of moral criteria (subject to negotiation and renegotiation), appeal to an ideal, sharable ideals, and full reciprocity.

Scoring of the DIT-2 instruments produces continuous-variable data in the form of (Postconventional) P-Scores, Personal-Interest scores, Maintaining-Norms scores, and N-2 scores (which are explained next).

The hybrid N-2 sub-score provides a sharper measure of respondents' prioritizing Postconventional reasoning and de-emphasizing Personal Interest, and has thus been developed to replace the old P-scores (Walker, 2002; Thoma, 2002). There were hints in the data that the P-score could be improved and that work led to the N-2, where the degree to which the individual discriminates clearly between lower and higher stage items would be better reflected (Thoma, 2002). Historically, the P-score overlooked much informative data, but the N-2 score now uses two types of data from the DIT-2 (the ranking of Postconventional items and the

difference in ratings between the Personal-Interest and the Postconventional items), yielding a demonstrably superior score in terms of construct validity and reliability (Walker, 2002).

Rest's DIT has been the best-documented instrument of its kind in terms of validity and reliability, as its test-retest reliability for P-Scores is generally in the high .70s or .80s, and the Cronbach's Alpha index of internal consistency is generally in the high .70s (Windsor & Cappel, 1999).

Rest, Narvaez, Bebeau, and Thoma (1999) set out seven validity and reliability criteria whereby the DIT proves itself robust: 1) differentiation of various age/education groups (e.g., in studies of large composite samples across thousands of subjects, 30-50% of variance of DIT scores is attributable to level of education in samples ranging from junior high to Ph.D.); 2) longitudinal gains (e.g., a 10-year longitudinal study shows significant gains for men and women from diverse walks of life who did or did not attend college, but a review of those students attending college from freshmen year to senior year (n=755) showed effect sizes of .80 ("large" gains), and revealed the DIT gains to be of the most dramatic longitudinal gains of any variable studied in college students); 3) correlation with cognitive capacity measures (e.g., $r=.60s$ in correlation studies between DIT scores and moral comprehension, recall, reconstruction of postconventional moral argument); 4) sensitivity to moral education interventions (e.g., a review of 50 intervention studies reports effect size for dilemma discussion interventions to be .41 ("moderate" gains) whereas effect size for comparison groups was only .09 ("small" gains)); 5) links to

pro-social behavior and preferred professional decision-making (e.g., one review reports that 32 of 47 measures were statistically significant comparing the DIT and this positive moral decision-making); 6) predicting political choice and attitude (e.g., in multiple regression analyses with measures of cultural ideology, the DIT predicts up to .67 of the variance in opinions about controversial public-policy issues such as abortion, religion in public schools, and rights of the accused); and 7) reliability (e.g., Cronbach's alpha is in the upper .70s/low .80s, and test-retest reliability is about the same).

There exists fairly decisive support for the construct validity and psychometric properties of the DIT, and for the DIT's discriminant validity indicating that it is not simply a mere reflection of other variables such as verbal ability or political attitudes (Walker, 2002). Specifically, information in the DIT scores predicts the seven validity criteria above and beyond that accounted for by scores of verbal ability, general intelligence, or political attitude, and the DIT does this equally validly for males and females (as gender accounts for less than 0.5% of variance of the DIT)(Rest, Narvaez, Bebeau, & Thoma, 1999).

Analysis of Data

Each of the DIT-2 sub-scores provided data to answer the three research questions, since the sub-scores peg respondents' moral reasoning and decision-

making within a spectrum of possibilities. The three research questions are addressed one by one.

The first research question (regarding the levels of moral reasoning and decision-making at which principals, assistant principals, and master's students in educational leadership currently operate) was answered by descriptive statistical treatment of participants' DIT-2 scores (including various sub-scores). The mean, median, range, standard deviation, minimum, and maximum DIT-2 scores (including various sub-scores) measured and reported respondents' moral reasoning and decision-making across each of the examined groupings.

The second research question (regarding comparison of moral reasoning and decision-making scores for principals, assistant principals, and master's students in educational leadership) was answered using three-celled, one-way ANOVA testing and independent-samples t-tests of DIT-2 scores (including various sub-scores). The dependent variable was DIT-2 scores and the independent variable was leadership level (i.e., principal, assistant principal, and master's student in educational leadership). Statistical significance was set at an alpha level of .05. The ANOVA and t-tests allowed statistical comparisons of the means of DIT-2 scores garnered across the three groups (i.e., principals, assistant principals, and master's students in educational leadership). The resultant F-statistics and t-statistics indicated whether the differences between groups were statistically significant, and for the ANOVA the Tukey's post-test pinpointed the groups between which significant differences in DIT-2 scores existed. The ANOVA and t-tests indicated

with 95% certainty whether mean differences between compared groups could be considered beyond a mere chance occurrence. This analysis answered the second research question as to whether there was a difference between principals, assistant principals, and master's level educational leadership students in their moral reasoning and decision-making?

The third research question (regarding comparison of moral reasoning and decision-making for principal participants across the four groups of years of experience) was answered using four-celled, one-way ANOVA testing of DIT-2 scores (including various sub-scores). The dependent variable was DIT-2 scores and the independent variable was level or stage of principal experience. Statistical significance was set at an alpha level of .05. Following Maclagan (1992), who found that moral development occurs across stages in working careers, this ANOVA allowed statistical comparisons of means of DIT-2 scores across the four groups of principals (i.e., zero to two years of experience, three to five years of experience, six to eight years of experience, and nine or more years of experience). The resultant F-statistic indicated whether any differences between these principal groups were statistically significant. The ANOVA determined with 95% certainty whether mean differences between compared groups could be considered beyond a mere chance occurrence. This analysis answered research question number three as to whether there was a difference in moral reasoning and decision-making between principals across years of experience?

Table 1 provides a summary of the research inquiries made in this study.

Table 1: Summary of Research Inquiries

<u>Research Question</u>	<u>Variables</u>	<u>Stat Tool</u>	<u>Null Hyp</u>
1. At what levels of moral reasoning and decision-making are principals, assistant principals, and master's students in educational leadership programs currently operating as measured by the second Defining Issues Test ("DIT-2")?	IV: Position (P, AP, or MS) DVs: DIT-2 sub-scores (P, PI, MN, and N-2)	Descriptive Statistics (means and standard deviations)	N/A
2. Is there a difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2")?	IV: Position (P, AP, or MS) DVs: DIT-2 sub-scores (P, PI, MN, and N-2)	ANOVA, t-test	No Difference
3. Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2")?	IV: Years of Experience in Principalship DVs: DIT-2 sub-scores (P, PI, MN, and N-2)	ANOVA	No Difference

IV and DVs denote independent variable and dependent variables, respectively; under "Position," P refers to principals, AP to assistant principals, and MS to master's students. Under DIT-2 sub-scores, abbreviations indicate as follows: P for P-scores, PI for Personal-Interest scores, MN for Maintaining-Norms scores, and N-2 for N-2 scores.

Table 1 sets forth the three research questions, the dependent and independent variables involved, the statistical tools employed to answer each research question, and the null hypothesis, if any, for each of the research questions.

Summary

Rest's DIT-2 instrument measured the moral reasoning and decision-making of principals, assistant principals, and master's students in educational leadership according to Kohlberg's moral development scale. Sampling the entirety of Florida's public, non-virtual, regular-education, K-12 principals ensured representation of Florida's principal population. Distinct samples of assistant principals and master's students in educational leadership supplied comparison groups to the principals in terms of moral reasoning and decision-making. The DIT-2's sensitivity, and robust validity and reliability provided worthy instrumentation for this study. Descriptive statistics portrayed the results across various groups, and one-way ANOVA (with Tukey's post-tests) and independent-samples t-tests determined and identified any statistically significant differences between group means in DIT-2 scores. The next chapter sets forth a presentation and an analysis of the collected data.

CHAPTER 4: PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this research was to examine and to compare the moral reasoning and decision-making of K-12 principals, assistant principals, and master's students in educational leadership. Measurement of moral reasoning and decision-making was achieved through administration of the Defining Issues Test Two, through an online Qualtrics survey where respondents self-identified as current principals, assistant principals, or master's-degree students in educational leadership. The survey asked principals to disclose the aggregate number of years in which they had served as principals. Beyond this introduction, this chapter is divided into four sections: 1) Population; 2) Descriptive Statistics, which includes analyses of the research questions; 3) Additional Analyses; and 4) Summary.

Population

Public, non-virtual, regular-education, K-12 principals and assistant principals in Florida comprised the population of surveyed principals and assistant principals. Master's students in educational leadership at a large public Florida university comprised the population of surveyed master's students.

Principals and master's students were sent a series of four email communications, wherein the first email was purely introductory, and the second, third, and fourth emails contained access to the online DIT-2 survey. Principals

were asked to forward emails they had received to their assistant principals that those assistant principals might take the survey and form the assistant-principal sample for this study. Response data is shown in Table 2.

Table 2: Response-Rate Data

<u>Email</u>	<u>Sent</u>	<u>Opened</u>	<u>Undelivered</u>	<u>Unsub.</u>	<u>Not Opened</u>
P 1/4	2458	347 (16%)	246	14	1865
P 2/4	2444	449 (20%)	243	9	1752
P 3/4	2435	348 (16%)	249	8	1838
P 4/4	2427	351 (16%)	238	8	1838
M 1/4	89	32 (37%)	2	0	55
M 2/4	90	38 (43%)	2	0	50
M 3/4	89	31 (36%)	2	0	56
M 4/4	89	34 (39%)	2	0	53

Note: “P” emails refer to the numbered series of emails sent to principals, and “M” emails refer to the numbered series of emails sent to master’s students. Emails denoted “Undelivered” may have contained the wrong address in the state’s database; Unsubscribed (“Unsub”) participants exercised their opt-out prerogative; and “Not Opened” would include emails stopped by district firewalls and emails recipients may have missed or ignored.

It was possible for email recipients to open some or all of the four emails sent to them. In total, 177 online surveys were commenced, and 69 of them were completed. While some of the 177 partially started surveys may have included multiple attempts by the same respondents, the 69 completed surveys were from unique, anonymous participants. In order to encourage participation by the master’s students in educational leadership, this researcher visited six different master’s classrooms and presented briefly regarding this research and made appeals for participation. Overall, the study’s response rate is measured by the total number of DIT-2 surveys completed (i.e., 69) divided by the total number of contacts reached (i.e., 2458 (the original number of emails sent to principals) minus

246 (the number of original emails to principals that went undelivered) plus 90 (the original number of emails sent to master's students) minus 2 (the number of original emails master's students that went undelivered), which equals 2300). Thus the response rate (i.e., 69 divided by 2300) was 3.00 percent.

Analysis of Research Questions

Three distinct research questions were posed in this study. They are now answered one by one in this section.

Research Question One

The first research question of the study asks: "At what levels of moral reasoning and decision-making are principals, assistant principals, and master's students in educational leadership programs currently operating as measured by the second Defining Issues Test ("DIT-2")?" Descriptive statistics served to answer this question.

The DIT-2 provides a series of numerical measurements of respondents' moral reasoning and decision-making. The P-score, Personal-Interest score, Maintaining-Norms score, and N-2 score represent scale data. The P-score represents the proportion by which the respondent employed Postconventional reasoning (the highest level of reasoning along the lines of Kohlberg's stages five and six); the Personal-Interest score represents the proportion by which the respondent employed Personal-Interest reasoning (the lowest level of reasoning on

the DIT-2 along the lines of Kohlberg’s stages two and three); the Maintaining-Norms score represents the proportion by which the respondent employed reasoning geared toward maintaining norms (a mid-level reasoning, along the lines of Kohlberg’s stage four); and the N-2 score represents a composite tally measuring the proportion by which the respondent employed the highest level of Postconventional reasoning and avoided the lowest level of Personal-Interest reasoning.

Table 3 shows the mean Postconventional P-scores and standard deviations for the studied groups. P-scores reflect the proportion by which respondents utilize the highest-level (i.e., Postconventional) reasoning and decision-making on the DIT-2, where higher scores reflect more advanced reasoning and decision-making. These results show master’s students outperforming both principals and assistant principals in Postconventional reasoning and decision-making (i.e., the highest level of reasoning on the DIT-2), and shows principals underperforming both master’s students and assistant principals. This means that though principals stand vocationally ahead of assistant principals and master’s students, principals lag both groups in utilizing the most sophisticated levels of reasoning and decision-making.

Table 3: P, AP, and MS Postconventional Means

Group	N	Mean	SD
Principals	36	34.50	17.38
Assistant Principals	7	36.00	15.53
Master’s Students	25	42.72	12.75
Totals	68	37.68	15.90

Note: P refers to principals, AP refers to assistant principals, MS refers to master’s students. Postconventional scores are synonymous with P-Scores.

Table 4 shows the mean Personal-Interest scores and standard deviations for the studied groups. Personal-Interest scores reflect the proportion by which respondents employ the lowest-level reasoning and decision-making on the DIT-2. Thus, lower scores would be higher-performing on this measure. These results show master’s students again outperforming both principals and assistant principals by employing the least of the lowest level of reasoning on the DIT-2, and again shows principals underperforming both master’s students and assistant principals by employing the most of this lowest level of reasoning on the DIT-2. This again shows that though principals stand vocationally ahead of assistant principals and master’s students, principals lag both groups, and more often employ the least sophisticated levels of reasoning and decision-making.

Table 4: P, AP, and MS Personal-Interest Means

Group	N	Mean	SD
Principals	36	24.00	12.14
Assistant Principals	7	20.29	7.16
Master’s Students	25	19.04	8.83
Totals	68	21.79	10.74

Note: P refers to principals, AP refers to assistant principals, MS refers to master’s students.

Table 5 shows the mean Maintaining-Norms scores and standard deviations for the studied groups. Maintaining-Norms scores reflect the proportion by which respondents choose mid-level reasoning and decision-making on the DIT-2, where scores are generally neutral, but provide an alternative to low-level Personal-Interest and high-level Postconventional reasoning and decision-making. While principals and assistant principals scored very similarly, master’s students scored

the lowest in employing reasoning geared toward maintaining norms. This indicates that while master’s students more often employed the Postconventional schema (Table 3), principals and assistant principals more often chose the Maintaining-Norms schema (Table 5).

Table 5: P, AP, and MS Maintaining-Norms Means

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Principals	36	38.61	16.64
Assistant Principals	7	38.57	14.32
Master’s Students	25	34.64	14.85
<u>Totals</u>	<u>68</u>	<u>37.15</u>	<u>15.67</u>

Note: P refers to principals, AP refers to assistant principals, MS refers to master’s students.

Table 6 shows the mean N-2 scores and standard deviations for the studied groups. N-2 scores reflect a composite measure weighting preference for Postconventional schema and avoidance of Personal-Interest schema, where higher scores reflect the more advanced reasoning and decision-making. In this composite N-2 scoring, master’s students once again outperformed both principals and assistant principals. In addition, assistant principals also outperformed their principal counterparts. This again means that though principals stand vocationally ahead of assistant principals and master’s students, principals lag both groups in utilizing the most sophisticated levels and avoiding the least sophisticated levels of reasoning and decision-making.

Table 6: P, AP, and MS N-2 Score Means

Group	N	Mean	SD
Principals	36	32.77	16.34
Assistant Principals	7	40.38	13.94
Master's Students	25	42.90	10.93
Totals	68	37.28	14.95

Note: P refers to principals, AP refers to assistant principals, MS refers to master's students.

As to research question one, master's students in educational leadership scored highest in the highest level of reasoning and lowest in the lowest level of reasoning as compared to principals and assistant principals. Conversely, principals scored lowest in the highest level of reasoning and highest in the lowest level of reasoning. Assistant principals placed between principals and master's students in these measurements of highest and lowest levels of reasoning.

Research Question Two

The second research question of the study asks: "Is there a difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2")?" Inferential statistics serve to answer this question.

Since P-scores, Personal-Interest scores, Maintaining-Norms scores, and N-2 scores are expressed in scale data, inferential tests including one-way ANOVA and independent-samples t-tests were employed to determine if mean differences between the sample groups were statistically significant. The one-way ANOVA provides a robust analysis but assumes equal variances between the sample groups,

and assumes a normal distribution in each sample's population as well (Steinberg, 2011). If variances between sample groups are not equal, the one-way ANOVA still functions appropriately if sample sizes are equal (Steinberg). Since the sample sizes are not equal in this study (N=36 for principals, N=7 for assistant principals, and N=25 for master's students), independent-samples t-tests were run in cases involving the largest mean differences between the sample groups so as not to rely solely upon an imperfect ANOVA. Not all comparisons were made using t-tests because unlike the one-way ANOVA, statistical error increases with each t-test employed (Steinberg).

Table 7 shows the ANOVA's F-statistics and significance levels for each of the four DIT-2 reasoning sub-score measurements for principals, assistant principals, and master's students. This one-way ANOVA shows statistically significant differences (at the .05 alpha level) between the sample groups only on the N-2 measurement, where $F(2, 65) = 3.861, p = .026$. A Tukey's post-test revealed the significant difference existed between principals and master's students on N-2 scores (those composite scores combining use of Postconventional reasoning and avoidance of personal interest reasoning), where a Tukey's significance level of .023 was reported when comparing principals and master's students on N-2 scores. This shows that master's students statistically significantly outperformed principals in this composite N-2 measure, meaning that master's students significantly differently choose Postconventional schema and eschew Personal-Interest schema as compared to principals. Conversely, Tukey's post-test significance levels on N-2

scores between master’s students and assistant principals was .911, and between assistant principals and principals was .410.

Table 7: ANOVA on P, AP, and MS DIT-2 Scores

DIT-2 Sub-Score	F	Sig.
Postconventional	2.080	.133
Personal Interest	1.686	.193
Maintaining Norms	0.498	.610
<u>N-2 Composite</u>	<u>3.861</u>	<u>.026</u>

Note: P refers to principals, AP refers to assistant principals, MS refers to master’s students. Tukey’s post-test on N-2 scores shows the significant difference exists between principals and master’s students (with a Tukey’s significance level of .023).

With the varying sizes of the three sample groups, independent-sample t-tests were also conducted for those comparisons where mean differences were most remarkable. In the t-test of principals and master’s students on P-scores, $t(59) = -2.130$, $p = .048$, showing significance at the .05 alpha level. And, in the t-test of principals and master’s students on N-2 scores, $t(59) = -2.901$, $p = .009$, showing significance at the .01 alpha level.

Thus, as to research question two, master’s students in educational leadership scored statistically significantly higher than active principals in Postconventional reasoning (the highest level of reasoning signified by the P-score) according to t-test assessments (where $p = .048$), but not according to the ANOVA (where $p = .133$ with Tukey’s $p = .116$). And, master’s students in educational leadership scored statistically significantly higher than active principals in N-2 score, which measures employment of Postconventional reasoning (the highest level of reasoning) and avoidance of Personal-Interest reasoning (the lowest level of

reasoning), as was shown on both the ANOVA (where $p = .026$ with Tukey's post-test $p = .023$) and on the t-test (where $p = .009$).

With regard to N-2 performance, ANOVA testing revealed an effect size, η^2 , of .33 (where a between-group sum of squares of 1,589.957 and a within-group sum of squares of 13,382.664 were identified). This moderate effect size was consistent with this study's expectations and research design based on prior works and DIT-2 sensitivities found in Rest, Narvaez, Bebeau, & Thoma (1999). This effect size, in concert with the study design and number of participants, allowed for the testing and finding of statistical significance in the difference between the moral reasoning and decision-making of principals, assistant principals, and master's students.

Research Question Three

The third research question of the study asks: "Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2")?" Descriptive and inferential statistics served to answer this question.

Table 8 shows the mean Postconventional P-scores and standard deviations for the four groups representing various years of principal experience. These results show close mean P-scores across years of experience in the principalship. This means that principals' Postconventional reasoning and decision-making does not vary much as a function of years of experience in the principalship.

Table 8: Principal Experience and Postconventional Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	33.50	14.49
3-5 Years	10	33.20	23.00
6-8 Years	5	34.80	21.24
9+ Years	11	32.36	11.86
Totals	34	33.24	16.93

Note: Postconventional scores are synonymous with P-Scores.

Table 9 shows the mean Personal-Interest scores and standard deviations for the four groups representing various years of principal experience. These results also show somewhat close mean Personal-Interest scores across years of experience in the principalship. This shows that principals' Personal-Interest reasoning and decision-making does not vary much across years of experience in the principalship.

Table 9: Principal Experience and Personal-Interest Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	23.50	5.42
3-5 Years	10	26.40	19.11
6-8 Years	5	24.00	6.78
9+ Years	11	21.64	11.59
Totals	34	23.82	12.48

Table 10 shows the mean Maintaining-Norms scores and standard deviations for the four groups representing various years of principal experience. These results also show close mean Maintaining-Norms scores across years of experience in the principalship. This demonstrates that principals' Maintaining-Norms reasoning and decision-making does not vary much across the years of experience in the principalship.

Table 10: Principal Experience and Maintaining-Norms Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	39.75	14.40
3-5 Years	10	38.00	20.55
6-8 Years	5	40.00	16.61
9+ Years	11	41.82	14.30
Totals	34	39.94	16.03

Table 11 shows the mean N-2 scores and standard deviations for the four groups representing various years of principal experience. These results show somewhat close mean N-2 scores across years of experience in the principalship. This means that principals' composite N-2 scores (combining the choosing of Postconventional schema and the avoidance of Personal-Interest schema) do not vary much across years of experience in the principalship.

Table 11: Principal Experience and N-2 Score Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	29.17	13.84
3-5 Years	10	31.20	21.96
6-8 Years	5	35.57	15.56
9+ Years	11	32.28	13.63
Totals	34	31.72	16.18

The closeness of the mean DIT-2 scores of principals across years of experience was also reflected in the one-way ANOVA testing, which showed no significant difference between any of the experiential groups' mean scores across any of the four DIT-2 sub-scores. These results are shown in Table 12. An additional one-way ANOVA tested whether there existed any difference between principal sub-scores on the basis of actual years in the principalship as opposed to

the grouping of years called for in the research design of this study. This ANOVA also demonstrated no significant difference in any principal sub-scores across the entire 25-year range of principal experience on a year-by-year analysis. These results are shown in Table 13.

Table 12: DIT-2 ANOVA on Grouped Principal Experience

<u>DIT-2 Sub-Score</u>	<u>F</u>	<u>Sig.</u>
Postconventional	0.022	.995
Personal Interest	0.239	.868
Maintaining Norms	0.091	.964
<u>N-2 Composite</u>	<u>0.155</u>	<u>.925</u>

Note: "Grouped Principal Experience" refers to comparison of blocks of principal experience (i.e., 0-2 years, 3-5 years, 6-8 years, and 9-plus years).

Table 13: DIT-2 ANOVA on Ungrouped Principal Experience

<u>DIT-2 Sub-Score</u>	<u>F</u>	<u>Sig.</u>
Postconventional	0.983	.503
Personal Interest	0.411	.952
Maintaining Norms	1.468	.215
<u>N-2 Composite</u>	<u>0.605</u>	<u>.780</u>

Note: "Ungrouped Principal Experience" refers to a comparison of principals across each and all years of experience (i.e., 0-25 years) and not across groups of years of experience.

Correlation analyses were also conducted, which compared the DIT-2 sub-scores across actual years of experience in the principalship. None of the correlations was anywhere near significant as across the four DIT-2 sub-scores the highest Pearson correlation was .188 (correlating Maintaining-Norms scores and years of experience in the principalship). This means that there was nothing close to a significant difference between principals' DIT-2 sub-scores across the 0-25 years-of-experience range studied.

As to research question three, there is not a significant difference in moral reasoning and decision-making as measured by the DIT-2 between principals across various years of experience. All mean differences were found not to be statistically significant.

Table 14 provides a summary of the research results. It sets forth the three research questions, the dependent and independent variables involved, the statistical tools employed to answer each research question, the null hypothesis for each of the research questions, and the ultimate acceptance or rejection of the null hypotheses.

Table 14: Summary of Research Results

Research Question	Variables	Stat Tool	Null Hyp	A/R Null
1. At what levels of moral reasoning and decision-making are principals, assistant principals, and master’s students in educational leadership programs currently operating as measured by the second Defining Issues Test (“DIT-2”)?	IV: Position (P, AP, or MS) DVs: DIT-2 sub-scores (P, PI, MN, and N-2)	Descriptive Statistics (means and standard deviations)	N/A	N/A
2. Is there a difference between principals, assistant principals, and master’s students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test (“DIT-2”)?	IV: Position (P, AP, or MS) DVs: DIT-2 sub-scores (P, PI, MN, and N-2)	ANOVA, t-test	No Difference	Reject
3. Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test (“DIT-2”)?	IV: Years of Experience in Principalship DVs: DIT-2 sub-scores (P, PI, MN, and N-2)	ANOVA	No Difference	Accept

IV and DVs denote independent variable and dependent variables, respectively; under “Position,” P refers to principals, AP to assistant principals, and MS to master’s students. Under DIT-2 sub-scores, abbreviations indicate as follows: P for P-scores, PI for Personal-Interest scores, MN for Maintaining-Norms scores, and N-2 for N-2 scores. “A/R Null” refers to acceptance/rejection of null hypothesis.

Additional Analyses

Data from DIT-2 testing provide several pieces of information that bear on the topics and interests in this research, and also provide a basis for further research. This section explicitly departs from the strict confines of the three research questions posed in this study's design, and provides some discussion of several ancillary yet germane findings. In total, six additional analyses are presented, including: Real-World Comparisons; Types; Aspiring Principals; Gender; Religious Orthodoxy; and Utilizer Scores.

Real-World Comparisons

Beyond principals' DIT-2 sub-score means heretofore compared according to this study's design, an examination of the frequencies of principal scores allows for a comparison of principals in this study to outside segments of the general population (based on archived and reported DIT-2 data from Bebeu & Thoma (2003)). Tabular representations, below, provide real-world comparisons between fractions of respondent principals in this study with various sub-groups upon which DIT-2 comparison data has been made available.

Table 15 provides Postconventional P-score comparisons of principals and other groups by various educational levels.

Table 15: Real-World Comparisons on Postconventional Scores

Comparison	Range	Fraction	Percentage
Principals near those having only a middle school education (who have a mean of 15.78)	8-18	9/34	26%
Principals below those with only a high school education (who have a mean of 33.13)	8-32	18/34	53%
Principals at or above those with a PhD/EdD education (who have a mean of 50.69)	50-72	6/34	18%

Note: Postconventional scores are synonymous with P-Scores. "Range" figures refer to the range of principal P-scores meeting the comparison criteria; "Fraction" refers to the fraction of principals in this study who fell within the range and met the comparison criteria; and "Percentage" refers to the percentage of the principals in this study who fell within the range and met the comparison criteria. Comparison data were derived from the Guide for DIT-2 (Bebeau & Thoma, 2003).

This comparison shows that more than one in four (26%) principals surveyed in this research employ the highest level of moral reasoning and decision-making at or below the levels of individuals with only a middle-school education. Additionally, more than half (53%) of principals surveyed utilized Postconventional reasoning and decision-making less than did individuals with only a high-school education. And lastly, fewer than one in five (18%) principals surveyed used Postconventional reasoning and decision-making at a level at or above the levels posted by fellow PhD- and EdD-educated persons. These comparisons show principals to be well off the anticipated pace of Postconventional reasoning and decision-making (given

their educational levels) and even behind the pace set by those who have only gotten as far as 10th to 12th grade in their educational pursuits.

Table 16 provides Personal-Interest score comparisons of principals and other groups by various educational levels.

Table 16: Real-World Comparisons on Personal-Interest Scores

Comparison	Range	Fraction	Percentage
Principals higher (worse) than those with only a middle-school education (who have a mean of 35.21)	36-68	5/34	15%
Principals lower (better) than those with a PhD/EdD education (who have a mean of 18.71)	8-18	16/34	47%

Note: "Range" figures refer to the range of principal Personal-Interest scores meeting the comparison criteria; "Fraction" refers to the fraction of principals in this study who fell within the range and met the comparison criteria; and "Percentage" refers to the percentage of the principals in this study who fell within the range and met the comparison criteria. Comparison data were derived from the Guide for DIT-2 (Bebeau & Thoma, 2003).

This comparison shows that 15% of principals surveyed in this research employ Personal-Interest moral reasoning and decision-making to a greater degree than do individuals with only a middle-school education. Additionally, about half (47%) of principals surveyed utilize Personal-Interest reasoning and decision-making less than do individuals with PhD and EdD levels of education. These comparisons show principals to be almost as expected in their use of Personal-Interest reasoning and decision-making, given their levels of education.

Table 17 provides Maintaining-Norms score comparisons of principals and other groups by various educational levels.

Table 17: Real-World Comparisons on Maintaining-Norms Scores

Comparison	Range	Fraction	Percentage
Principals higher than those with only a middle-school education (who have a mean of 41.69)	42-66	20/34	59%
Principals lower than those with a PhD/EdD education (who have a mean of 27.24)	4-26	8/34	24%

Note: "Range" figures refer to the range of principal Maintaining-Norms scores meeting the comparison criteria; "Fraction" refers to the fraction of principals in this study who fell within the range and met the comparison criteria; and "Percentage" refers to the percentage of the principals in this study who fell within the range and met the comparison criteria. Comparison data were derived from the Guide for DIT-2 (Bebeau & Thoma, 2003).

This comparison shows that six in ten (59%) principals surveyed in this research employ Maintaining-Norms moral reasoning and decision-making to a greater degree than do individuals with only a middle-school education. Further, only one in four (24%) principals surveyed utilize Maintaining-Norms reasoning and decision-making to a lesser degree than do individuals with PhD and EdD levels of education. These comparisons show principals to be much more heavily weighted toward utilizing Maintaining-Norms schema than would be expected, given their levels of education. So, whereas principals somewhat eschew Personal-Interest schema as expected given their educational levels, they do not employ

Postconventional schema in the reasoning and decision-making vacuum, but rather turn heavily toward the maintenance of norms.

These real-world comparisons hearken back to Palmer (2008) and Starratt (2005) who called upon educational leaders to transform the toxic settings in which they work and to provide responsible leadership in their schools. But, with principals struggling to outperform mere middle- and high-school-educated persons on the DIT-2, what moral leadership can Palmer and Starratt really expect to see?

Types

The DIT-2 classifies respondents as certain “Types.” To make this determination, the DIT-2 assesses whether one is “consolidated” or “transitional” in moral reasoning and decision-making. Those deemed “consolidated” clearly distinguish between the three schema-typed items on the DIT-2 (i.e., Personal-Interest, Maintaining-Norms, and Postconventional), whereas those deemed “transitional” show little evidence of discriminating between two or more of these schemas (Bebeau & Thoma, 2003). Beyond this, the DIT-2 determines the schema preferences of test-takers (i.e., Personal-Interest, Maintaining-Norms, and Postconventional). By combining the consolidated-transitional determination with the schema-preference determination, the DIT-2 produces a hybrid label or “Type” for each of those taking the instrument. The Guide for DIT-2 (Bebeau & Thoma) provides the following definitions for the seven Types:

Type 1: predominant in Personal-Interest schema and consolidated

Type 2: predominant in Personal-Interest schema, but transitional

- Type 3: predominant in Maintaining-Norms schema, but transitional;
where Personal-Interests schema is secondary
- Type 4: predominant in Maintaining-Norms schema and consolidated
- Type 5: predominant in Maintaining-Norms schema, but transitional;
where Postconventional schema is secondary
- Type 6: predominant in Postconventional schema, but transitional
- Type 7: predominant in Postconventional schema and consolidated

Table 18 shows individual counts as to Type for participants in this study, and Table 19 shows means and standard deviations as to Type for the groups in this study.

Table 18: Type Counts for P, AP, and MS

Group	1	2	3	4	5	6	7	Total
Principals	0	3	5	9	7	6	6	36
Assistant Principals	0	0	1	3	0	1	2	7
Master's Students	0	1	1	4	2	8	9	25
Total	0	4	7	16	9	15	17	68

Note: In reasoning and decision-making, Type measures of "1" represent the lowest level (Personal-Interest, consolidated), Type measures of "7" represent the highest level (Postconventional, consolidated), and all other Types lie ordinarily within the range. P refers to principals, AP refers to assistant principals, MS refers to master's students.

Table 19: Type Means and Medians

Group	N	Median	Mean	SD
Principals	36	5.00	4.72	1.54
Assistant Principals	7	4.00	5.00	1.63
Master's Students	25	6.00	5.68	1.44
Totals	68	5.00	5.10	1.56

Note: In reasoning and decision-making, Type measures of "1" represent the lowest level (Personal-Interest, consolidated), Type measures of "7" represent the highest level (Postconventional, consolidated), and all other Types lie ordinarily within the range.

It is noteworthy that nearly all of the participants (57 of 68 for 84%) scored as Type Four or higher, and that eight of the 11 (73%) of those below Type Four were current principals. A Kruskal-Wallis Chi-Square test showed the differences in Type to be nearly significant as $X^2(2) = 5.757$, *asymp sig* = .056. Further insight afforded by a Mann-Whitney Chi-Square analysis revealed a statistically significant difference at the .05 alpha level in Type between principals and master's students, where $Z = -2.411$, $p = .016$, as principals (Type median of five) underperformed master's students (Type median of six). This means that to a statistically significant degree master's students prefer Postconventional schema while principals prefer the maintenance of norms schema. No other statistically significant differences on Type existed between any of the group comparisons.

Aspiring Principals

Participating assistant principals (N=7) and master's students in educational leadership (N=25) were asked to indicate whether becoming a principal was one of their possible aspirations. Of the 32 participants posed this question, 27 responded to it. To this question, 22 of the aggregated assistant principals and master's students indicated that, yes, becoming a principal was one of their possible aspirations, while five indicated that, no, becoming a principal was not one of their possible aspirations. Tables 20, 21, 22, and 23 show the mean DIT-2 sub-scores for those indicating "yes" and "no" to the question on aspirations for the principalship.

Table 20: Aspiring and Non-Aspiring Principals' Postconventional Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Aspiring	22	41.45	14.10
Not Aspiring	5	42.80	15.27
Totals	27	41.70	14.03

Note: Postconventional scores are synonymous with P-scores.

Table 21: Aspiring and Non-Aspiring Principals' Personal-Interest Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Aspiring	22	20.55	8.62
Not Aspiring	5	17.20	6.42
Totals	27	19.93	8.26

Table 22: Aspiring and Non-Aspiring Principals' Maintaining-Norms Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Aspiring	22	33.74	12.64
Not Aspiring	5	35.60	19.57
Totals	27	34.07	13.73

Table 23: Aspiring and Non-Aspiring Principals' N-2 Score Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Aspiring	22	43.72	11.00
Not Aspiring	5	42.91	11.16
Totals	27	43.57	10.82

Independent-samples t-tests and a one-way ANOVA showed no significant differences between these two groups on any of the DIT-2 sub-scores.

Consistent with this study's research design, a comparison between aspiring principals (N=22) can now be made with current principals (N=36). Tables 24, 25, 26, and 27 show the mean DIT-2 sub-scores for principals and aspiring principals participating in this study.

Table 24: Aspiring and Current Principals' Postconventional Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Current Principals	36	34.50	17.38
Aspiring Principals	22	41.45	14.10
Totals	58	37.14	16.44

Note: Postconventional scores are synonymous with P-scores.

Table 25: Aspiring and Current Principals' Personal-Interest Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Current Principals	36	24.00	12.14
Aspiring Principals	22	20.55	8.62
Totals	58	22.69	10.99

Table 26: Aspiring and Current Principals' Maintaining-Norms Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Current Principals	36	38.61	16.64
Aspiring Principals	22	33.72	12.64
Totals	58	36.76	15.31

Table 27: Aspiring and Current Principals' N-2 Score Means

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Current Principals	36	32.77	16.34
Aspiring Principals	22	43.72	11.00
Totals	58	36.93	15.40

Both an independent-samples t-test and a one-way ANOVA showed a significant difference at a .01 alpha level between principals and aspiring principals on N-2 scores, but no significant differences existed across any of the other DIT-2 sub-scores. On the comparison of N-2 scores, $F(1, 56) = 7.719, p = .007$ and $t(56) = 2.778, p = .007$. Therefore, as there were significant differences discussed previously between principals and master's students in educational leadership on P-Scores and N-2 scores, there were also significant differences between principals

and aspiring principals on N-2 scores. This means that principals underperform on the DIT-2 relative to those still aspiring to become principals one day. Thus, in these cases of significant differences, principals have underperformed master's students and aspiring principals in moral reasoning and decision-making as measured by the DIT-2.

Gender

The DIT-2 allows gender comparisons across the sub-scores of moral reasoning and decision-making, as shown for participants in this study in Table 28.

Table 28: Gender Means Across DIT-2 Scores

<u>Group</u>	<u>N</u>	<u>P</u>	<u>P-I</u>	<u>M-N</u>	<u>N-2</u>
Female	47	39.62	21.23	35.49	39.18
Male	22	33.82	22.18	41.18	33.97
<u>Totals</u>	<u>69</u>	<u>37.77</u>	<u>21.54</u>	<u>37.30</u>	<u>37.52</u>

Note: P denotes Postconventional (also synonymous with P-scores); P-I denotes Personal-Interest; M-N denotes Maintaining-Norms; and N-2 denotes N-2 score.

It is noteworthy that women (N=47) outnumbered men (N=22) in this study. And while men and women scored similarly in Personal-Interest schema, women outperformed men in the other three categories. This finding is consistent with DIT-2 studies through the years (Bebeau & Thoma, 2003). Independent-samples t-tests showed the differences in gender scores not to be significant in any of the four measures. The difference in P-scores represented the greatest disparity between the genders, as $t(67) = -1.431, p=.157$.

Religious Orthodoxy Comparisons

The DIT-2 measures religious orthodoxy as determined by issue number ten on the cancer dilemma as to the notion that only God can determine whether or not someone lives or dies (Bebeau & Thoma, 2003). The published Guide for DIT-2 by Bebeau & Thoma indicates that a score of “one” on item ten shows the lowest ranking and importance of religious orthodoxy; a score of “nine” shows the highest ranking and importance of religious orthodoxy; and those in-between scores show relative rankings and importance. Table 29 shows individual counts as to religious orthodoxy for participants in this study, and Table 30 shows means and standard deviations on religious orthodoxy for the groups in this study.

Table 29: Religious Orthodoxy Counts for P, AP, and MS

Group	1	2	3	4	5	6	7	8	9	Tot
Principals	12	2	6	1	1	1	1	1	11	36
Asst. Princ.	0	0	1	2	0	0	0	0	4	7
Master Stud.	3	9	4	2	4	1	1	0	1	25
Totals	15	11	11	5	5	2	2	1	16	68

Note: In reasoning and decision-making, Religious Orthodoxy measures of “1” represent the lowest level (lowest-ranking of importance of religious considerations), Religious Orthodoxy measures of “9” represent the highest level (highest-ranking of importance of religious considerations), and all other Religious Orthodoxies lie ordinarily within the range. P refers to principals, AP refers to assistant principals, MS refers to master’s students.

Table 30: Religious Orthodoxy Means and Medians

Group	N	Median	Mean	SD
Principals	36	3.00	4.53	3.45
Assistant Principals	7	9.00	6.71	2.87
Master’s Students	25	3.00	3.32	2.01
Totals	68	3.00	4.31	3.07

Note: In reasoning and decision-making, Religious Orthodoxy measures of “1” represent the lowest level (lowest-ranking of importance of religious considerations), Religious Orthodoxy measures of “9” represent the highest level (highest-ranking of importance of religious considerations), and all other Religious Orthodoxies lie ordinarily within the range.

From Table 29, it is noteworthy that one-third of principals (12 of 36) operated with the lowest possible religious orthodoxy, nearly another one-third (11 of 36) operated with the highest possible religious orthodoxy, and the remaining nearly one-third of principals (13 of 36) were spread across the other seven levels of religious orthodoxy. While principals were most likely found at one extreme or the other, assistant principals and master's students in educational leadership were more evenly spread across the nine levels of religious orthodoxy measured by the DIT-2. A Kruskal-Wallis Chi-Square test showed the differences in religious orthodoxy to be nearly significant as $X^2(2) = 5.890$, *asymptotic significance* = .053. A closer look afforded by a Mann-Whitney Chi-Square analysis revealed a statistically significant difference at the .01 alpha level in religious orthodoxy between assistant principals and master's students, where $Z = -2.713$, $p = .007$, as assistant principals had a relatively high religious orthodoxy (median of 9.00) and master's students had a relatively low religious orthodoxy (median of 3.00). No other statistically significant differences on religious orthodoxy were found between the groups.

The relevance of religious orthodoxy measures arises in the literature, but cannot be addressed fully, here. In short, Rest, Narvaez, Bebeau, & Thoma (2009) admit that norms based on God's will are automatically never classified as Postconventional, regardless of the reasoning. In addition, Pritchard (1999) highlights the likelihood of religious rationales being scored as Maintaining Norms even when the response to DIT-2 dilemmas could reflect much more sophisticated reasoning. As a result of this scoring controversy, Pritchard concluded that some

Postconventional thinkers score more lowly on the DIT-2 than their actual reasoning sophistication would suggest.

Utilizer Scores

The DIT-2 assesses respondents' consistency in endorsing items as important on one hand, and making action choices on the moral dilemmas on the other hand. In what is called a "Utilizer" score, where a high Utilizer tally represents relative consistency and a low Utilizer result indicates a relative lack of consistency, the DIT-2 seeks to increase the predictability of moral judgment and behavior (Bebeau & Thoma, 2003).

Table 31 shows the DIT-2's Utilizer mean scores and standard deviations for the samples examined in this study.

Table 31: Utilizer Means and Medians

Group	N	Median	Mean	SD
Principals	36	.223	.231	.134
Assistant Principals	7	.116	.122	.064
Master's Students	25	.214	.195	.114
Totals	68	.213	.207	.124

Note: Utilizer scores represent consistency between the importance rank of items and the action choices made on moral dilemmas. The higher the Utilizer score, the more consistent the respondent.

It is noteworthy that principals were the most consistent in their endorsements and action choices. Of course, the Utilizer score does measure the propriety or desirability of endorsements and action choices, but simply measures the consistency (Bebeau & Thoma, 2003). A Kruskal-Wallis Chi-Square test showed the differences in Utilizer scores to be nearly significant as $X^2(2) = 5.947$, asymp sig

= .051. An additional Mann-Whitney Chi-Square analysis revealed a statistically significant difference at the .05 alpha level in Utilizer score between principals and assistant principals, where $Z = -2.434$, $p = .015$, as principals were substantially more consistent in their DIT-2 endorsements and action choices than were assistant principals. No other statistically significant differences on Utilizer scores were found between the groups.

Summary

Master's students in educational leadership employ more Postconventional moral reasoning and decision-making (the highest levels of such on the DIT-2) than do either assistant principals (who finished in the middle of the three groups) or principals. In addition, on composite N-2 scores on the DIT-2, which combine use of Postconventional reasoning and avoidance of Personal-Interest reasoning, master's students also outperformed assistant principals (who again finished in the middle of the three groups) and principals.

Statistically significant differences were found between master's students and current principals on N-2 scores according to both ANOVA ($p = .026$ with a Tukey's $p = .023$) and t-test ($p = .009$) analyses. In addition, there was a borderline significant difference between master's students and current principals on Postconventional P-scores, where a t-test found a significant difference ($p = .048$), but ANOVA testing ($p = .133$ with Tukey's $p = .116$) did not. These findings comport

with Strenth (2013) and Vitton & Wasonga (2009) who previously found current principals struggling on the DIT-2's measure of moral reasoning and decision-making. This study has now advanced this body of knowledge in finding that: current principals underperform masters's student statistically significantly on N-2 measures and borderline significantly on Postconventional P-score measures; and principals also trail assistant principals in mean comparisons on those same two measures.

In comparing principals' moral reasoning and decision-making scores across years of principal experience, only small and statistically insignificant differences were found amongst principals across all DIT-2 sub-scores. Now, discussions and conclusions concerning this research shall be set forth in the fifth and final chapter.

CHAPTER 5: DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

This final chapter provides a thorough discussion of this study's results, and posits conclusions and recommendations. This concluding chapter sets forth across five sections, including: summary of the study, discussion, implications, recommendations for further research, and conclusions.

Summary of the Study

The Problem

To date, no study had analyzed how principals' levels of moral reasoning and decision-making compared across years of experience in the principalship. This study set out to do so. Further, studies had not compared moral reasoning and decision-making along the continuum of the principalship track (i.e., from master's student, to assistant principal, to principal). This study also set out to make those comparisons.

Generally, this study's samples of principals, assistant principals, and master's students in educational leadership represent the populations for the first and second research questions of this study. These same principals with zero to two years of experience, with three to five years of experience, with six to eight years of experience, and with at least nine years of experience represent the populations compared in the third research question.

Specifically, Florida's public, non-virtual, regular-education, K-12 school (charter and non-charter) principals with reported online contact information represented the principal population for this study as disseminated by the Florida Department of Education (2013). This population specifically excludes principals of schools of adult education, alternative education, special education, and vocational and/or technical education. A sample of assistant principals was drawn through referrals made by surveyed principals to represent the population of assistant principals. And, a convenience sample of master's students in educational leadership programs was drawn from a large, public university in Florida to represent the population of master's students in educational leadership.

The Purpose

The purpose of this study was to examine and compare the moral reasoning and decision-making of school principals, assistant principals, and current master's-degree students in educational leadership as measured by the second Defining Issues Test ("DIT-2"). In addition, the moral reasoning and decision-making of principals was compared across years of experience as measured by the DIT-2.

Theoretical Framework

Lawrence Kohlberg's moral development scale (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995) provided the theoretical framework for this study. The scale posits three levels and six stages of moral standing. Level 1, the pre-conventional level associated with children, contains the motivations of stage 1 (fear of

punishment) and stage 2 (opportunism). Level 2, the conventional level associated with most adults, contains the reasoning of stage 3 (approval-seeking) and stage 4 (dutiful). Level 3, the post-conventional level associated with a few highly developed adults, contains the capacity of stage 5 (socially contractual) and stage 6 (principled). Key to Kohlberg's scale were *the reasons why* individuals gauged certain actions to be right, and *the identification of moral principals* being used in moral reasoning (Elm & Weber, 1994, and Baxter & Boblin, 2007). Notably, advancement on the Kohlberg scale relates positively to intelligence, age, and education (Lee & Olszewski-Kubilius, 2006; Windsor & Capel, 1999; and Bruess & Pearson, 2002).

Despite educational leaders' requisitely advanced age and education (positive factors for elevated moral reasoning), Mason & Mudrack (1997) have wondered aloud as to how accommodating schools and districts would ever be toward individuals capable of more complex reasoning in such bureaucratic institutions. Therein lay the great interest in this study—to determine how educational leaders score on the DIT-2 and place on the Kohlberg scale across the years and milestones of the principalship track.

Research Questions

The following research questions and hypotheses guided this study:

1. At what levels of moral reasoning and decision-making are principals, assistant principals, and master's students in educational leadership programs currently operating as measured by the second Defining Issues Test ("DIT-2")?

H₀1: There exists no null hypothesis for this research question of descriptive statistics.

2. Is there a difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2")?

H₀2: There is no difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2").

3. Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2")?

H₀3: There is no difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2").

Methodology

The most common vehicle used in ethics literature to measure moral reasoning and decision-making has been Rest's DIT and DIT-2, whereby assessments are made as to how respondents justify or support their ethical decisions in terms of Kohlberg's stages of moral development (Windsor & Cappel, 1999). In this study, Rest's DIT-2 was employed to measure the moral reasoning and decision-making of principals, assistant principals, and master's students in educational leadership.

This study utilized the online version of the DIT-2 through the Qualtrics survey engine as was compatible with the owner of the DIT-2, the University of Alabama (University of Alabama, 2013). This online version of the DIT-2 is as reliable and valid as its pencil-and-paper predecessor (Xu, Iran-Nejad, & Thoma, 2007). The DIT-2 was scored by the University of Alabama's Office for the Study of Ethical Development. A host of continuous variables were produced from the examination. Most notably, four distinct sub-scores provided indicia of various types of moral reasoning and decision-making. The P-Score indicated the proportion of items upon which the respondent applied Kohlberg's highest levels of moral development—the post-conventional stages five and six. The composite N-2 score represented the degree to which respondents prioritized post-conventional reasoning and de-emphasized items of personal interest. There were also scores identifying the priorities of personal interest ("Stage 23" also called the "Personal Interest Schema Score") and scores indicative of respondents' operating in Kohlberg's stage four ("Stage 4P" also called the "Maintaining Norms Schema Score"). Each of these sub-scores has been utilized to answer the three research questions. Therefore, they are explained in greater detail now.

Findings

This research found statistically significant differences in moral reasoning and decision-making as measured by the DIT-2, where master's students in educational leadership outperformed current principals running public K-12 schools. These statistically significant findings were found with both an ANOVA and

a t-test on measures of N-2 score (i.e., a composite score containing components of preference for Postconventional reasoning and decision-making, and avoidance of Personal-Interest reasoning and decision-making). A borderline significant difference was also found between master's students and underperforming principals in Postconventional moral reasoning and decision-making (i.e., the highest level of moral reasoning and decision-making in Kohlberg's framework and on the DIT-2). A t-test ($p = .048$) found significance, but an ANOVA analysis ($p = .133$ with a Tukey's of $.116$) did not. In addition, those assistant principals and master's students in educational leadership who indicated that becoming a school principal was one of their possible aspirations, as a group, statistically significantly outperformed current principals on N-2 scores.

Discussion

Research Question One

The first research question of this study asked: "At what levels of moral reasoning and decision-making are principals, assistant principals, and master's students in educational leadership programs currently operating as measured by the second Defining Issues Test ("DIT-2")?"

Of the various measures generated from the DIT-2, Postconventional P-scores received scrutiny in this study to determine the degree to which participants were functioning at the highest levels of moral reasoning and decision-making. In

addition, the DIT-2's strongest and most sensitive measure (Bebeau & Thoma, 2003), the N-2 Score, provided insight into participants' preferences for Postconventional reasoning and avoidance of Personal-Interest reasoning (i.e., presumably the most desirable combination for moral reasoning and decision-making). For participating principals, assistant principals, and master's students, the Postconventional mean scores are shown in Table 32, and the N-2 mean scores are shown in Table 35. In addition, those scores measuring Personal-Interest alone are reflected in Table 33, and scores for Maintaining-Norms are found in Table 34.

Table 32: P, AP, and MS Postconventional Means for Discussion

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Principals	36	34.50	17.38
Assistant Principals	7	36.00	15.53
Master's Students	25	42.72	12.75
Totals	68	37.68	15.90

Note: P refers to principals, AP refers to assistant principals, MS refers to master's students. Postconventional scores are synonymous with P-Scores.

Table 33: P, AP, and MS Personal-Interest Means for Discussion

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Principals	36	24.00	12.14
Assistant Principals	7	20.29	7.16
Master's Students	25	19.04	8.83
Totals	68	21.79	10.74

Note: P refers to principals, AP refers to assistant principals, MS refers to master's students.

Table 34: P, AP, and MS Maintaining-Norms Means for Discussion

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Principals	36	38.61	16.64
Assistant Principals	7	38.57	14.32
Master's Students	25	34.64	14.85
Totals	68	37.15	15.67

Note: P refers to principals, AP refers to assistant principals, MS refers to master's students.

Table 35: P, AP, and MS N-2 Score Means for Discussion

<u>Group</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
Principals	36	32.77	16.34
Assistant Principals	7	40.38	13.94
Master's Students	25	42.90	10.93
<u>Totals</u>	<u>68</u>	<u>37.28</u>	<u>14.95</u>

Note: P refers to principals, AP refers to assistant principals, MS refers to master's students.

Comparison of this study's scores can be made with archived data reported in Guide for DIT-2 (Bebeau & Thoma, 2003). On the P-score measure, principals (P-score mean of 34.50) and assistant principals (P-score mean of 36.00) performed at levels comparable to those reached by college juniors (P-score mean of 34.45), while master's students (P-score mean of 42.72) performed at levels between those reached by master-of-science degree holders (P-score mean of 41.06) and those of professional-degree holders (P-score mean of 44.87). On the N-2 measure, principals (mean N-2 of 32.77) again performed at levels comparable to those reached by college juniors (mean N-2 of 32.65); assistant principals (mean N-2 of 40.38) scored at levels comparable to those reached by master-of-science degree holders (mean N-2 of 40.56); and master's students (mean N-2 of 42.90) performed at levels comparable to those between master's of science graduates (mean N-2 of 40.56) and professional-degree holders (mean N-2 of 44.97).

With regard to Types, Table 36 shows that principals and assistant principals predominately maintain norms in moral reasoning, while master's students predominately engage in Postconventional moral reasoning. The Guide for DIT-2 (Bebeau & Thoma, 2003), in pertinent part, defines the Types as follows:

- Type 4: predominant in Maintaining-Norms schema and consolidated
- Type 5: predominant in Maintaining-Norms schema, but transitional;
where Postconventional schema is secondary
- Type 6: predominant in Postconventional schema, but transitional
- Type 7: predominant in Postconventional schema and consolidated

Table 36: Type Means and Medians for Discussion

Group	N	Median	Mean	SD
Principals	36	5.00	4.72	1.54
Assistant Principals	7	4.00	5.00	1.63
Master's Students	25	6.00	5.68	1.44
Totals	68	5.00	5.10	1.56

Note: In reasoning and decision-making, Religious Orthodoxy measures of "1" represent the lowest level (lowest-ranking of importance of religious considerations), Religious Orthodoxy measures of "9" represent the highest level (highest-ranking of importance of religious considerations), and all other Religious Orthodoxies lie ordinarily within the range. P refers to principals, AP refers to assistant principals, MS refers to master's students.

As to research question one, master's students in educational leadership scored highest in the highest level of reasoning and lowest in the lowest level of reasoning as compared to principals and assistant principals. Conversely, principals scored lowest in the highest level of reasoning and highest in the lowest level of reasoning. Assistant principals placed between principals and master's students in these measurements of highest and lowest levels of reasoning. This same order of scores also obtained with regard to composite N-2 scores, which measured affinity for Postconventional reasoning and avoidance of Personal-Interest reasoning.

These results may seem counter-intuitive, as principals, those at the more vocationally accomplished end of the spectrum of participants, scored consistently

below their assistant-principal and master's-student counterparts in moral reasoning and decision-making measurements on the DIT-2. As educational leaders, principals would more likely be expected by educational stakeholders to lead their still aspiring colleagues. Perhaps the complexity and difficulty of the principalship, recounted at length in the chapter two of this dissertation, accounts somewhat for principals' relatively poor performance on the DIT-2.

The data produced by the DIT-2 provide sufficient answers to the first research question of this study. The Postconventional, Personal-Interest, Maintaining-Norms, and N-2 scores allow comparisons of participating principals, assistant principals, and master's students.

These results support Strenth (2013) and Vitton & Wasonga (2009), which measured principal P-Scores at 25.6 and 38.7, respectively, and found a relatively subdued performance by principals on measures of the highest level of moral reasoning and decision-making. This study went further by comparing principals with assistant principals and master's students in educational leadership. This study not only brought assistant principals and master's students into the current research, but also measured their group performances and compared them with their principal counterparts. These particular comparisons present as fresh findings against the backdrop of current literature.

Based on the literature review, these seemingly counter-intuitive results were not a surprise. West, Peck, & Reitzug (2010) have openly wondered how much pressure principals can be expected to endure, especially as these researchers have

found so many distinct workplace stressors in the daily lives of current principals. Lynch (2012) considered it uncanny the number of responsibilities now upon the shoulders of principals. And, as principled moral reasoning and decision-making require more time and may result in more backlash (Mason & Mudrack, 1997), the principalship has been more and more saturated in various wastes of time (Theoharis, 2008; Starratt, 2005; and Borish-Schacter, 2008). In this current study, the research design, sampling, and instrumentation allowed for testing and analysis sensitive enough to yield results both consistent with previous studies regarding principals and unveiling of new findings regarding other educational populations (i.e., assistant principals and master's students in educational leadership).

Research Question Two

The second research question of this study asked: "Is there a difference between principals, assistant principals, and master's students in educational leadership programs in moral reasoning and decision-making as measured by the second Defining Issues Test ("DIT-2")?"

Discussion of the first research question has established that principals, assistant principals, and master's students did not fare equally in DIT-2 sub-scores. This second question probed whether or not the differences seen in the scores were statistically significant.

Table 37 shows the F-statistics and significance levels for each of the four DIT-2 reasoning measurements for principals, assistant principals, and master's students. This one-way ANOVA test shows statistically significant differences at the

.05 alpha level between the sample groups only on the N-2 measurement, where $F(2, 65) = 3.861, p = .026$. A Tukey's post-test revealed the only significant difference on N-2 score (those composite scores combining use of Postconventional reasoning and avoidance of personal-interest reasoning) to exist between principals and master's students, where Tukey's significance level equaled .023. These results showed master's students to be statistically significantly outperforming principals in this composite N-2 measure.

Table 37: ANOVA on P, AP, and MS DIT-2 Scores for Discussion

<u>DIT-2 Sub-Score</u>	<u>F</u>	<u>Sig.</u>
Postconventional	2.080	.133
Personal Interest	1.686	.193
Maintaining Norms	0.498	.610
<u>N-2 Composite</u>	<u>3.861</u>	<u>.026</u>

Note: P refers to principals, AP refers to assistant principals, MS refers to master's students. Tukey's post-test on N-2 scores shows the significant difference exists between principals and master's students (with a Tukey's significance level of .023).

With the varying sizes of the three sample groups (i.e., N=36, 25, and 7), independent-sample t-tests were also conducted for those comparisons where mean differences were most remarkable. In the t-test of principals and master's students on P-scores, $t(59) = -2.130, p = .048$, highlighting a significant difference at the .05 alpha level. And, in the t-test of principals versus master's students on N-2 scores, $t(59) = -2.901, p = .009$, marking a significant difference at the .01 alpha level.

Thus, as to research question two, master's students in educational leadership scored statistically significantly higher than active principals in Postconventional reasoning (the highest level of reasoning signified by the P-score)

according to t-test assessments (where $p = .048$), but not according to the ANOVA (where $p = .133$ with a Tukey's $p = .116$). And, master's students in educational leadership scored statistically significantly higher than active principals in N-2 score, which measures employment of Postconventional reasoning (the highest level of reasoning) and avoidance of Personal-Interest reasoning (the lowest level of reasoning), as seen with both the ANOVA (where $p = .026$ with Tukey's post-test $p = .023$) and the t-test (where $p = .009$).

Again, these results may surprise in that the more educationally and experientially accomplished principals statistically significantly underperform their master's-student counterparts in moral reasoning and decision-making measurements on the DIT-2. As educational leaders, principals would likely be expected to outperform those at lower levels on the principalship track, and not to lag those still aspiring colleagues by wide and significant margins. The finding of significance points to some real difference among the samples beyond mere chance. Hence, this study provides a timely opportunity for educational policymakers, schools, leaders, and all stakeholders to consider the pressure-cooker of the principalship and the underperforming environment to which principals may be subjected despite their relatively elevated positions.

These data, at this stage, may in fact serve to open and serve more questions than they answer. Does compliance, with its rules, regulations, and constraints of the principalship, result in less-reasoned leadership consistent with less-reasoned performances on the DIT-2? As DIT-2 performance rises with education, what

happened with principals? Does the job simply not afford the luxury of more sophisticated reason and thought? With relatively high Maintaining-Norms scores, do principals aim largely to keep the peace above all else? Does the principalship tend to demand this? With principals scoring highest among the three groups in Personal-Interest schema, does the principalship demand a somewhat selfish, job-maintenance, stay-out-of-trouble outlook, attitude, and rationale? In a bureaucracy as sizable as school districts and school sites, does not Postconventional thinking provide a wrench in the works, only to be frowned upon by principal bosses? These questions cannot be answered fully by this study or these data. But they do provide fodder for follow-up studies aiming to pinpoint the causes and/or reasons for three consecutive studies showing principals performing poorly on the DIT-2.

The data produced by the DIT-2 along with the one-way ANOVA testing and independent-samples t-tests do provide sufficient findings to answer the second research question of this study. The various findings of statistically significant differences between over-performing master's students and under-performing principals in Postconventional and N-2 scoring answers the inquiry as to whether any differences existed between the groups of educators in moral reasoning and decision-making.

These results support Strenth (2013) and Vitton & Wasonga (2009), who found samples of principals struggling with Postconventional and N-2 scoring on the DIT-2. This study introduces the statistically significant difference between

master's students and underperforming principals, and extends the knowledge base with regard to principal's historically dampened performance on the DIT-2.

The significant differences between principals and their vocational inferiors (i.e., master's students and aspiring principals) should echo alarming sentiments across the professional literature. R.D. Ramsey has found that most school leaders actually only function as mere managers (Msila, 2012) and not as actual *leaders*. Similarly, Theoharis (2008) sees principals as technical bureaucrats and lockstep managers of the status quo. Despite a poll of school leaders citing the provision of vision and moral leadership as school leaders' number one responsibility (Orem, 2002), principals in reality find themselves making decisions on the fly (Pauken, 2012). This backdrop provides key insight into the answers of the first two research questions of this study, where principals were found to have failed to keep pace with their pre-principal colleagues.

Research Question Three

The third research question of this study asked: "Is there a difference in moral reasoning and decision-making between principals across various years of experience as measured by the second Defining Issues Test ("DIT-2")?"

This third research question, in light of this dissertation's answers to the first two research questions, ponders the following: as current principals significantly underperform current master's students in educational leadership, where on the road to or in the principalship did current principals backslide in moral reasoning and decision-making so as to underperform master's students following in their

educational footsteps? By examining principals' performance on the DIT-2 across years of experience in the principalship, this study sought to identify the chronological point at which principals tended to slide in moral reasoning and decision-making scores on the DIT-2.

Tables 38 to 41 show that there were only small mean differences between principals across four groupings of experience (i.e., 0-2 years, 3-5 years, 6-8 years, and 9-plus years), and Table 42 shows that a one-way ANOVA revealed none of the differences to be statistically significant. Table 43 shows one-way ANOVA results for a comparison of principals across each of the 25 years of experience (rather than comparing multi-year groupings) sampled in this study. Even the year-by-year analysis showed no significant differences across the years of principal experience in moral reasoning and decision-making.

Table 38: Principal Experience and Postconventional Means for Discussion

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	33.50	14.49
3-5 Years	10	33.20	23.00
6-8 Years	5	34.80	21.24
9+ Years	11	32.36	11.86
Totals	34	33.24	16.93

Note: Postconventional scores are synonymous with P-Scores.

Table 39: Principal Experience and Personal-Interest Means for Discussion

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	23.50	5.42
3-5 Years	10	26.40	19.11
6-8 Years	5	24.00	6.78
9+ Years	11	21.64	11.59
Totals	34	23.82	12.48

Table 40: Principal Experience and Maintaining-Norms Means for Discussion

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	39.75	14.40
3-5 Years	10	38.00	20.55
6-8 Years	5	40.00	16.61
9+ Years	11	41.82	14.30
Totals	34	39.94	16.03

Table 41: Principal Experience and N-2 Score Means for Discussion

<u>Experience</u>	<u>N</u>	<u>Mean</u>	<u>SD</u>
0-2 Years	8	29.17	13.84
3-5 Years	10	31.20	21.96
6-8 Years	5	35.57	15.56
9+ Years	11	32.28	13.63
Totals	34	31.72	16.18

Table 42: DIT-2 ANOVA on Grouped Principal Experience for Discussion

<u>DIT-2 Sub-Score</u>	<u>F</u>	<u>Sig.</u>
Postconventional	0.022	.995
Personal Interest	0.239	.868
Maintaining Norms	0.091	.964
N-2 Composite	0.155	.925

Note: "Grouped Principal Experience" refers to comparison of blocks of principal experience (i.e., 0-2 years, 3-5 years, 6-8 years, and 9-plus years).

Table 43: DIT-2 ANOVA on Ungrouped Principal Experience for Discussion

<u>DIT-2 Sub-Score</u>	<u>F</u>	<u>Sig.</u>
Postconventional	0.983	.503
Personal Interest	0.411	.952
Maintaining Norms	1.468	.215
N-2 Composite	0.605	.780

Note: "Ungrouped Principal Experience" refers to a comparison of principals across each and all years of experience (i.e., 0-25 years) and not across groups of years of experience.

While data from this study support the existence of general uniformity of principal performance on the DIT-2, they do not foreclose the possibility of different moral reasoning and decision-making across years of experience in the

principalship. This study sampled only 36 principals, and spread across the four experiential groups for purposes of this third research question, the groups contained only five, eight, ten, and eleven participants each. Significant differences would be hard to show with such sample sizes. Perhaps larger sample sizes may shed a brighter light on any year-by-year differences in principals' performance on the DIT-2. However, the similar group means in this research show that the differences in moral reasoning and decision-making do not so much exist across the years in the principalship, but rather, between the principalship itself and master's students as a separate group, and those aspiring to be principals as yet another separate group.

So what happens between a master's education and the principalship? What happens between the assistant principalship and the principalship? This research points to those time frames and moments of career advancement as the points in which moral reasoning and decision-making decline. As with research question two, this third research question perhaps serves to prompt more questions than answers. As principals find themselves ushered into higher pay, greater power, and increased prestige, do Personal-Interest and Maintaining-Norms preferences seek to preserve this vocational "arrival"? Are the more sophisticated moral reasoning and decision-making of master's students and aspiring principals too costly to carry into the principalship? Does the job change the student and aspirant? Or do the student and the aspirant willingly yield to maintain a satisfying status? Though this

research was never designed to answer these questions, its significant and startling findings do now pose them before future researchers to investigate further.

The data produced by the DIT-2 provide sufficient findings to answer the third research question of this study. There is no statistically significant difference between principals across years of experience in moral reasoning and decision-making as measured by the DIT-2.

These results extend the knowledge base provided by Strenth (2013) and Vitton & Wasonga (2009) by showing that consistently low-performing principals see their moral reasoning and decision-making scores drop not across years of the principalship but at some point when stepping into the principalship.

Implications for Practice

Manifold are the implications of this study. How should lawmakers, school districts, schools of educational leadership, and other stakeholders (e.g., communities, parents, students, teachers) respond? If aspiring principals outperform acting principals in moral reasoning and decision-making, has not something gone awry in the public K-12 system? If master's students still learning educational leadership in the classroom are already outperforming the leaders they hope to join and/or replace, then has the system managed to regress rather than progress? Each educational realm must grapple with this research and its findings. After all, principals remain the key players in school climates and they must operate

from actionable values in order to succeed (Quick & Normone, 2004; Mirk, 2009). And in their endeavors to lead schools, principals must first claim their cores, find their voices, develop their visions, and consciously align their actions (Dufresne & McKenzie, 2009). In light of the results reported in this dissertation and seen in Strenth (2013) and Vitton & Wasonga (2009), the requirements outlined in the literature for strong principalships seem unattainable at current rates and trends, and under current pressures and policies.

Lawmakers

Legislatures, governors, and state departments of education must lead others in re-examining their public K-12 systems. The incredibly complex, difficult, and compliance-driven principalships (West, Peck, & Reitzug, 2010) may be selecting and rewarding leaders whose moral reasoning and decision-making have dipped significantly in order to fit into and hold onto the apex position at schools.

Lawmakers must consider whether the principalship repels Postconventional leaders and whether it attracts Maintaining-Norms leaders instead. Alternatively, but not any more encouraging, lawmakers must consider whether the principalship actually transforms those formerly Postconventional reasoners into norm maintainers. In either case, the powers that be must fix this dynamic whereby leaders of public schools are the lowest-level reasoners and decision-makers in the educational-leadership spectrum. Whether the problem is pressure, or lack of time to think things through, or the demands of compliance, or fear of termination or demotion, or lack of autonomy, lawmakers must figure out how to boost moral

reasoning and decision-making levels of principals at least to the level of those supposedly chasing after principals in the hierarchy of school leadership.

School Districts

School boards and superintendents must also seek and find ways to get their principals functioning at moral reasoning and decision-making levels commensurate with the reasonable expectations of school and community leaders. School districts should sound the alarm (at least internally), and undertake effective action research and qualitative research to discern how and why the principals struggle so consistently and now predictably in measures of moral reasoning and decision-making. Would relieving pressures, hiring outside-the-box candidates (e.g., capable candidates from non-traditional backgrounds), and infusing the principalship with new and refreshing autonomies and votes of confidences get district principals up and running with master's students on the DIT-2? Whatever it takes, public school districts owe it to their many stakeholders to employ and support leaders who would actually lead and not simply maintain the status quo, or worse yet, consider their own interests first and foremost.

Schools of Educational Leadership

Schools and colleges of educational leadership are well situated to address preemptively the abrupt fall-off in moral reasoning and decision-making scores in those who ascend to the principalship. Studies show that classes in morality and ethics readily boost DIT-2 performances (Pauken, 2012). Warning and preparation

regarding the point at which DIT-2 scores plummet (i.e., when crossing the threshold from being an aspiring principal to becoming an actual principal) would serve eventual principals well in weathering the multiple storms that militate against postconventional leadership. As schools of educational leadership enjoy ready access to aspiring educational leaders, they are well positioned to provide this indispensable education to its leadership students. Without such an acknowledgment and action, schools of educational leadership will likely continue to see DIT-2 scores of their relatively high-scoring students drop off as those students cross thresholds to principalships. Without needing an act of the legislature, a governor's signature, or a school district's consistent reshaping of culture, colleges of educational leadership could quickly and effectively implement curricular supplements and enhancements that could better prepare their students and bring the larger educational community toward the cause of a new system where school leaders would not lag their underlings in moral reasoning and decision-making.

School Stakeholders

If communities, parents, and students were informed of this research and its stark results, public schools could likely suffer even more popular backlash, a continued drain of enrollment, and additional slides in reputation. After a while, it could prove difficult for communities to rally around norms maintenance and compliance. Parents are not likely to defer to principals in an age where principals' reasoning and decision-making hardly impress or lead in any demonstrative way.

And a system in which students and teachers are subjected to a leadership of lower-level reasoning cannot likely endure much more scrutiny or elapsed time. And what must teachers think about principals who reason at lower levels than their assistant principals, and at significantly lower levels than those in master's programs still hoping to reach the principalship one day? In all cases, the public K-12 dynamic seems unsustainable if principals shall not be comprehensive leaders in fact, but only in title.

Implications of this research may also prompt public K-12 stakeholders to examine Kohlberg's research as to which factors actually improve moral reasoning. For example, Kohlberg considers "quality experiences" to militate in favor of advanced moral reasoning and judgment (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995). The accounts of the principalship shared in the second chapter of this dissertation seem contrary to a position immersed in "quality experiences." This angle alone would theoretically go far in improving principals' standing amidst Kohlberg's levels and stages, and upon Rest's DIT-2, and should thus be considered and implemented by stakeholders.

Recommendations for Further Research

In light of this study's successful design and statistically significant findings, further advancement of this research remains to be undertaken by others. Progress

in this research could improve upon the design used here, and could look more deeply into the problems exposed in this study.

This study could be improved by obtaining larger sample sizes and by employing mixed methods. Though over 2,500 qualified subjects were contacted and invited to participate in this research, only 69 actually fully completed the DIT-2 and were considered study participants. Further research could survey educational leaders nationwide and/or worldwide. It could also seek and obtain permissions from school districts or other gateway entities to gain wider access to would-be participants. Further, more aggressive sampling methods, such as providing participants a free lunch and a sit-down online DIT-2 survey at educational conventions would likely generate a larger return rate. In addition to sampling improvements, future studies should utilize mixed methods, combining the DIT-2 survey with a complementary qualitative component. Respondents should be interviewed and afforded the opportunity to explain their situations, DIT-2 performances, positions, pressures, and any number of measurable attributes that may be found to be mediating variables on their DIT-2 scores.

In an age of compliance and organizational socialization for school leaders (Armstrong, 2010), what impact will developments such as the elimination of educators' tenure have upon principals? Future research could investigate the impacts, positive or negative, that these and other policies have upon principals' moral reasoning and decision-making. In this, pathways to accommodate site

leaders' primary charge to lead school cultures (Owens and Valesky, 2011) can be developed.

Additional independent variables are worthy of study. Future research should include private school principals and assistant principals, for example. Does less governmental control matter in school leaders' moral reasoning and decision-making scoring? In addition, those possible explanations for principal drop-off on the DIT-2 could be examined and quantified as independent variables. For instance, pressure ratings, autonomy scores, elements of compliance, and measures of fear, frustration, confidence, and satisfaction could be self-reported by respondents on a researcher's scale to investigate whether these relate to DIT-2 scores as plausibly suspected.

In addition to DIT-2 scores, additional dependent variables should be considered and researched. Survey ratings of principals by students, parents, teachers, and administrators could provide a clearer picture as to whether DIT-2 scores relate to how nearby stakeholders assess their principals. This would not only supplement the DIT-2 as a dependent variable, but would also supplement the DIT-2 in confirming the scope of any practical evidence associated with principals' low-scoring moral reasoning and decision-making.

As this study shows a significant change in moral reasoning and decision-making occurring at the point of crossover from master's student and/or aspiring principal to principal, a longitudinal study of participants would be ideal. If participants were tracked and tested from high school or college, through teaching

careers, administrative moves, educational advancements, into the principal's chair and then across the years of holding that position, the data would likely show much more definitively as to when and where DIT-2 scores fluctuate, and reach significant changes. This design and study would be ideal, especially if combined with the other improvements and recommendations made for further research.

Conclusions

In the principalship, moral leadership is incalculable (Shields, 2004). And though leadership anywhere stands as a moral task, such is especially the case in education (Quick & Normone, 2004). And while educational scholars Sergiovanni and Barth have tried to help educators to see and to implement moral leadership in the schools (Smith, 1999), the principalship has become a place with an environment where even new arrivals do not plan to remain for more than five to ten years (Soho & Barnett, 2010).

This study examined and compared principals', assistant principals', and master's students' moral reasoning and decision-making levels as measured by the DIT-2. Three research questions were posed, and all three were answered.

Descriptive statistics answered the first research question as to the level of moral reasoning and decision-making of the three educational-leader groups. Master's students outperformed both principals and assistant principals in Postconventional moral reasoning and decision-making (the DIT-2's highest level of

moral reasoning and decision-making), and in avoiding Personal-Interest schema (the lowest level of performance on the DIT-2). On both measures, assistant principals also outperformed principals.

Inferential statistics (i.e., one-way ANOVA and independent-samples t-tests) answered the second research question as to the significance of any differences found in the descriptive statistical treatments performed in response to the first research question. Master's students scored statistically significantly higher than principals in composite N-2 scoring, which is a measure based upon use of Postconventional reasoning and avoidance of personal interest reasoning. In addition, a borderline significant difference was found between overperforming master's students and principal counterparts on Postconventional reasoning, where a t-test showed a significant difference ($p = .048$), but an ANOVA analysis did not (where $p = .133$ with a Tukey's $p = .116$).

Inferential statistics (i.e., one-way ANOVA) were utilized to answer the third research question as to whether principals scored differently in moral reasoning and decision-making across the years of the principalship. Small mean differences on DIT-2 sub-scores existed between principals of varying years of experience, and none of those differences reached statistical significance.

This research supports Kohlberg's theory of moral development, especially in that the lack of quality experiences (Kohlberg, 1981; Kohlberg, 1984; Wren, 1995) seemingly tasted by those in the principalship (Lynch, 2012) would work against their moral reasoning and decision-making scores on the DIT-2. Those similarly

educated and yet much less pressured (e.g., assistant principals and master's students), do not seem to experience this quality-experience dearth, and perhaps thereby surpass their principal counterparts on the DIT-2.

Beyond the literature cited and the research questions answered in this dissertation, additional analyses of this study's data further revealed serious trouble in the principalship. Current principals' failure to reach the higher levels of Postconventional reasoning and decision-making bodes extraordinarily poorly for those students and stakeholders looking toward principals to lead the way. More than half (53%) of principals scored below Postconventional mean scores of persons with only 10th to 12th grade educations (33.13 P-scores). This makes one wonder how principals can be expected to lead schools where many students are likely outperforming the principal in moral reasoning and decision-making. Less than one-fifth (18%) of principals measured up in Postconventional reasoning with the means of fellow PhD- and EdD-degree holders (50.69 P-scores). This makes one wonder and worry how and why principals particularly have failed to live up to DIT-2 performance expectations set for those so highly educated. Gaining respect and making an impact in their communities will likely require principals to employ more Postconventional reasoning and decision-making commensurate with their calling, training, and education. These Postconventional data should sound alarms for any concerned about *all* schools, for more than half of them are being led by underachieving reasoners according to the DIT-2 and its archived data.

Further, six in ten principals (59%) prefer the maintenance of norms in their reasoning and decision-making to a degree beyond that preferred by those with only a 7th to 9th grade education. What has happened to principals that they flee not to Postconventional reasoning, but to Maintaining-Norms reasoning? Why do principals, stand-alone leaders of schools and shapers of culture and climate (Owens & Valesky, 2011), play it safer than those who dropped out of school in or immediately after middle school? In addition, less than one in four (24%) principals scores below the PhD/EdD Maintaining-Norms mean (of 27.24). While other highly educated persons migrate toward Postconventional reasoning and decision-making, why have principals particularly parked their reasoning in the maintenance of norms? Compliance, fear, regulation, bureaucracy, and dozens of more reasons fill the literature. For now, for purposes of this study, it can be said that until principals utilize Postconventional reasoning and decision-making, they will greatly lag their highly educated cohorts, mostly lag their students and other stakeholders, and continue to be unable to move the needle in leading their schools toward rejuvenated cultures and thriving climates.

Palmer (1998) did not mince words when he warned that educational leaders who fail to honor the deepest questions in their lives reap schools mired in triviality, banality, and boredom. Given that *principal aspirants* outperform *existing principals* in moral reasoning and decision-making, public K-12 educational stakeholders must rethink and reconfigure the realities that befall occupants of the principalship in order to attempt to ensure that those at the highest levels of school

leadership are in fact those also operating at the highest levels of sophisticated reasoning and decision-making. Without that honest introspection and appropriate action, the crises in K-12 public education (e.g., student flight, principal burnout, and Palmer's warnings) will likely only intensify.

APPENDIX A:
PERMISSION TO USE DEFINING ISSUES TEST TWO (DIT-2)

**OFFICE for the study of
ETHICAL DEVELOPMENT**

University of Minnesota and University of Alabama

Muriel Bebeau, Executive Director / 206 Burton Hall / 178 Pillsbury Drive SE / Minneapolis, MN 55455 / (612) 624-0876 / FAX: (612) 624-8241
Steve Thoms, Research Director / 307 Carmichael Hall / 520 Colonial Drive / Tuscaloosa, AL 35487 / (205) 348-4571 / FAX: (205) 348-0683

Friday, July 26, 2013

Mr. Trent Ling

Dear Mr. Ling:

I grant you permission to use the Defining Issues Test in your current study. If you are using DIT-1 (1979) and making copies of the test items for hand scoring, please include the copyright information on each copy (e.g., Copyright, James Rest, 1979, All Rights Reserved).

If you are using the DIT-2 (1998), you must use the Center's scoring service.

I also grant you permission to reprint the Defining Issues Test as an appendix in your dissertation or report for publication. This includes the stories and test items, but not the scoring key or stage designations for specific items. Please make sure that the copy contains the usual copyright information. I understand that copies of your dissertation may be duplicated for distribution.

Please send me a copy of the report of your study. Thanks for your interest in the Defining Issues Test.

Sincerely,

Muriel Bebeau, Executive Director
Professor
Educational Psychology

APPENDIX B:
DISSERTATION PROPOSAL APPROVAL

30 days
to complete
approval due
8/17/13

University of Central Florida

Approved
8/17/13
[Signature]

College of Education

DISSERTATION PROPOSAL APPROVAL

Permission to Continue with Dissertation

Date 07/17/2013

Name Trent W. Ling

PID: _____

Program Major: Executive Ed.D. in Ed. Leadership Degree: EdD PhD

Working Title of Dissertation "An Examination of School Principals' Moral Reasoning and Decision-Making Across Years of Experience"

This student is hereby certified as having met all requirements to continue dissertation research.

Candidacy admission date 07/17/2013

Committee Member Signature

Committee Member Signature

Committee Member Signature

Committee Member Signature (Outside COE)

Dissertation Chair Signature

Doctoral Program Coordinator Signature

Date 07/17/2013

APPENDIX C:
INSTITUTIONAL REVIEW BOARD APPROVAL



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138

To: Trent Ling

Date: January 16, 2014

Dear Researcher:

On 1/16/2014, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination
Project Title: AN EXAMINATION OF SCHOOL PRINCIPALS' MORAL REASONING AND DECISION-MAKING ALONG THE PRINCIPALSHIP TRACK AND ACROSS YEARS OF EXPERIENCE
Investigator: Trent Ling
IRB Number: SBE-13-09919
Funding Agency:
Grant Title:
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 01/16/2014 03:16:22 PM EST

A handwritten signature in black ink that reads "Joanne Muratori".

IRB Coordinator

APPENDIX D:
DEFINING ISSUES TEST TWO (DIT-2)

DIT-2

1. This questionnaire is concerned with how you define the issues in a social problem. Several stories about social problems will be described. After each story, there will be a list of questions. The questions that follow each story represent different issues that might be raised by the problem. In other words, the questions/issues raise different ways of judging what is important in making a decision about the social problem. You will be asked to rate and rank the questions in terms of how important each one seems to you.

EXAMPLE of the task. Imagine you are about to vote for a candidate for the Presidency of the United States. Before you vote, you are asked to rate the importance of five issues you could consider in deciding who to vote for. Rate the importance of each item (issue) by checking the appropriate box.

1. Rate the following issues in terms of importance.

	Great (1)	Much (2)	Some (3)	Little (4)	No (5)
1. Financially are you personally better off now than you were four years ago?	<input type="radio"/>				
2. Does one candidate have a superior moral character?	<input type="radio"/>				
3. Which candidate stands the tallest?	<input type="radio"/>				
4. Which candidate would make the best world leader?	<input type="radio"/>				
5. Which candidate has the best ideas for our country's internal problems, like crime and health care.	<input type="radio"/>				

Note. Some items may seem irrelevant or not make sense (as in item #3). In that case, rate the item as "NO". After you rate all of the items you will be asked to RANK the top four items in terms of importance. Note that it makes sense that the items you RATE as most important should be RANKED as well. So if you only rated item 1 as having great importance you should rank it as most important.

2. Consider the 5 issues above and rank which issues are the most important.

	1	2	3	4	5
Most important item (1)	<input type="radio"/>				
Second most important item (2)	<input type="radio"/>				
Third most important item (3)	<input type="radio"/>				
Fourth most important item (4)	<input type="radio"/>				

Again, remember to consider all of the items before you rank the four most important items and be sure that you only rank items that you found important. Note also that before you begin to rate and rank items you will be asked to state your preference for what action to take in story. Thank you and you may begin the questionnaire!

Famine: The small village in northern India has experienced shortages of food before, but this year's famine is worse than ever. Some families are even trying to feed themselves by making soup from tree bark. Mustaq Singh's family is near starvation. He has heard that a rich man in his village has supplies of food stored away and is hoarding food while its price goes higher so that he can sell the food later at a huge profit. Mustaq is desperate and thinks about stealing some food from the rich man's warehouse. The small amount of food that he needs for his family probably wouldn't even be missed.

3. What should Mustaq Singh do? Do you favor the action of taking food?

- Should take the food (1)
- Can't decide (2)
- Should not take the food (3)

4. Rate the following issues in terms of importance.

	Great (1)	Much (2)	Some (3)	Little (4)	No (5)
1. Is Mustaq Singh courageous enough to risk getting caught for stealing?	<input type="radio"/>				
2. Isn't it only natural for a loving father to care so much for his family that he would steal?	<input type="radio"/>				
3. Shouldn't the community's laws be upheld?	<input type="radio"/>				
4. Does Mustaq Singh know a good recipe for preparing soup from tree bark?	<input type="radio"/>				
5. Does the rich man have any legal right to store food when other people are starving?	<input type="radio"/>				
6. Is the motive of Mustaq Singh to steal for himself or to steal for his family?	<input type="radio"/>				
7. What values are	<input type="radio"/>				

going to be the basis for social cooperation?					
8. Is the epitome of eating reconcilable with the culpability of stealing?	<input type="radio"/>				
9. Does the rich man deserve to be robbed for being so greedy?	<input type="radio"/>				
10. Isn't private property an institution to enable the rich to exploit the poor?	<input type="radio"/>				
11. Would stealing bring about more total good for everybody concerned or wouldn't it?	<input type="radio"/>				
12. Are laws getting in the way of the most basic claim of any member of a society?	<input type="radio"/>				

5. Consider the 12 issues above and rank which issues are the most important.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	8 (8)	9 (9)	10 (10)	11 (11)	12 (12)
Most important item (1)	<input type="radio"/>											
Second most important item (2)	<input type="radio"/>											
Third most important item (3)	<input type="radio"/>											
Fourth most important item (4)	<input type="radio"/>											

Reporter: Molly Dayton has been a news reporter for the Gazette newspaper for over a decade. Almost by accident, she learned that one of the candidates for Lieutenant Governor for her state, Grover Thompson, had been arrested for shoplifting 20 years earlier. Reporter Dayton found out that early in his life, Candidate Thompson had undergone a confused period and done things he later regretted, actions which would be very out-of-character now. His shoplifting had been a minor offense and charges had been dropped by the department store. Thompson has not only straightened himself out since then, but built a distinguished record in helping many people and in leading constructive community projects. Now, Reporter Dayton regards Thompson as the best candidate in the field and likely to go on to important leadership positions in the state. Reporter Dayton wonders whether or not she should write the story about Thompson's earlier troubles because in the upcoming close and heated election, she fears that such a news story could wreck Thompson's chance to win.

6. Do you favor the action of reporting the story?
- Should report the story (1)
 - Can't decide (2)
 - Should not report the story (3)

7. Rate the following issues in terms of importance.

	Great (1)	Much (2)	Some (3)	Little (4)	No (5)
1. Doesn't the public have a right to know all the facts about all the candidates for office?	<input type="radio"/>				
2. Would publishing the story help Reporter Dayton's reputation for investigative reporting?	<input type="radio"/>				
3. If Dayton doesn't publish the story wouldn't another reporter get the story anyway and get the credit for investigative reporting?	<input type="radio"/>				
4. Since voting is such a joke anyway, does it make any difference what reporter Dayton does?	<input type="radio"/>				
5. Hasn't Thompson shown in the past 20 years that he is a better person than his earlier days as a shop-lifter?	<input type="radio"/>				

6. What would best service society?	<input type="radio"/>				
7. If the story is true, how can it be wrong to report it?	<input type="radio"/>				
8. How could reporter Dayton be so cruel and heartless as to report the damaging story about candidate Thompson?	<input type="radio"/>				
9. Does the right of "habeas corpus" apply in this case?	<input type="radio"/>				
10. Would the election process be more fair with or without reporting the story?	<input type="radio"/>				
11. Should reporter Dayton treat all candidates for office in the same way by reporting everything she learns about them, good and bad?	<input type="radio"/>				
12. Isn't it a reporter's duty to report all the news	<input type="radio"/>				

regardless of the circumstances?					
----------------------------------	--	--	--	--	--

8. Consider the 12 issues you rated above and rank which issues are the most important.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	8 (8)	9 (9)	10 (10)	11 (11)	12 (12)
Most important item (1)	<input type="radio"/>											
Second most important item (2)	<input type="radio"/>											
Third most important item (3)	<input type="radio"/>											
Fourth most important item (4)	<input type="radio"/>											

School Board: Mr. Grant has been elected to the School Board District 190 and was chosen to be Chairman. The district is bitterly divided over the closing of one of the high schools. One of the high schools has to be closed for financial reasons, but there is no agreement over which school to close. During his election to the School Board, Mr. Grant had proposed a series of "Open Meetings" in which members of the community could voice their opinions. He hoped that dialogue would make the community realize the necessity of closing one high school. Also he hoped that through open discussions, the difficulty of the decision would be appreciated, and that the community would ultimately support the school board decision. The first Open Meeting was a disaster. Passionate speeches dominated the microphones and threatened violence. The meeting barely closed without fist-fights. Later in the week, school board members received threatening phone calls. Mr. Grant wonders if he ought to call off the next Open Meeting.

9. Do you favor calling off the next Open Meeting?

- Should call off the next open meeting (1)
- Can't decide (2)
- Should not call off the next open meeting (3)

10. Rate the following issues in terms of importance.

	Great (1)	Much (2)	Some (3)	Little (4)	No (5)
1. Is Mr. Grant required by law to have Open Meetings on major school board decisions?	<input type="radio"/>				
2. Would Mr. Grant be breaking his election campaign promises to the community by discontinuing the Open Meetings?	<input type="radio"/>				
3. Would the community be even angrier with Mr. Grant if he stopped the Open Meetings?	<input type="radio"/>				
4. Would the change in plans prevent scientific assessment?	<input type="radio"/>				
5. If the school board is threatened, does the chairman have the legal authority to protect the Board by making decisions in closed	<input type="radio"/>				

meetings?					
6. Would the community regard Mr. Grant as a coward if he stopped the open meetings?	<input type="radio"/>				
7. Does Mr. Grant have another procedure in mind for ensuring that divergent views are heard?	<input type="radio"/>				
8. Does Mr. Grant have the authority to expel troublemakers from the meetings or prevent them?	<input type="radio"/>				
9. Are some people deliberately undermining the school board process by playing some sort of power game?	<input type="radio"/>				
10. What effect would stopping the discussion have on the community's ability to handle controversial issues in the	<input type="radio"/>				

<p>future?</p> <p>11. Is the trouble coming from only a few hotheads, and is the community in general really fair-minded and democratic?</p> <p>12. What is the likelihood that a good decision could be made without open discussion from the community?</p>	<input type="radio"/>				
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

11. Consider the 12 issues you rated above and rank which issues are the most important.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	8 (8)	9 (9)	10 (10)	11 (11)	12 (12)
Most important item (1)	<input type="radio"/>											
Second most important item (2)	<input type="radio"/>											
Third most important item (3)	<input type="radio"/>											
Fourth most important item (4)	<input type="radio"/>											

Cancer: Mrs. Bennett is 62 years old, and in the last phases of colon cancer. She is in terrible pain and asks the doctor to give her more pain-killer medicine. The doctor has given her the maximum safe dose already and is reluctant to increase the dosage because it would probably hasten her death. In a clear and rational mental state, Mrs. Bennett says that she realizes this; but she wants to end her suffering even if means ending her life. Should the doctor give her an increased dosage?

12. Do you favor the action of giving more medicine?

- Should give Mrs. Bennett an increased dosage to make her die (1)
- Can't decide (2)
- Should not give her an increased dosage (3)

13. Rate the following issues in terms of importance.

	Great (1)	Much (2)	Some (3)	Little (4)	No (5)
1. Isn't the doctor obligated by the same laws as everybody else if giving an overdose would be the same as killing her?	<input type="radio"/>				
2. Wouldn't society be better off without so many laws about what doctors can and cannot do?	<input type="radio"/>				
3. If Mrs. Bennett dies, would the doctor be legally responsible for malpractice?	<input type="radio"/>				
4. Does the family of Mrs. Bennett agree that she should get more painkiller medicine?	<input type="radio"/>				
5. Is the painkiller medicine an active heliotropic drug?	<input type="radio"/>				
6. Does the	<input type="radio"/>				

state have the right to force continued existence of those who don't want to live?					
7. Is helping to end another's life ever a responsible act of cooperation?	<input type="radio"/>				
8. Would the doctor show more sympathy for Mrs. Bennett by giving the medicine or not?	<input type="radio"/>				
9. Wouldn't the doctor feel guilty from giving Mrs. Bennett so much drug that she died?	<input type="radio"/>				
10. Should only God decide when a person's life should end?	<input type="radio"/>				
11. Shouldn't society protect everyone against being killed?	<input type="radio"/>				
12. Where should society draw the line between	<input type="radio"/>				

protecting life and allowing someone to die if the person wants to?					
---------------------------------------------------------------------	--	--	--	--	--

14. Consider the 12 issues you rated above and rank which issues are the most important.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	8 (8)	9 (9)	10 (10)	11 (11)	12 (12)
Most important item (1)	<input type="radio"/>											
Second most important item (2)	<input type="radio"/>											
Third most important item (3)	<input type="radio"/>											
Fourth most important item (4)	<input type="radio"/>											

Demonstration: Political and economic instability in a South American country prompted the President of the United States to send troops to "police" the area. Students at many campuses in the U.S.A. have protested that the United States is using its military might for economic advantage. There is widespread suspicion that big oil multinational companies are pressuring the President to safeguard a cheap oil supply even if it means loss of life. Students at one campus took to the streets in demonstrations, tying up traffic and stopping regular business in the town. The president of the university demanded that the students stop their illegal demonstrations. Students then took over the college's administration building, completely paralyzing the college. Are the students right to demonstrate in these ways?

15. Do you favor the action of demonstrating in this way?

- Should continue demonstrating in these ways (1)
- Can't decide (2)
- Should not continue demonstrating in these ways (3)

16. Rate the following issues in terms of importance.

	Great (1)	Much (2)	Some (3)	Little (4)	No (5)
1. Do the students have any right to take over property that doesn't belong to them?	<input type="radio"/>				
2. Do the students realize that they might be arrested and fined, and even expelled from school?	<input type="radio"/>				
3. Are the students serious about their cause or are they doing it just for fun?	<input type="radio"/>				
4. If the university president is soft on students this time, will it lead to more disorder?	<input type="radio"/>				
5. Will the public blame all students for the actions of a few student demonstrators?	<input type="radio"/>				
6. Are the authorities to blame by giving in to the greed of the multinational oil companies?	<input type="radio"/>				

<p>7. Why should a few people like Presidents and business leaders have more power than ordinary people?</p>	○	○	○	○	○
<p>8. Does this student demonstration bring about more or less good in the long run to all people?</p>	○	○	○	○	○
<p>9. Can the students justify their civil disobedience?</p>	○	○	○	○	○
<p>10. Shouldn't the authorities be respected by students?</p>	○	○	○	○	○
<p>11. Is taking over a building consistent with principles of justice?</p>	○	○	○	○	○
<p>12. Isn't it everyone's duty to obey the law, whether one likes it or not?</p>	○	○	○	○	○

17. Consider the 12 issues you rated above and rank which issues are the most important.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	8 (8)	9 (9)	10 (10)	11 (11)	12 (12)
Most important item (1)	<input type="radio"/>											
Second most important item (2)	<input type="radio"/>											
Third most important item (3)	<input type="radio"/>											
Fourth most important item (4)	<input type="radio"/>											

Please provide the following information about yourself:

1. Age in years:

2. Sex:

- Male (1)
- Female (2)

Which best describes your race/ethnicity? [Check all that apply]

- African American or Black (1)
- Asian or Pacific Islander (2)
- Hispanic (3)
- American Indian/ Other Native American (4)
- Caucasian (other than Hispanic) (5)
- Other (please specify) (6)

Level of Education (mark the highest level of formal education you've obtained, or if you are currently working at that level [i.e. Freshman in college], or if you have completed that level [i.e. you have finished your Freshman year but gone no further] then mark that level.

- Grade 1 to 6 (1)
- Grade 7, 8, 9 (2)
- Grade 10, 11, 12 (3)
- Vocational/technical school (without a bachelor's degree) (i.e. auto mechanic, beauty school, real estate, secretary, 2-year nursing program) (4)
- Junior college (i.e. 2-year college, community college, Associate Arts degree) (5)
- Freshman in college in bachelor degree program (6)
- Sophomore in college in bachelor degree program (7)
- Junior in college in bachelor degree program (8)
- Senior in college in bachelor degree program (9)
- Professional degree (practitioner degree beyond bachelor's degree) (i.e. M.D., M.B.A., Bachelor of Divinity, D.D.S. in dentistry, J.D. in law, Master's of Arts [in teaching], Master's of Education [in teaching], Doctor of Psychology, nursing degree along with 4-year Bachelor's degree) (10)
- Master's Degree (in academic graduate school) (11)
- Doctoral Degree (in academic graduate school) (12)
- Other Formal Education (13)

If you selected other please describe:

4. In terms of your political views, how would you characterize yourself?

- Very Liberal (1)
- Somewhat Liberal (2)
- Neither Liberal nor Conservative (3)
- Somewhat Conservative (4)
- Very Conservative (5)

5. Are you a citizen of the U.S.A?

- YES (1)
- NO (2)

6. Is English your primary language?

- YES (1)
- NO (2)

7. Which best describes your current position?

- Principal (1)
- Assistant Principal (2)
- Master's Student in Education (3)

8. For principals only: For how many years have you served as principal (including all schools and locales) prior to the current year?

9. For principals only: At what school level do you currently serve as principal?

- Elementary School (1)
- Middle/Junior-High School (2)
- High School (3)
- Multi-Level School (4)

10. For assistant principals and master's students only: Is becoming a principal of a school one of your possible aspirations?

- Yes (1)
- No (2)

11. For principals and assistant principals only: Which best describes your school?

- Regular Public School (1)
- Charter Public School (2)

APPENDIX E:
COMMUNICATION WITH PARTICIPANTS

First Contact Letter to Principals:

Dear Principal (Participant's Last Name):

This letter introduces a research questionnaire that will be sent to you within the next few days.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in educational leadership, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through an online link, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In the next few days, you will receive a follow-up email containing a link to the survey, an attachment further explaining the research, an informed consent form for your records, and the opportunity to opt-out if you wish to do so.

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you in advance for taking this most fascinating online survey and contributing to this most important research.

Sincerely,
Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

Second Contact Letter to Principals:

Dear Principal (Participant's Last Name):

Please accept this as a follow-up letter to mine of a few days ago.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in educational leadership, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through the online link below, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In order to participate in the survey, please click here: **Take Survey**

Principals, please also take this opportunity to forward this letter and its attachments to your assistant principal that he/she may also participate in this research.

To review the Informed Consent for your records and to gain a further explanation of this research, please open the attachments to this email. And, if you wish to opt out of this research and not receive future communications, please click here: **Opt Out**

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you for taking this most fascinating online survey and contributing to this most important research.

Sincerely,

Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

Third Contact Letter to Principals:

Dear Principal (Participant's Last Name):

Please accept this as a follow-up letter if you have not yet participated in the survey or not yet referred this letter to your assistant principal that he/she might also participate. If you have already done both, thank you for your valuable time and attention, and feel free to discard this first of two reminders.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in educational leadership, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through the online link below, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In order to participate in the survey, please click here: **Take Survey**

Principals, please also take this opportunity to forward this letter and its attachments to your assistant principal that he/she may also participate in this research.

To review the Informed Consent for your records and to gain a further explanation of this research, please open the attachments to this email. And, if you wish to opt out of this research and not receive future communications, please click here: **Opt Out**

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you for taking this most fascinating online survey and contributing to this most important research.

Sincerely,

Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

Fourth Contact Letter to Principals:

Dear Principal (Participant's Last Name):

Please accept this as a final follow-up letter if you have not yet participated in the survey or not yet referred this letter to your assistant principal that he/she might also participate. If you have already done both, thank you for your valuable time and attention, and feel free to discard this final reminder.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in educational leadership, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through the online link below, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In order to participate in the survey, please click here: **Take Survey**

Principals, please also take this opportunity to forward this letter and its attachments to your assistant principal that he/she may also participate in this research.

To review the Informed Consent for your records and to gain a further explanation of this research, please open the attachments to this email. And, if you wish to opt out of this research and not receive future communications, please click here: **Opt Out**

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you for taking this most fascinating online survey and contributing to this most important research.

Sincerely,

Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

First Contact Letter to Master's Students:

Dear (Master's Student's Name):

This letter introduces a research questionnaire that will be sent to you within the next few days.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in the educational leadership master's program, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through an online link, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In the next few days, you will receive a follow-up email containing a link to the survey, an attachment further explaining the research, an informed consent form for your records, and the opportunity to opt-out if you wish to do so.

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you in advance for taking this most fascinating online survey and contributing to this most important research.

Sincerely,
Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

Second Contact Letter to Master's Students:

Dear (Master's Student's Name):

Please accept this as a follow-up letter to mine of a few days ago.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in the educational leadership master's program, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through the online link below, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In order to participate in the survey, please click here: **Take Survey**

To review the Informed Consent for your records and to gain a further explanation of this research, please open the attachments to this email. And, if you wish to opt out of this research and not receive future communications, please click here: **Opt Out**

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you for taking this most fascinating online survey and contributing to this most important research.

Sincerely,

Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

Third Contact Letter to Master's Students:

Dear (Master's Student's Name):

Please accept this as a follow-up letter if you have not yet participated in our online survey. If you have already participated, thank you for your valuable time and attention, and feel free to discard this first of two reminders.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in the educational leadership master's program, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through the online link below, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In order to participate in the survey, please click here: **Take Survey**

To review the Informed Consent for your records and to gain a further explanation of this research, please open the attachments to this email. And, if you wish to opt

out of this research and not receive future communications, please click here: **Opt Out**

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you for taking this most fascinating online survey and contributing to this most important research.

Sincerely,

Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370

Fourth Contact Letter to Master's Students:

Dear (Master's Student's Name):

Please accept this as a final follow-up letter if you have not yet participated in the survey or not yet referred this letter to your assistant principal. If you have already done both, thank you for your valuable time and attention, and feel free to discard this final reminder.

My name is Trent Ling, and I am a doctoral candidate in the educational leadership program at the University of Central Florida. I am conducting original research with regard to a very interesting decision-making theory and its applicability to K-12 principals and aspiring principals. Based upon your status in the educational leadership master's program, you were identified as part of the population of this study and selected to participate in a valid, reliable, and research-based online questionnaire, the Defining Issues Test Two ("DIT-2") which has been utilized annually by hundreds of researchers in other disciplines for each of the past 15 years and which should take only 20-30 minutes to complete. The online DIT-2 presents five scenarios and multiple choices for how you would solve the dilemmas presented. There are no right or wrong answers. Rather, the DIT-2 examines the decision-making process itself.

Your participation will allow this fresh educational research to examine decision-making across the continuum of K-12 site leadership. In an age of compliance and accountability, this study will likely have insightful implications for principals, aspiring principals, and the schools and students in their charge.

Your participation will be completely anonymous and confidential since you will access the survey through the online link below, and there exists no way to track even whether you have engaged the questionnaire or not. If you wish, I would more than happy to provide to you a final report when the study has been completed.

In order to participate in the survey, please click here: **Take Survey**

To review the Informed Consent for your records and to gain a further explanation of this research, please open the attachments to this email. And, if you wish to opt out of this research and not receive future communications, please click here: **Opt Out**

Thank you very much for your valuable time and participation. Should you have any questions or concerns, please do not hesitate to seek clarification by writing back to me. Otherwise, I thank you for taking this most fascinating online survey and contributing to this most important research.

Sincerely,

Trent W. Ling, J.D.
Email: TrentLing@Knights.ucf.edu
Phone: 407-492-4370



EXPLANATION OF RESEARCH

Title of Project: An Examination Of School Principals' Moral Reasoning And Decision-Making Along The Principalship Track And Across Years of Experience

Informed Consent

Principal Investigator: Trent Ling, J.D.

Faculty Supervisor: Barbara Murray, Ph.D.

Investigational Site: University of Central Florida, College of Education & Human Performance

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study, which will include about 2500 people across the state of Florida. You have been asked to take part in this research study because you are either a school principal or assistant principal, or because you are a master's degree student in educational leadership. You must be 18 years of age or older to be included in this research study.

The person doing this research, Trent Ling, is a doctoral student in educational leadership in the UCF College of Education and Human Performance. Because the researcher is a doctoral student, he is being guided by Barbara Murray, Ph.D., a UCF faculty supervisor in educational leadership in the School of Teaching, Learning, and Leadership.

Purpose of the research study: The purpose of this study is to examine and compare the reasoning and decision-making of school principals, assistant principals, and current master's degree students in educational leadership as measured by the Defining Issues Test, which has been utilized in 500 such studies for each of the past 15 years. Data collection will be completely anonymous as even the researchers will have no way of knowing who has completed the survey.

What you will be asked to do in the study: Participants will complete the Defining Issues Test involving five short dilemmas, and will answer eleven short demographic questions.

Please click the link below to access the online survey:

https://ucfced.qualtrics.com/SE/?SID=SV_7WjsrEiTEx8ktyR

Alternatively, participants may copy and paste the following URL into their browsers:

https://ucfced.qualtrics.com/SE/?SID=SV_7WjsrEiTEx8ktyR

Those wishing to opt out of future emails may click below to unsubscribe:

URL to Unsubscribe Hyperlinked

Location: Participants can complete the survey/questionnaire from any online device anywhere in the world. There is no need to attend any specific location to participate.

Time required: Participation should require only 20-30 minutes on one occasion.

Anonymous research: This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints please contact Trent Ling, Graduate Student, Educational Leadership Doctoral Program, College of Education and Human Performance at telephone number 407-492-4370 or at email address TrentLing@Knights.ucf.edu; or Dr. Barbara Murray, Faculty Supervisor, School of Teaching, Learning, and Leadership at telephone number 407-823-1473 or at email address Barbara.Murray@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.



AN EXAMINATION OF SCHOOL PRINCIPALS' MORAL REASONING AND DECISION-
MAKING ALONG THE PRINCIPALSHIP TRACK AND ACROSS YEARS OF EXPERIENCE

Informed Consent for an Adult in a Non-Exempt Research Study

Principal Investigator: Trent Ling, J.D.

Sub-Investigator(s): N/A

Faculty Supervisor: Barbara Murray, PhD

Sponsor: N/A

Investigational Site(s): University of Central Florida, Department of Education

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study which will include about 2500 people across the state of Florida. You have been asked to take part in this research study because you are either a school principal or assistant principal, or because you are a master's degree student in educational leadership. You must be 18 years of age or older to be included in this research study.

The person doing this research is Trent Ling of the UCF College of Education. Because the researcher is a doctoral student, he is being guided by Dr. Barbara Murray, PhD, a UCF faculty supervisor in Education.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.

- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The purpose of this study is to examine and compare the moral reasoning and decision-making of school principals, assistant principals, and current master's degree students in educational leadership. In addition, principals will be compared with each other across years of experience.

To date, no study has analyzed how principals' levels of moral reasoning and decision-making compare across years of experience in the principalship. Further, studies have not compared moral reasoning and decision-making along the continuum of the educational-leadership track (i.e., from master's student, to assistant principal, to principal). This study sets out to make these comparisons.

Despite federal, state, and district mandates, and other directives in K-12 education, site leaders, namely principals, remain the primary leaders of schools and those specifically charged with effectuating positive and powerful cultures and climates (Marzano, Waters, & McNulty, 2005). Colleges of education, certification standards and processes, professional development for existing and aspiring leaders, and mentoring relationships within educational entities may purport to support principals and to improve their leadership, but do principals' moral reasoning and decision-making processes improve across the years as they receive these supports and interventions? Such is the focus of this research.

In this environment of constant transition, where do principal leaders stand in terms of their own moral reasoning and decision-making? Lawrence Kohlberg posited the moral development scale (Wren, 1995), and James Rest subsequently developed the Defining Issues Tests ("DIT" and "DIT-2") to measure individual moral development (Rest & Narvaez, 1998). How do principals, assistant principals, and master's students in educational leadership fare against these standards and measurements?

What you will be asked to do in the study: Participants will only be required to complete the Defining Issues Test (DIT) questionnaire, which includes the DIT-2, some demographic questions from the University of Alabama (owner of the DIT-2) and some additional demographic information sought by this researcher for this specific study.

In November, 2013, participants will receive from the principal investigator an initial introductory email communication introducing the study and their selection as participants. Thereafter, participants will receive three consecutive and identical communications offering a link to the survey/questionnaire. Participants should only

once complete the survey/questionnaire. The data from the surveys will be collected in November and December, 2013.

Location: Participants can complete the survey/questionnaire from any online device anywhere in the world. There is no need to attend any specific location to participate.

Time required: We expect that you will be in this research study for 20-30 minutes on one occasion.

Anonymous research: This study is anonymous. That means that no one, not even members of the research team, will know that the information you gave came from you.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you, talk to Trent Ling at (407) 909-9305, or contact Dr. Barbara Murray, Faculty Supervisor, Department of Education at (407) 823-1473 or by email at BarbaraMurray@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Master's Student Voluntary Contact Information Upon Class Visits:

Participant Email Address (ALL CAPS):

Date Provided:

APPENDIX F: ANNOUNCEMENT OF ORAL DEFENSE

Announcing the Final Examination of Trent W. Ling for the degree of Doctor of Education

Date of defense: June 16, 2014

Time and room: 3:30PM, Education Complex, Room 306

Dissertation Title: An Examination of School Principals' Moral Reasoning and Decision-Making along the Principalship Track and across Years of Experience

This research examined and compared the moral reasoning and decision-making of regular-education K-12 public school principals and assistant principals in Florida, and current master's degree students in educational leadership programs at a large public Florida university, as measured by the second Defining Issues Test ("DIT-2"). The DIT-2 was administered anonymously to participants through an online link, and was scored by the University of Alabama's Office for the Study of Ethical Development. Data were analyzed through descriptive and inferential statistical methods principally to determine the degree to which participants reasoned and made decisions based upon personal interests, upon the maintenance of norms, or upon the basis of more sophisticated principles.

Results showed master's students in educational leadership outperforming active principals and assistant principals in moral reasoning and decision-making by more often employing sophisticated principles and by more often avoiding choices associated with personal interests. With regard to principals, the difference was statistically significant on DIT-2 P-scores and N-2 scores. Principals not only underperformed master's students in educational leadership statistically significantly, but also underperformed active assistant principals in comparisons of group means on DIT-2 sub-scores.

This research also confirms the prior works of Strenth (2013) and Vitton & Wasonga (2009), where principals were found struggling in measures of moral reasoning and decision-making. These consecutive and consistent findings now require consideration, discussion, and action by K-12 public school stakeholders.

Committee in charge:

Dr. Barbara Murray, Chair

Dr. Lee Baldwin

Dr. Larry Holt

Dr. Kenneth Murray

Outline of Studies:

Major: Ed.D. in Educational Leadership

Educational Career:

B.A. 1988, Pacific Lutheran University

J.D., 1991, Duke University School of Law

Approved by Dr. Barbara Murray, Committee Chair, on May 27, 2014

The public is welcome to attend.

LIST OF REFERENCES

- Anhorn, R. (2008). The profession that eats its young. *Delta Kappa Gamma Bulletin*, 74(3), 15-26.
- Armstrong, D.E. (2010). Rites of passage: Coercion, compliance, and complicity in the socialization of new vice-principals. *Teachers College Record*, 112(3), 685-722.
- Arnold, M. (2000). Stage, sequence, and sequels: changing conceptions of morality, post-Kohlberg. *Educational Psychology Review*, 12(4), 365-383.
- Bailey, C. (2011). Does the defining issues test measure ethical judgment ability or political position? *Journal of Social Psychology*, 151(3), 314-330.
- Baxter, P.E., & Boblin, S.L. (2007). The moral development of baccalaureate nursing students: Understanding ethical behavior in classroom and clinical settings. *Journal of Nursing Education*, 46(1), 20-27.
- Bebeau, M.J., & Thoma, S.J. (2003). Guide for DIT-2. Minneapolis, MN: Center for the Study of Ethical Development.
- Boris-Schacter, S. (2008). Good principals by fiat? *Education Week*, 27(25), 27.
- Bruess, B.J., & Pearson, F.C. (2002). The debate continues: Are there gender differences in moral reasoning as defined by Kohlberg? *College Student Affairs Journal*, 21(2), 38-52.
- Cummings, R., Dyas, L., Maddux, C., & Kochman, A. (2001). Principled moral reasoning and behavior of preservice teacher education students. *American Educational Research Journal*, 38(1), 143-158.

- Cummings, R., Maddux, C.D., Harlow, S., & Dyas, L. (2002). Academic misconduct in undergraduate teacher education students and its relationship to their principled moral reasoning. *Journal of Instructional Psychology, 29*(4), 286-296.
- Derryberry, W., Jones, K.L., Grieve, F.G., & Barger, B. (2007). Assessing the relationship among defining issues test scores and crystallized and fluid intellectual indices. *Journal of Moral Education, 36*(4), 475-496.
- Dillman, D.A., Smyth, J.D., & Christian, L.M. (2009). Internet, mail, and mixed-mode surveys: The tailored design method (3rd ed). Wiley, New York, NY.
- Dufresne, P., & McKenzie, A.S. (2009). A culture of ethical leadership. *Principal Leadership, 10*(2), 36-39.
- Elm, D.R. & Weber, J. (1994). Measuring moral judgment: the moral judgment interview or the defining issues test? *Journal of Business Ethics, 13*, 341-355.
- Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2009). G*Power software (version 3.1.3).
- Flores, G. (2012). Five R's for success. *Principal, 91*(5), 38.
- Florida Department of Education. (2013). FLDOE Master School ID. Retrieved from <http://doeweb-prd.doe.state.fl.us/EDS/MasterSchoolID/Downloads.cfm?CFID=7642543&CFTOKEN=c7a2d4d7fe342b76-464FF092-5056-8C3F-16BD0C274AFD465E>
- Fullan, M. (2002). The change leader. *Educational Leadership, 59*(8), 16-20.
- Gay, L. R., Mills, G. E., & Airasian, P. (2009). Educational research: Competencies for analysis and applications. Upper Saddle River, NJ: Pearson.
- Glanz, J. (2008). Five essential virtues for leading ethically. *Principal Leadership: Middle Level Edition, 8*(9), 64-66.

- Gordon, J. R. (1999). *Organizational behavior: A diagnostic approach*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Heischman, D.R. (2002). Moral courage in teaching and school leadership. *Independent School*, 62(1), 22-32.
- Holloway, J. (2006). Model behavior. *Principal Leadership: Middle Level Edition*, 6(5), 44-48.
- Ibarra, L., Santamaria, A.P., Lindsey, D.B., & Daly, A.J. (2010). From compliance to transformation. *Leadership*, 39(5), 32-36.
- King, P.M., & Mayhew, M.J. (2002). Moral judgement development in higher education: insights from the defining issues test. *Journal of Moral Education*, 31(3), 247-270.
- Kohlberg, L. (1981). *The philosophy of moral development: Moral stages and the idea of justice*. San Francisco, CA: Harper & Row.
- Kohlberg, L. (1984). *The psychology of moral development: The nature and validity of moral stages*. San Francisco, CA: Harper & Row.
- Lee, S. & Olszewski-Kubilius, P. (2006). The emotional intelligence, moral judgment, and leadership of academically gifted adolescents. *Journal for the Education of the Gifted*, 30(1), 29-67.
- Leithwood, K.A., & Duke, D.L. (1998). Mapping the conceptual terrain of leadership: A critical point of departure for cross-cultural studies. *Peabody Journal of Education (0161956X)*, 73(2), 31-50.
- Levine, C., Kohlberg, L., & Hewer, A. (1985). The current formulation of Kohlberg's theory and a response to critics. *Human Development*, 28, 94-100.

- Lynch, J. (2012). Responsibilities of today's principal: Implications for principal preparation programs and principal certification policies. *Rural Special Education Quarterly*, 31(2), 40-47.
- Maclagan, P. (1992). Management development and business ethics: A view from the U.K. *Journal of Business Ethics*, 11, 321-328.
- Marzano, R. J., Waters, T., & McNulty, B.A. (2005). School leadership that works: From research to results. Alexandria, VA: ASCD.
- Mason, E., & Mudrack, P.E. (1997). Do complex moral reasoners experience greater ethical work conflict? *Journal of Business Ethics*, 16(12-13), 1311-1318.
- Mirk, P. (2009). Ethics by example. *Principal Leadership*, 10(2), 18-23.
- Msila, V. (2012). Fostering an effective school through moral leadership: A South African case study. *International Journal of Social Sciences and Education*, 2(1), 174-192.
- Orem, D. (2002). Leaders on leadership. *Independent School*, 62(1), 40-47.
- O'Shea, M.R. (2006). Beyond compliance: Steps to achieving standards. *Principal Leadership: Middle Level Edition*, 6(8), 28-31.
- Owens, R. G. & Valesky, T. C. (2011). Organizational behavior in education: Leadership and school reform. Upper Saddle River, NJ: Pearson.
- Palmer, P.J. (2008). On the edge. *Journal of Staff Development*, 29(2), 12-16.
- Palmer, P.J. (1998). Evoking the spirit in public education. *Educational Leadership*, 56(4), 6-11.

- Pauken, P. (2012). "Are you prepared to defend the decisions you've made?" Reflective equilibrium, situational appreciation, and the legal and moral decisions of school leaders. *Journal of School Leadership*, 22(2), 350-384.
- Pritchard, M.S. (1999). Kohlbergian contributions to educational programs for the moral development of professionals. *Educational Psychology Review*, 11(4), 395-409.
- Quick, P.M. & Normore, A.H. (2004). Moral leadership in the 21st century: Everyone is watching—especially the students. *Educational Forum*, 68(4), 336-347.
- Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.
- Reitzug, U.C. (2008). Diversity, power, and influence: Multiple perspectives on the ethics of school leadership. *Journal of School Leadership*, 18(4), 396-420.
- Research Advisors (2006). Sample size table. Retrieved from <http://www.research-advisors.com/tools/SampleSize.htm>
- Rest, J. & Narvaez, D. (1998). DIT-2. Retrieved from <http://www.liberalarts.wabash.edu/storage/assessment-instruments/dit2.pdf>
- Rest, J.R., Narvaez, D., Bebeau, M.J., & Thoma, S. (1999). A neo-Kohlbergian approach: the DIT and schema theory. *Educational Psychology Review*, 11(4), 291-324.
- Rossouw, G.J., & Vuuren, L. (2003). Modes of managing morality: A descriptive model of strategies for managing ethics. *Journal of Business Ethics*, 46(4), 389-402.
- Scribner, S., Crow, G.,M., Lopez, G.R., & Murtadha, K. (2011). "Successful" principals: A contested notion for superintendents and principals. *Journal of School Leadership*, 21(3), 390-421.

- Sergiovanni, T.J. (1994). *Building community in schools*. San Francisco, CA: Jossey-Bass, Inc.
- Sergiovanni, T.J. (2005). The virtues of leadership. *Educational Forum*, 69(2), 112-123.
- Shields, C.M. (2004). Creating a community of difference. *Educational Leadership*, 61(7), 38-41.
- Shoho, A. & Barnett, B. (2010). The realities of new principals: Challenges, joys, and sorrows. *Journal of School Leadership*, 20(5), 561-596.
- Smith, W.F. (1999). Leadership for educational renewal. *Phi Delta Kappan*, 80(8), 602-605.
- Steinberg, W.J. (2011). *Statistics Alive!*. Thousand Oaks, CA: Sage Publications, Inc.
- Starratt, R.J. (2005). Responsible leadership. *Educational Forum*, 69(2), 124-133.
- Strenth, R.S. (2013). *The moral reasoning and moral decision making of urban high-poverty elementary school principals in a large urban southeastern school district* (Doctoral dissertation). Retrieved from http://etd.fcla.edu/CF/CFE0004943/Strenth_Robert_S_201305_EdD_2.pdf.
- Swanson, R.L. (1995). Research foundations of moral and ethical education. *Education*, 116, 296-301.
- Theoharis, G. (2008). At every turn: The resistance that principals face in their pursuit of equity and justice. *Journal of School Leadership*, 18(3), 303-343.
- Thoma, S.J. (2002). An overview of the Minnesota approach to research in moral development. *Journal of Moral Education*, 31(3), 225-245.
- University of Alabama (2013). Using the DIT online. Retrieved from <http://www.ethicaldevelopment.ua.edu/dit-online>

- Vitton, C.J., & Wasonga, T.A. (2009). Between Kohlberg and Gilligan: Levels of moral judgment among elementary school principals. *Leadership and Policy in Schools, 8*(1), 92-116.
- Walker, L.J. (2002). The model and the measure: An appraisal of the Minnesota approach to moral development. *Journal of Moral Education, 31*(3), 353-367.
- West, D., Peck, C., & Reitzug, U. (2010). Limited control and relentless accountability: Examining historical changes in urban school principal pressure. *Journal of School Leadership, 20* (2), 238-266.
- Windsor, J. & Cappel, J.J. (1999). A comparative study of moral reasoning. *College Student Journal, 33*(2), 281-287.
- Wren, J.T. (1995). *The Leader's Companion*. New York, New York: The Free Press.
- Xu, Y., Iran-Nejad, A., & Thoma, S.J. (2007). Administering defining issues test online: Do response modes matter? *Journal of Interactive Online Learning, 6*(1), 10-27.