AN INVESTIGATION OF PREFERRED CONFLICT-MANAGEMENT
BEHAVIORS IN SMALL-SCHOOL PRINCIPALS

A Dissertation

by

BRADLEY DEAN VESTAL

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2011

Major Subject: Educational Administration
AN INVESTIGATION OF PREFERRED CONFLICT-MANAGEMENT BEHAVIORS IN SMALL-SCHOOL PRINCIPALS

A Dissertation

by

BRADLEY DEAN VESTAL

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Chair of Committee, Mario S. Torres
Committee Members, Virginia Collier
                           James Lindner
                           Fred Nafukho
Head of Department, Fred Nafukho

May 2011

Major Subject: Educational Administration
ABSTRACT

An Investigation of Preferred Conflict-Management Behaviors in Small-School Principals. (May 2011)

Bradley Dean Vestal, B.S., Texas A&M University; M.Ed., Midwestern State University;
Chair of Advisory Committee: Dr. Mario S. Torres

This quantitative study was conducted to investigate the preferred conflict-management behaviors of small-school principals in Texas Education Service Center regions five, six, and seven. The problem facing the small-school principal in conflict-management was knowing how and when to behave towards campus teachers in order to further the goals of the school system and satisfy the needs of its teachers. The study focused on the principal-teacher relationship and the five possible preferred conflict-management behaviors – competing, collaborating, compromise, avoiding, and accommodating. The abilities of gender and experience were analyzed as possible predictors of the preferred conflict-management behaviors of small-school principals.

Using a logistical regression analysis, the predictive abilities of gender and experience were evaluated by using the Thomas-Kilmann Instrument in relation to five possible preferred conflict-management behaviors of small-school principals toward teachers. The instrument identified frequencies of preferred conflict-management behaviors. Based on existing literature, the null hypotheses posited that neither gender
nor experience would have a significant predictive effect (.05 alpha level) on the preferred conflict-management behaviors of the small-school campus principals under examination.

Results indicated that gender could not predict a clear preference for any of the five possible conflict-management behaviors. Thus, the null was not rejected concerning gender. Also, experience was found to have no significant effect on the prediction of collaborating, avoiding, and accommodating. However, findings revealed that experience had a significant positive relationship to a preference for competing behaviors; and experience also had a significant negative relationship to a preference for compromising behaviors in the group of small-campus principals. Findings indicated that more experience came with an increased preference for competing and a decreased preference for compromising behaviors.

The study sought to address a gap in the literature as related to the preferred conflict-management behaviors of small-school principals in the principal-teacher relationship. Societal changes and differences in school administrator and teacher viewpoints have necessitated that school principals acquire and improve conflict-management skills in advancing student achievement. By focusing on the small-school principal-teacher relationship and the variables of gender and experience the study contributed to the research-base surrounding small-school campuses. Findings suggested the need for a renewed emphasis on conflict-management skills in principal preparation programs.
DEDICATION

This dissertation is dedicated to all of the school administrators and teachers everywhere who strive daily for the same goal – to help children succeed. My experience as teacher, coach, and principal has taught me that administrators and teachers can often have differing priorities and this fact has provided much of my motivation for a study about conflict-management. Administrators and teachers working together for the same goal can produce some remarkable results. The students are the reason we are passionate, the purpose for our lives; and, we must constantly strive to work together and put their needs first in our schools.
ACKNOWLEDGEMENTS

Completing coursework and the accompanying dissertation has been a difficult job while married with two small children, and working as a full-time principal. I have finally come to a place in my life where I believe God has prepared me to be. After some years of uncertainty, I can see His plan unfolding daily. Without Christ, true success is impossible and I continue to be amazed and overwhelmed by the undeserved blessings He has poured out on me.

Finishing the doctoral program at Texas A&M University could not have been possible without the support of some very important people. My supportive and very loving wife, Laura, has offered her unwavering support in many ways, but mostly by dedicating every minute of her own life to our two daughters. She has nurtured and grown them in many ways while I have worked on my “homework” and could not be there, while encouraging me along the way.

Audrey and Claire, my two gifts from above, have been the biggest inspiration to me and the reason I started the program at Texas A&M University. They constantly amaze me with their own perspectives and have provided me with a renewal of spirit since their births. The optimism of these two children has been refreshing and caused me to focus on the important and minimize the inconsequential. They have helped me to become a better teacher and administrator just by being here.

I am thankful to my own parents, Kenneth and Yvonne, who have always supported me in whatever I wanted to do. I do appreciate everything you have done to enable me at home and school. I am grateful that you raised me in an environment that
taught Christian principles, moderation, and common sense, all of which I strive to use every day at school and home.

I am grateful for the generosity of Alice and Luther Price for allowing me the use of their upstairs office in lieu of my living room. Having a quiet place to work has been a lifesaver for me by enabling me to focus on my college work in the office, my principal job at the schoolhouse, and my family at my home. I have often said I have three lives – family, school, and college – and it was hectic focusing on each of the three. Without a separate place to work on the college work my stress level would have been much higher and finishing the program would have been even more difficult.

Several professors have been instrumental in making this happen. Dr. John Hoyle provided inspiration early on. Then Dr. Mario Torres provided valuable guidance and insight from the standpoint of a researcher, and he constantly motivated me to do quality work. Dr. Virginia Collier helped me through the writing process and challenged me to write with clarity and purpose, emphasizing to me that the standards at Texas A&M are very high. I am also especially appreciative of Dr. Jimmy Lindner, professor of Agricultural Leadership, and Dr. Fred Nafukho, department head for the College of Education Administration and Human Resource Development, for reviewing this work and providing valuable insight from the quality research perspective that has become a defining feature of Texas A&M University.

Finally, I want to thank Mr. Larry Williams, my current superintendent-of-schools for providing a great mentoring relationship as a former principal. And, for allowing me much-needed flexibility while I was principal and college student.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xi</td>
</tr>
<tr>
<td>CHAPTER I</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION AND RATIONALE</td>
<td>1</td>
</tr>
<tr>
<td>Conflict-Management Theory</td>
<td>5</td>
</tr>
<tr>
<td>Problem Statement</td>
<td>19</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>20</td>
</tr>
<tr>
<td>Research Questions</td>
<td>20</td>
</tr>
<tr>
<td>Research Hypotheses</td>
<td>23</td>
</tr>
<tr>
<td>Methodology</td>
<td>23</td>
</tr>
<tr>
<td>Definition of Key Terms</td>
<td>23</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>26</td>
</tr>
<tr>
<td>Limitations</td>
<td>27</td>
</tr>
<tr>
<td>Assumptions</td>
<td>29</td>
</tr>
<tr>
<td>Organization of the Dissertation</td>
<td>29</td>
</tr>
<tr>
<td>CHAPTER II</td>
<td>32</td>
</tr>
<tr>
<td>REVIEW OF THE LITERATURE</td>
<td>32</td>
</tr>
<tr>
<td>Introduction</td>
<td>32</td>
</tr>
<tr>
<td>Power Bases for Leaders</td>
<td>41</td>
</tr>
<tr>
<td>The Evolution of Conflict-Management Theory</td>
<td>43</td>
</tr>
<tr>
<td>Conflict-Management and Gender</td>
<td>52</td>
</tr>
<tr>
<td>Conflict-Management and Experience</td>
<td>59</td>
</tr>
<tr>
<td>Summary</td>
<td>61</td>
</tr>
<tr>
<td>CHAPTER III</td>
<td>62</td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td>62</td>
</tr>
<tr>
<td>Population</td>
<td>62</td>
</tr>
</tbody>
</table>
CHAPTER | Page
--- | ---
Research Questions and Hypotheses | 63
Research Instrument | 67
Validity and Reliability of the Instrument | 72
Data Collection Procedures | 75
Overview of Methodology | 76
Design | 82
Participants | 84
Summary | 89

IV RESULTS | 91
Analysis of Research Questions | 91
Summary | 107

V DISCUSSION, IMPLICATIONS, AND CONCLUSIONS | 110
Competition | 111
Collaboration | 114
Compromise | 115
Avoiding | 117
Accommodating | 119
Implications for Leaders | 120
Conclusion | 127

REFERENCES | 130

VITA | 144
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>The Five Conflict-Handling Modes in the Context of the Assertiveness and Cooperativeness Dimensions</td>
<td>8</td>
</tr>
<tr>
<td>2.1</td>
<td>The Social System Model</td>
<td>45</td>
</tr>
</tbody>
</table>
LIST OF TABLES

TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Structure of the Logistic Regression Analysis</td>
<td>82</td>
</tr>
<tr>
<td>3.2</td>
<td>Categorical Coding for the Logistical Regression Analysis</td>
<td>85</td>
</tr>
<tr>
<td>3.3</td>
<td>Participant Descriptive Statistics by Age and Experience</td>
<td>86</td>
</tr>
<tr>
<td>3.4</td>
<td>Overall Results of the Modified Instrument as Compared to the Norm Group of 8,000a</td>
<td>87</td>
</tr>
<tr>
<td>3.5</td>
<td>Individual Raw Score Frequencies</td>
<td>89</td>
</tr>
<tr>
<td>4.1</td>
<td>Results of the Backward Stepwise (conditional) Analysis in the Competing Equation</td>
<td>94</td>
</tr>
<tr>
<td>4.2</td>
<td>Results of the Backward Stepwise (conditional) Analysis in the Collaborating Equation</td>
<td>97</td>
</tr>
<tr>
<td>4.3</td>
<td>Results of the Backward Stepwise (conditional) Analysis in the Compromising Equation</td>
<td>100</td>
</tr>
<tr>
<td>4.4</td>
<td>Results of the Backward Stepwise (conditional) Analysis in the Avoiding Equation</td>
<td>103</td>
</tr>
<tr>
<td>4.5</td>
<td>Results of the Backward Stepwise (conditional) Analysis in the Accommodating Equation</td>
<td>106</td>
</tr>
<tr>
<td>4.6</td>
<td>Summary of Overall Analysis</td>
<td>108</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION AND RATIONALE

Conflict-management skills have become increasingly important to managers in postmodern society (Ramani & Zhimin, 2010; Lang, 2009). Senge (1994) has noted that the abundance of information, differing ideas, and the proliferation of technology in the postmodern world has diluted the traditional superior-inferior working relationship that prevailed in the early 20th century. Therefore, managers must now be able to adapt to changes in the workforce by not only behaving in a commanding or competing style; but they must also be able to persuade, participate, delegate (Blake & Mouton, 1964), as well as collaborate, compromise, accommodate, and avoid more than in previous generations (Thomas, 2007).

A recent report compiled by CPP Inc. in North America, OPP, Ltd in Europe, and Fellipelli in Brazil surveyed five-thousand full-time employees in nine countries (CPP, 2008). The report analyzed workers’ attitudes about conflict. Eighty-five percent of the respondents reported having to cope with conflict on the job, and twenty-nine percent reported conflict as “always” or “frequently” (CPP, 2008, p. 3). The report highlights the magnitude of the problem of workplace conflict on a world-wide scale, calls attention to the causes of workplace conflict, and calls for a renewed focus on conflict-management training programs for managers.

CPP’s Human Capital Report (2008) documented that seventy percent of the employees surveyed saw managing conflict as a “‘very’ or ‘critically’ important

This dissertation follows the style of Educational Administration Quarterly.
leadership skill, while fifty-four percent of employees think managers could handle disputes better by addressing underlying tensions before things go wrong” (p. 3). They reported that managers viewed themselves as handling conflict much better than the employees’ perceptions of how well managers managed conflict. This finding suggests that there is a need for an intense focus on conflict-management research for organizational managers.

The followership in the postmodern world has come to expect that managers communicate in a manner that is more diverse than the top-down style of years past (Hoy & Miskel, 2005; Senge, 1994). Senge (1994) contends that a manager can no longer expect a followership that is oblivious to forces outside the organization. Managers can expect followers who may not respond the top-down leadership styles of the past and may be sometimes skeptical of management (Hoy & Miskel, 2005).

Organizational leaders may need to alter their managerial behavior to account for this collective change in thinking by the populace, adopting constructive leadership behaviors that promote the organizations goals (Einarsen, Aasland, & Skogstad, 2007). To be successful in the postmodern world managers will need to be skilled in situational leadership (Blake & Mouton, 1964) and conflict-management (Thomas, 2007). By taking heed of each situation and treating is as unique, leadership earns the loyalty of subordinates.

Societal factors have impacted the traditional managerial-subordinate relationship in the workplace (Lang, 2009), but changes have also affected the school system (Lieberman, 2005). As a result, school principals who are charged with
managing successful campuses, face an increasingly diverse set of expectations from various parties (Tschannen-Moran, 2009; Wolcott, 2003). For example, society has come to expect schools to be accountable for student learning by displaying tangible results (NCLB, 2001). Because of this goal, as well as other goals too numerous to list, the principal must maintain a task-oriented strategy in his/her managerial approach.

For the campus principal, success not only requires a strong task-orientation, it requires a relationship-orientation and attention to the school’s climate and culture (Lumpkin, 2008). Abraham Maslow (1970) posited that each person has lower to higher-order needs; he arranged human needs according to degree of urgency for survival, with basic needs such as food and shelter being placed on the base of a hierarchical pyramid, while the issue of self-actualization is positioned at the top. Maslow (1970) contended that, if a lower-order need is not satisfied it would dominate behavior, while self-actualization, the highest-ordered human need, requires very good environmental conditions to become possible. The implication of Maslow’s theory for the building principal is that he/she must attend to the personal needs of teachers in order for the school to reach its full potential.

The principal’s ability or inability to meet the needs of teachers can affect a teacher’s attitude and work-habits. The works of Herzberg (1982) noted that, if motivators and hygiene of the job are met, workers experience high job satisfaction. For an employee, high job satisfaction can translate into a cooperative attitude and task accomplishment, while job dissatisfaction can result in an uncooperative attitude and results that oppose organizational goals (Herzberg, 1982). In order for the principal to
unite teachers behind the goals of the school, he/she must persuade, convince, and motivate them toward the task and address their concerns and problems along the way.

Because of their different roles in the school system, principals and teachers often have different orientations that can lead to differing priorities (Blase, 1988; Blase & Blase, 2002; Tschannen-Moran, 2009; Tschannen-Moran, 2007; Louis, 2007; Balay, 2006; Deutsch, Coleman, & Marcus, 2006; Marshall, 1991). A principal must effectively address the needs of teachers or he/she is not likely to sustain long-term success in leading a school staff to improved student performance. With effective principal-teacher conflict-management skills (Berry, 1994) and a good overall principal-teacher relationship (Picucci, Brownson, Kahlert, & Sobel, 2002; Currall, 1996) the principal can empower teachers and reach the school’s goals.

Blase and Blase (2000) have documented the preference of teachers for principals who adopt a professional view of teaching, collaborative efforts, and the ensuing best results that the team-work view brings. Principals would be well-advised to adopt a view of teachers as professionals who excel in loosely-coupled systems within a culture of team-work (Lumpkin, 2008).

The 20th century saw women entering the workforce and increasingly moving into managerial positions (Lang, 2009). As female leadership increased, so did the number of studies surrounding gender differences in conflict-management behaviors. Female managers and principals have become commonplace, yet studies continue to compare male and female differences concerning conflict-management. The overall results of these studies appear to be inconclusive.
With improvements in health care, society has seen increased life-expectancies followed by an aging workforce. This means that careers have been, and will continue to be lengthened. Yet, in studies surrounding conflict-management behaviors, level of experience is a variable that has not received an abundance of attention in the literature. Level of experience in the principalship and its effect on preferred conflict-management behaviors is a timely topic and worthy of investigation.

The rationale for this study has attempted to show that conflict-management skills are vital to the campus principal. Gender and experience are two variables that may influence the preferred conflict-management behaviors of principals in the midst of a continually changing society.

**Conflict-Management Theory**

Blake and Mouton (1964), reported that managers need a dual focus characterized by concerns for both tasks and people, asserting that leaders who exhibit the highest degree of concern for both dimensions will consistently be successful in most situations. Kilmann and Thomas (1977) expanded the conflict-management research while stressing that one of five different managerial behaviors could be appropriate depending on the situation.

Kilmann and Thomas (1977) developed a conflict-management theory based on two basic dimensions of conflict-handling behavior – assertiveness and cooperativeness. The theory posits that a manager traverses an unassertive-assertive continuum, while simultaneously moving along a separate continuum ranging between uncooperative to cooperative behavior. Kilmann and Thomas (1977) noted that the unassertive-assertive
continuum captures the degree of concern for the self, while the uncooperative-cooperative continuum captures the degree of concern for others. According to the theory (Kilmann and Thomas, 1977), assertive behaviors indicate degree of concern for self, while cooperative behaviors reflect a manager’s level of concern for others.

Kilmann and Thomas’s (1977) assertive dimension is relevant to the building principal who must constantly assess situations and traverse the unassertive-assertive continuum in order to ensure that effective administration of rules and procedures occurs at the campus level. The principal has to discern at what point to fall on the unassertive-assertive continuum for every situation because, while untimely assertive actions can cause principal-teacher conflict, untimely passivity can mean that school system needs or requirements are compromised.

According to Kilmann and Thomas (1977), individuals within the organization also attempt to satisfy the needs of others by occupying an uncooperative-cooperative continuum. In the case of a principal, he/she must individually assess situations as they arise and discern where to occupy this continuum. Too much cooperation can lead to a loss of organizational focus on important goals, while a high level of uncooperative behavior can be damaging to interpersonal relationships.
If a principal traverses the two continuums of assertiveness and cooperation, a teacher also occupies a space somewhere on both. From the viewpoint of a teacher, he/she can view the principal as too assertive or too cooperative, or somewhere in between, but the focus of the multitude of teacher viewpoints is beyond the scope of this study. In keeping with the purpose of this study, the focus will remain on the superior view in the superior-inferior relationship of principal and teacher in the school system.

According to Kilmann and Thomas (1977), every person, principal or teacher, moves along both continuums into five possible modes of conflict management behavior. The five behaviors are competition, collaboration, compromise, avoiding, and accommodation. Thomas and Kilmann posited that any one of the five conflict-management behaviors can be effective when applied to the right situation. The principal’s dilemma is in knowing what behavior to use, as well as when to use the behavior in order to ensure that the integrity of the school system and its people are preserved. Figure 1.1 summarizes Thomas’s (2002) theory.
Thomas (2007) summarized his research into a set of self-assessment questions that were devised to help individuals examine their own tendencies concerning the use of conflict-management behaviors. The questions are intended to be used after individuals complete the Thomas-Kilmann Instrument (2007, 1974) – an exercise that reveals the participant’s conflict-management tendencies. Participant scores range from high to low on each of the five conflict-management behaviors. The remainder of this discussion
uses Thomas’s (2007) self-assessment questions in order to focus more closely on the principal’s dilemma surrounding conflict-management behavior.

The first behavior a principal could use when faced with interpersonal conflict with a teacher is *competition*. Competitive behavior is power-oriented, assertive and uncooperative. When using competitive behavior, the principal emphasizes his/her own concerns and minimizes the teacher’s. Competitive behavior, simply stated, is trying to win.

Situations may arise in the life of a principal where competitive behavior is appropriate (Thomas, 2007). First, when a decision needs to be made quickly, such as in the case of an emergency competitive behavior may be warranted. Second, when an issue requires an unpopular course of action, competition may be necessary. Third, a principal may choose a power-oriented mode when an issue is vital to the welfare of everyone in the organization and, fourth, when he/she knows he/she is right in taking the action. Competitive behavior may also be best when encountering a teacher who is bullying, or taking advantage of non-competitive behavior.

A high score on the Thomas-Kilmann Instrument (2007, 1974) in competition may indicate a preference for competitive behaviors. Therefore, the principal should ask the self-assessment question, “Are you surrounded by ‘yes’ people?” (p. 12) If the principal’s answer is “yes,” it could be that followers are afraid to disagree; thus, the principal can become closed off from the best information or insulated from hearing of better ways of doing things.
Additionally, a principal who displays too much competitive behavior may cause others to become afraid to admit their ignorance or uncertainty. An environment where acting certain or confident is the unwritten rule can hinder the flow of information, opinions, and ideas in the school. People can become less likely to learn in an overly-competitive environment because they do not feel comfortable expressing themselves openly. In this scenario, it is safer to project confidence and move forward with a potentially wrong approach than to scrutinize closely an idea or proposal and risk losing face.

Thomas (2007) has noted that too many competitive behaviors can be unproductive, but too few competitive behaviors can also be problematic. Thomas’s (2007) asks, “Do you often feel powerless in situations” (p. 12)? The implication is that the principal may not be aware of his/her own power. Or, it could be that the principal is unskilled in the use of competitive behavior or uncomfortable using it. Not taking advantage of competitive behavior can restrict the principal’s influence.

The second question that can be asked of a principal who scores low on competitive behavior is, “Do you sometimes have trouble taking a firm stand, even when you see the need” (p. 12)? A leader can become too concerned for the feelings of others, causing him/her to hesitate or resist a power-oriented behavior. Followers can become frustrated or resentful as the result of a principal who postpones important decisions by not being assertive.

A second conflict-management behavior is collaborating. Useful when situations arise where the principal needs to work with the teacher to find a solution that
will satisfy both parties, collaboration is both assertive and cooperative. Principal and teacher each have a separate set of concerns that require a resolution. Collaborating requires a high level of effort, an open discussion, and the exploration of the positives and negatives of two different points-of-view in seeking a creative solution.

Collaboration is appropriate for a principal under the following circumstances (Thomas, 2007): When both principal and teacher need a solution that satisfies the concerns of everyone, and both points-of-view are too important to be compromised. Second, when the principal wishes to learn more, test his/her own assumptions, and better understand the views of the teacher. Third, when principal and teacher have different perspectives, and it becomes desirable to merge those insights, it may be best to collaborate. Fourth, a consensual decision may be needed when the principal seeks to gain commitment from the teacher. Further, when the relationship is hindered by any variety of negative feelings, collaboration can be worth the effort.

A tendency towards a high preference for collaboration may require the question, “Do you sometimes spend time discussing issues in depth that do not seem to warrant it” (Thomas, 2007, p. 13)? The implication in this question is that the principal may be spending too much time and energy on issues that could be solved by using a more efficient decision-making process. Every conflict on a campus does not need the attention of the principal, and some trivial problems do not need an optimal solution. Overusing collaboration can indicate an unwillingness to take risk. The results of too much collaboration can be the diffusion of responsibility for a decision, or it could result in postponing much-needed action.
A high score in collaboration could also beg the question, “Does your collaborative behavior fail to elicit collaborative responses from others?” It is possible that the principal is much higher in collaboration than the teacher. From the viewpoint of a principal, a teacher may take advantage of the campus leader’s preference for collaborative behavior. The openness and trust that a principal displays can become too extreme in certain situations. The absence of defensiveness, strong feelings, impatience, or the appearance of conflicting interests from the principal may hinder a true collaborative decision. Thus, a higher level of competitive behavior may be needed when the collaborating score is very high.

Too few collaborative behaviors can also be problematic. A low score in collaboration could illicit the question, “Is it difficult for you to see differences as opportunities for joint gain, learning, or problem-solving” (Thomas, 2007, p. 13)? The implication in this question is that the principal may not understand the value in the more threatening or seemingly unproductive approach of collaboration. Approaching problems with pessimism and failing to realize the possibilities can hinder the collaborative process, while optimism can often lead to a collaborative decision that works best for both parties. A change in the principal’s attitude may be needed.

A collaboration score in the low range could also point to another problem that can lead a principal to benefit from the question, “Are others uncommitted to your decisions or policies” (Thomas, 2007, p. 13)? The implication in this question, for a school principal is that, because the teacher’s concerns are not being incorporated into decisions and/or policies, he/she may be uncommitted to the decisions and/or policies
that are being implemented. Simply stated, a teacher who feels that the principal does not collaborate with him/her may not commit to support that principal’s decisions and/or policies.

A third behavior that a principal could choose when addressing principal-teacher conflict is *compromise* – a mostly assertive and cooperative approach. Compromise could be used when a decision is needed quickly or when a solution is needed that will at least partially satisfy both principal and teacher. This behavior involves giving up something in order to gain something else. It does not require the amount of work or level of in-depth analysis that collaboration, which seeks to fully satisfy both parties, requires. Compromising usually means exchanging concessions or giving and taking in order to reach a quick solution.

Compromise can be useful in several situations (Thomas, 2007). First, it can be beneficial when more assertive modes of behavior are not worth the extra effort or disruption or when a goal is not very important. Second, a situation may arise where a principal and teacher have mutually exclusive goals, making collaboration unlikely. Third, compromise could be used when a principal is addressing a complex issue and a temporary settlement is needed. Fourth, it is useful when time pressure requires a quick solution; or, fifth, compromise can be used as a third choice when competition or collaboration fails to achieve a goal.

Too much compromise can be detrimental to a principal’s goals. Thomas’s self-assessment asks, “Do you concentrate so heavily on the practicalities and tactics of compromise that you sometimes lose sight of larger issues” (p. 14)? This question
suggests that it is possible for a principal to unintentionally compromise important principles or values. Long-term objectives or the welfare of the organization may not need to be compromised.

A second question a principal with a high score in compromise may wish to ask him/herself is, “Does an emphasis on bargaining and trading create a cynical climate of gamesmanship” (p. 14)? The negative implication is that a climate that emphasizes bargains and trade-offs can foster an environment that de-emphasizes interpersonal trust, as well as deflect attention away from the important issues that need to be discussed and resolved.

Too little compromise can also be a problem. A compromise score that is low on the Thomas-Kilmann Instrument (2007, 1974) for a principal may reveal the need to ask the self-examination question, “Do you sometimes find yourself too sensitive or embarrassed to engage in the give-and-take of bargaining” (p. 14)? Reservations about the value of compromise can keep the principal from getting a fair share for the self, the group, or the organization.

A second question that can help a principal to address problematic deficiencies in conflict-management behavior as indicated by a low score in compromise is, “Do you sometimes find it difficult to make concessions” (p. 14)? The principal must realize that, in situations where compromise is needed, other power-oriented approaches to conflict-management, such as competition, can be unproductive. A principal who finds him/herself unwilling to give in order to receive may tend to have difficulty escaping power struggles because of this inflexibility.
A fourth behavior that a principal may choose to use in addressing interpersonal conflict with a teacher is *avoiding*, an unassertive as well as uncooperative behavior (Thomas, 2007). Here, the principal would not pursue his/her own goals or the goals of the teacher. He/she simply ignores or does not address the conflict. Avoiding, commonly known as ‘sidestepping,’ can mean postponing the conflict, retreating, or withdrawing from the issue.

Avoiding can be useful at times (Thomas, 2007). It may be appropriate when other issues are more important or when the principal believes there is no chance of satisfying his/her concerns. When the costs of a conflict are greater than the benefit, confronting the issue may not be worth the effort, or when a cool-down period is needed so that principal and/or teacher can regain perspective it may not be wise to immediately address the issue. Further, when more information is needed before addressing the issue, avoidance can be a good strategy, a third party may be better equipped to resolve the conflict more effectively, or the immediate issue could be symptomatic of another more fundamental problem that needs attention.

A principal, however, could utilize too many avoiding behaviors. A Thomas-Kilmann Instrument (2007, 1974) score that is high in avoiding might be worthy of the question, “Does coordination suffer because people sometimes have trouble getting your input on issues” (p. 15)? The implication is that, because the principal practices avoiding at a high rate, he/she does not adequately address problems and the organization suffers as a result. Another question for a principal who scores high in avoiding might be, “Does it sometimes appear that people are ‘walking on eggshells’” (p. 15)? In other
words, people in the organization may be devoting too much energy to avoiding issues instead of solving them. A third question for a high avoiding score could be, “Are decisions on important issues sometimes made by default” (p. 15)? If so, the principal may need to reevaluate his/her own role in the school, ensuring that he/she is making decisions when appropriate, rather than allowing others to do so.

A principal may also score low in the area of avoiding on the Thomas-Kilmann Instrument (2007, 1974). If so, he/she might benefit from asking him/herself, “Do you sometimes find yourself hurting people’s feelings or stirring up hostilities” (p. 15)? If so, the principal may need to practice more discretion, or tact, and begin to address conflict in less threatening ways. A second question could be appropriate. And that is, “Do you sometimes feel harried or overwhelmed by a number of issues?” If so, the principal could benefit from reexamining priorities and delegating certain issues to others when appropriate.

The fifth conflict-management behavior that Thomas (2007) identified is **accommodating**, an unassertive and cooperative approach. Accommodating is the opposite of competing. This behavior requires the principal to practice self-sacrifice by neglecting his/her own concerns and addressing the concerns of the teacher. Generosity, unquestioning obedience, or deferring to the teacher’s point-of-view are examples of accommodating principal behaviors.

Accommodating can be useful to a campus administrator (Thomas, 2007). The occasion may arise when a principal realizes that he/she is wrong and a better solution needs to be considered, learning becomes viewed as beneficial, and the time is
appropriate to demonstrate that he/she is reasonable. Or, when an issue is more important to the teacher than it is to the principal, the principal may need to use accommodation as a gesture of goodwill in order to foster a cooperative relationship.

Additionally, accommodating can be beneficial at other times (Thomas, 2007). For example, it could be best when building “social credits” (p. 16) for use at a later time, in anticipated future situations that are viewed by the principal as more important. Or, it could be that pressing the issue could only result in losing and further power-oriented behaviors would only serve to irreparably damage the cause. Accommodating can also be useful when preserving harmonious relationships and avoiding disruptions are important. Or, a principal could use accommodating behaviors at times when a teacher needs to develop, experiment, and/or learn from mistakes.

Too many accommodating behaviors can be a problem. For the principal who has a high score in accommodating on the Thomas-Kilmann Instrument (2007, 1974), it may be appropriate to ask, “Do you feel that your ideas and concerns sometimes don’t get the attention they deserve” (p. 16)? Maximizing potential contributions to the organization may not be possible for a principal with too many accommodating behaviors; his/her influence and respect can suffer. There is a second question that may be appropriate for a high accommodating score - “Is discipline lax” (p. 16)? If the answer is ‘yes,’ the principal may need to realize that certain basic rules and procedures need to be enforced and not enforcing them could damage the principal, other teachers, and/or the school.
Too few accommodating behaviors can be problematic. A principal who scores low in accommodating might need to ask him/herself, “Do you sometimes have trouble building goodwill with others?” If so, the principal may need to realize that accommodating teachers on minor issues can be important as a gesture of goodwill. Another self-examination question can be appropriate, “Do others sometimes seem to regard you as unreasonable” (p. 16)? If so, it may be necessary to move away from power-oriented behaviors.

Other questions for principals who score low in accommodating may be appropriate. For example, “Do you occasionally have trouble admitting when you are wrong” (p. 16)? If so, it could indicate a need to move away from the use of so many competing behaviors. Or, “Do you recognize legitimate exceptions to the rules” (p. 16)? If the answer is ‘no,’ the principal may need to think more critically about issues, seek to understand the intent behind rules and procedures, rather than blindly enforcing every rule. Or, another appropriate question might be, “Do you know when to give up” (p. 16)? If a principal relentlessly pursues every issue with power-oriented behaviors, he/she will not maximize his/her influence.

This study addresses the problem of the principal’s need for task-orientation and simultaneous people-orientation by referencing Thomas’s (2002) five conflict-management behaviors; the study views them as a principal’s contingency model, each behavior to be used in varying degrees when appropriate. The challenge for the campus principal lies in exercising good judgment and accurate discernment based on situational
factors in order to manage interpersonal conflict between himself and each teacher with
the goal of advancing the school system and meeting the needs of its people.

Problem Statement

The central problem addressed was the lack of research on the prediction of
preferred conflict-management behaviors among small-school campus principals.
Research on conflict-management was widespread, but literature that employed the
technique of prediction and school principal preferred conflict-management behavior
was sparse at best.

The problem under investigation was the inconclusive collective results of
studies that have compared male and female conflict-management behaviors. Studies
have documented similarities and differences in males and female behaviors with some
agreement, as well as some disagreement. As part of the problem, while comparisons
between genders have been made in the literature, predicting preferred conflict-
management behaviors based on gender was largely undocumented. Therefore, this
study sought to predict the preferred conflict-management behaviors in the group of
principals.

Next was the question of experience and its predictive effect on preferred
conflict-management behaviors of the group of small-school principals under
investigation. There appeared to be a void in the literature concerning the variable of
experience, and its predictive effect was largely a question that had been left
unanswered. This study aimed to examine the available literature concerning conflict-
management behaviors and level of experience. Then, the study attempted to determine if the behaviors could be predicted based on level of experience.

**Purpose of the Study**

The purpose of this study was to address two problems related to preferred conflict-management behaviors in small-school principals within Texas Education Agency service center regions 5, 6, and 7. Analysis of the group of principals and the related variables should hopefully contribute to the existing literature surrounding conflict-management and best practices. A goal of this study was to assist practicing principals to better understand how to manage conflict between themselves and their teachers in order for the school to reach its full potential.

For the purposes of this study, the definition of conflict remained consistent with the definition provided by the authors of the Thomas-Kilmann Instrument (2007, 1974). “Conflict is simply the condition in which people’s concerns – the things they care about – appear to be incompatible” (Thomas, 2002). Using this definition, conflict can range from subtle to overt, or anywhere in between those two extremes.

**Research Questions**

Q1: *Is there evidence to suggest that a preference for competitive conflict-management behavior can be predicted?*

Q1.1: Can a preference for competitive conflict-management behavior be predicted by gender?

Q1.2: Can a preference for competitive conflict-management behavior be predicted by years of experience in education?
Q1.3: Can a preference for competitive conflict-management behavior be predicted by years of experience in administration?

Q2: Is there evidence to suggest that a preference for collaborative conflict-management behavior can be predicted?

Q2.1: Can a preference for collaborative conflict-management behavior be predicted by gender?

Q2.2: Can a preference for collaborative conflict-management behavior be predicted by years of experience in education?

Q2.3: Can a preference for collaborative conflict-management behavior be predicted by years of experience in administration?

Q3: Is there evidence to suggest that a preference for compromising conflict-management behavior can be predicted?

Q3.1: Can a preference for compromising conflict-management behavior be predicted by gender?

Q3.2: Can a preference for compromising conflict-management behavior be predicted by years of experience in education?

Q3.3: Can a preference for compromising conflict-management behavior be predicted by years of experience in administration?

Q4: Is there evidence to suggest that a preference for avoiding conflict-management behavior can be predicted?

Q4.1: Can a preference for avoiding conflict-management behavior be predicted by gender?
Q4.2: Can a preference for avoiding conflict-management behavior be predicted by years of experience in education?

Q4.3: Can a preference for avoiding conflict-management behavior be predicted by years of experience in administration?

Q5: Is there evidence to suggest that a preference for accommodating conflict-management behavior can be predicted?

Q5.1: Can a preference for accommodating conflict-management behavior be predicted by gender?

Q5.2: Can a preference for accommodating conflict-management behavior be predicted by years of experience in education?

Q5.3: Can a preference for accommodating conflict-management behavior be predicted by years of experience in administration?
Research Hypotheses

H₀₁: Gender will have no significant predictive effect on the preferred conflict-management behaviors of small-school principals when interacting with teachers.

H₀₂: Level of experience will have no significant predictive effect on the preferred conflict-management behaviors of small-school principals when interacting with teachers.

Methodology

This research project was a quantitative study that utilized the Thomas-Kilmann Instrument (2007, 1974) as a tool for collecting self-assessment data from practicing small-school principals in Texas Education Service Center regions five, six, and seven. A logistical regression analysis was used in an attempt to predict the effects of gender and experience on each of the five conflict-management behaviors as identified by Thomas (2007). A comprehensive discussion of the methodology is found in Chapter III.

Definition of Key Terms

The following definitions are pertinent to this study:

- Accommodating: An unassertive and cooperative behavior where the person is attempting to satisfy the other person’s concerns at the expense of his/her own.

- Assertiveness: The extent to which one tries to satisfy his/her own concerns (Thomas, 2002).

- Avoiding: Both an unassertive and uncooperative behavior where the person tries to sidestep conflict without trying to satisfy...
either person’s concerns.

Collaborating: An assertive and cooperative behavior where the person attempts to find a win-win solution that completely satisfies both people’s concerns (Thomas, 2002).

Competing: An assertive and uncooperative behavior where the person tries to satisfy his/her own concerns at the other person’s expense (Thomas, 2002).

Compromising: An intermediate behavior between both assertiveness and cooperativeness where the person is trying to find an acceptable settlement that only partially satisfies both people’s concerns (Thomas, 2002).

Conflict: The condition in which people’s concerns – the things they care about – appear to be incompatible (Thomas, 2002).

Conflict-Management: Refers to the on-going effort to effectively control disputes. An approach that assumes that the dispute may be on-going.

Conflict Resolution: Refers to ending a dispute between parties. An approach that assumes that the dispute can be ended.

Cooperativeness: The extent to which one tries to satisfy the concerns of another person (Thomas, 2002).
Experience: The length of time a principal has directly participated in some aspect of school leadership. *Experience in education* refers to the number of combined years in education in any capacity; while, *experience in administration* refers to the number of years the principal has participated in school administration.

Small School: A school district containing less than 1,000 students.
Significance of the Study

This study’s aim was to address a gap in the literature as related to the preferred conflict-management behaviors of small-school principals in the principal-teacher relationship. The study will compare its findings to other related research and draw conclusions that may improve the research-base concerning the topic of conflict-management in the principalship. Thus, the significance of the study from the researcher’s perspective was that it might fill a void in the principal-teacher literature.

This study sought to contribute to the research base that describes the evolution of the principal-teacher relationship. As the relationship continues to evolve with changes in society, research should be a continuous effort in order to further the goal of improving schools. The changes in public schools that have take place over the last fifty to one-hundred years have been drastic and largely unforeseen. The next century is sure to hold more changes. Therefore, best-practices for principals surrounding the principal-teacher relationship should focus on advancing that relationship.

At the practitioner level, this study sought to emphasize the need for principals who are versed in conflict-management techniques. Blase (1991) noted that administrators in general must have a strong sense of self-awareness, possess the ability to operate in a dynamic and political social setting, and be able to engage individuals both reactively and proactively. For the campus principal who is attempting operate in this setting and behave appropriately, conflict-management behaviors need to be a part of the training process. This study aimed to add to the principal preparation effort.
Limitations

Several limitations are worth noting. This study may be considered limited in scope because of the small sampling size of female participants. CPP Inc. authorized the administration of a maximum of five-hundred instruments, an amount larger than the number of participants in the Thomas-Kilmann Instrument’s (2007, 1974) first norming in 1977. However, 191 instruments were mailed and only 29 valid instruments for female principals were acceptable for use in the analysis, as opposed to the 47 valid instruments returned by male principals.

The study was based on an instrument that is a self-assessment. Although Kilmann and Thomas (1974) designed a forced-choice question format that tends to lower social desirability bias, self-assessment has its own set of limitations. Self-perceptions and the views of others do not always match (Halpin, 1966). In order to get an unbiased view of what is actually happening, the results of a self-assessment might be further validated by the assessment of an observer.

Only three variables were examined as possible predictors of the principals’ preferences for conflict-management behaviors. The three variables were gender, level of experience in education, and level of experience in administration. It must be noted that the variance for each of these variables were reported, but no other variables were taken into consideration for the purposes of this study. Any future study might consider including other variables so that more of the variance can possibly be explained.

Concerning the treatment of variables, the stepwise logistical regression that was employed in the methodology is a backward (conditional) method that requires variables
to be loaded, then dismissed them in order of least to most significant respectively. It has been noted by Agresti (2007) that the treatment of variables can impact outcomes. Therefore, if the issues of gender and/or experience are researched in future studies focusing on conflict-management, it may be appropriate to explore other methods of loading variables, such as a forward (conditional) method that adds significant variables until all are arranged hierarchically.

The study was also limited to head principals and their perceived interactions with teachers. There was no comparison of preferred conflict modes across organizational levels as the narrow focus of this study was only concerned with current conditions in the primary campus leadership role. An interesting follow-up to this study might be to compare the principal’s preferred modes of behavior with teachers to the principal’s preferred mode of conflict-management behavior toward other stakeholders such as custodians, assistant principals, parents, superintendents, or students.

The scope of this study was limited by the self-imposed boundaries of the researcher. The decision to involve only public independent school districts may have limited the ability to generalize into schools outside the public domain. The public schools of Texas were much larger in number that other schooling designs, such as private enterprises; further, public school information was more readily available and lent itself to a research project with limited means. Those principals, because of the differing characteristics of their schools in private settings, may have preferred approaches much different than those of public school principals who operate under a larger myriad of federal and state rules and regulations.
The rationale for choosing eastern Texas was twofold: Preliminary research revealed a lack of conflict-management studies conducted with a focus on small-school principals in the region. Further, the region was chosen for convenience of study without attempts to stratify the demographic specifics of participants.

The small-school aspect of the study was chosen as focus by the researcher. Campus principals in districts with student enrollments under 1,000 in the 2008-09 school-year were the focus of the research. The implication was that preferred conflict-management behaviors of small-school school principals may have been different from those in much larger settings or urban areas. However, the comparison between principals of small and large campuses was beyond the scope of this study.

Assumptions

For purposes of this study, the following assumptions were made:

1. The Thomas-Kilmann Instrument (2007, 1974) as modified for this study will cause participants to focus on the principal-teacher relationship.

2. The participants will read and understand the instructions and language in the instrument.

3. The participants will complete the instrument honestly, with earnest self-reflection, and effort.

4. Interpretation of the data will accurately reflect the intent of the participants.

Organization of the Dissertation

Chapter I of the study has introduced the purpose of the study, an overview of conflict-management theory, the problem statements, the study’s purpose, research
questions, the hypotheses, and significance. Chapter I has also outlined several limitations of the study. Assumptions have been discussed and key terms have been defined.

Chapter II contains a review of the literature. The format follows a broad to narrow focus, beginning with studies that focus research on the universal issue of communication in educational administration. Next, works on conflict-management are examined. Finally, more recent studies surrounding organizational conflict are surveyed. The focus of Chapter II then narrows to gender and level of experience in relation to conflict-management.

Chapter III describes the methodology used in the study. The chapter reports on the study’s population, the central questions that are addressed, the instrument that is used, as well as the instrument’s validity and reliability. Next, data collection procedures are described, followed by an overview and explanation of the study’s methods, and design. Finally, the participants and their overall results are reported, followed by a brief summary of the chapter.

Chapter IV reports on the results of the study. Each behavior – competition, collaboration, compromise, avoidance, and accommodation – has its own set of results. Male vs. female results are analyzed and reported, as well as experience vs. inexperience. The chapter ends with a summary table and discussion that focuses on the overall findings.
Chapter V is a discussion of the findings as related to the literature. Implications for practice, preparation of school leaders, policy, and research are discussed. Finally, a conclusion brings the chapter to an end with a summation of the study.
CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this review is to provide an understanding of previous research in the area of the principal-teacher relationship, focusing on conflict that arises between principals and teachers. The review begins with an introduction that describes the general literature on principal-teacher communication and its effect on students. Next, the topic of conflict is addressed as related to gender and experience.

Introduction

Communication in the Principal-Teacher Relationship

Current research identifies a communication-orientation as a key leadership characteristic (Maxwell, Scheurich, and Skrla, 2009; Spillane, 2006; Gronn, 2000). A communication-oriented theme resonates from the literature surrounding the principal-teacher interpersonal relationship.

Sergiovanni (2007) posits that the supervisor is the key to a healthy and productive schoolhouse because he/she fosters climate, culture, and student achievement. The school administration sets a tone for campus climate and culture by providing sound moral and ethical leadership practice based on a view of teachers as professionals. The school’s potential can be reached only when the leadership transitions from a bureaucratic to an organic management orientation with open communication channels (Tschannen-Moran, 2009).

Sergiovanni (2009) and Tschannen-Moran, (2009) emphasize that when the school leadership’s moral authority outweighs its bureaucratic orientation then the
commitment of the school’s membership will produce a high level of performance. Through the efforts of school administration the school’s original expectations can be surpassed (Sergiovanni, 2007).

Fullan (2005) acknowledges that the moral aspect of leadership should be an emphasis with the goal of public service, and that a systems approach that addresses the need for task-completion is a necessity. He posits that enabling behaviors are important, such as good communication that produces other leaders in the school. Fullan (2005) posits that one dilemma for leadership is in striving for a system that is sustainable and productive by simultaneously paying attention to the organization’s goals and people with effective communication.

A problematic issue that has been identified in schools is poor communication that results in poor relationships (de Wet, 2010; Sergiovanni, 2009). Sergiovanni (2009) posits that relationship themes are vital in the quest for school improvement, and without strong positive relationships between administrators, teachers, students, and parents, transformation is impossible. In planning for continuity of purpose, schools should be caring (Noddings, 1992), and the school’s administration must have the skills to advance instructional coherence, enabling teachers and students to work together in executing a plan (Sergiovanni, 2009).

Fullan and Hargreaves (2009) posited that, for true communication to take place, speaking and listening are vital, especially when the communication concerns the vision and strategies of the organization. Fundamental goals must be stated, and stakeholders must be given the chance to provide input and feedback. As Fullan and Hargreaves
(2009) stated, “policies and strategies require many more times the communication than you might rationally feel is sufficient” (p. 291).

Leithwood, Blair, and Strauss (2009) found that a team-oriented style with open communication channels has yielded positive effects. Two-way communication calls for a collaborative approach (Trimble, 2002) that can yield two effects that serve to reduce unproductive conflict in schools - more democratic practices and greater commitment by a staff to the mission of the organization (Leithwood, Blair, & Strauss, 2009, Somech, 2008).

Hoy and Miskel (2005) point out that enabling structures require two-way communication, and problems must be seen as learning opportunities. The principal, as campus leader, must encourage trust, openness, and cooperation without tightly-coupled mechanisms that reflect suspicion and control; rather, he must create and maintain enabling structures that provide teachers with the plan, resources, and motivation to experience success. In short, the principal must be a good communicator in order to be a good leader and get good results.

Effects of the Principal-Teacher Relationship on Student Achievement

Through effective communication, school leaders establish a relationship with the school’s teachers that can affect the school’s primary goal of student achievement. The importance of principal leadership has been researched, and there is little dispute that the principal influences student learning. According to Leithwood, Louis, Anderson, and Wahlstrom (2004), “Leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school” (p. 5).
Their research identifies high quality leadership, clear and understandable goals, and the development of people as vital themes for school leaders who seek to improve student achievement.

Marzano, Waters, and McNulty (2005) conducted research that outlined specific leadership strategies that affect student achievement. Among those that have been identified and correlated with academic achievement gains is developing a strong school leadership team. Their research found that a collaborative approach with a strong emphasis on principal-teacher communication with the understanding that teacher intellectual stimulation and motivation produces a more effective teacher.

Research has reinforced the notion that principals should take collaborative approaches toward teachers for the sake of students (Trimble, 2002). Walsh (2005), in attempting to better understand principal-teacher relationships at a group of successful North Carolina Title I elementary schools, found that the principal-teacher relationship affected student achievement.

Hoy, Tarter, and Hoy (2006) found that the attitudes of the school administration and teachers can have a collective effect on student achievement. Research supports the notion that the principal’s attitude as a form of communication can largely affect teacher attitudes, and in turn indirectly affect student learning (Leithwood, Patten, & Jantzi, 2010). Further, Kuczma (2008) reported that principals and teachers perceived their core beliefs to affect student achievement.
The Need for Conflict-Management in the Principal-Teacher Relationship

Hall and Bernier (2008) have researched interpersonal sensitivity as a form of communication and emphasize the importance of the qualities that it encompasses. Empathy and rapport are among verbal and non-verbal skills that are part of interactions that communicate attitudes, feelings, and thoughts to those in proximity. Interpersonal sensitivity means “perceiving the needs and concerns of others; dealing tactfully with others; working with others in emotionally stressful situations or in conflict; managing conflict; obtaining feedback; recognizing multicultural differences; and relating to people of varying backgrounds” (Hoyle & Crenshaw, 1997, p. 1-2).

The quality of interpersonal sensitivity has been researched in the area of school administration by Hoyle and Oates (1998), and Walters (2008). Walters (2008) conducted a study focusing on the interpersonal sensitivity of five high school principals, finding that male and female principals perceived their interpersonal skills differently than their campus improvement teams. The males scored themselves higher, while female principals scored themselves lower than the campus improvement teams. Walters (2008) reported that differences may have resulted because teachers and principals had differing perceptions about what skills were important.

The matter of sometimes differing focal points between principal and teacher has carried over into other campus-level research that has stressed that teachers understand the need for more effective principal leadership. Although an in-depth analysis of teacher viewpoints is beyond the scope of this study, it is appropriate to note that differences have been documented (Blase, 2000, 1988a, 1988b). Research has shown
that teachers and administrators often hold differing sets of expectations and values (Blase & Blase, 2002; Ramani & Zhimin, 2010).

Hoy and Miskel (2005) state that conflict in organizations is inevitable and can be good for an organization. Tjosvold (1997) reported that conflict can be a source of positive change, improvement, and more democratic processes. Putnam (1997) posited that conflict can balance power, improve communication, and develop a basis that is useful to manage differences. Thomas (1976) has also emphasized that conflict has the potential for constructive or destructive effects, depending upon how it is managed. However, Somech (2008) found that good conflict-management contributes to effective teamwork.

DeDreu (1997), DiPaola and Hoy (2001), Uline, Tschannen-Moran, and Perez (2003) distinguished the difference between cognitive and affective conflict. Cognitive conflict focuses on issues that are related to policies, tasks, and resources, while affective conflict is associated with social-emotional issues, values, beliefs, and group identity. DeDreu (1997) found that cognitive issues foster more problem-solving as compared to affective conflicts. Oppositional behaviors are more often associated with affective conflicts and tend to reduce problem-solving (DeDreu, 1997).

Research into motives behind workplace behavior underscores the importance of relationships. Mintzberg (1983) identified five broad categories of behaviors that organizational members may embrace, depending on the motives and beliefs of each member. Mintzberg (1983) refers to the behaviors as “games” (p. 217) that are played between members of the organization. They include games to resist authority, games to
counter the resistance of authority, games to build power bases, games to defeat opponents, and games to bring organizational change (Mintzberg, 1983). Usually, political games do not dominate work environments, but the presence of a political game to any degree can serve to influence, strengthen, or weaken the organization (Mintzberg, 1983).

Ruzzier (2007) examined the conflicts between individual philosophies and institutional expectations and found that the pressures associated with accountability and a standardized curriculum made it difficult for teachers to implement key components of developmentally appropriate practices. Ruzzier (2007) found that teachers experienced conflict due to administrative pressures and expectations, and that teachers need administrators who cultivate an atmosphere of collaboration, support, and flexibility.

Amato (2008) reported that times of change or transition can be more stressful than usual for principals as well as teachers at the campus level, more intensely testing the leadership skills of the principal and his/her ability to collaborate with a dual focus on tasks and people. Amato (2008) examined the challenges that a principal experienced during a change process and the influence of that principal during the time of change and what the effects of that influence meant for teachers. He found that principals need to maintain a degree of rigidity in order to meet accountability requirements, but they also need to display flexibility in order to manage the human dimension of teachers.

Research has indicated that teacher professionalism has been linked to a professional orientation by the principal as well as faculty trust in colleagues (Tschannen-Moran, 2009). Cosner (2009) found that fostering collegial trust is a vital
component that is important in achieving innovation in the school. Jensen (2006) found that teachers who showed high levels of trust in their principals, and who reported higher levels of empowerment, perceived their schools as more supportive of innovation.

Saxton (2006) attempted to understand how a new principal initiates trust with a new faculty. He explored principal behaviors that engender initial trust formation between principal and teacher, attempting to find a practical framework to assist a new principal in the trust engenderment process. He reported that the principal’s ability to provide purpose, address issues/conflicts, seek input, and follow through were seen as major factors in initial trust engenderment.

Dymek-Thompson (2004) studied teacher perceptions through the concept of organizational justice that recognizes the superior-inferior dimension of the principal-teacher relationship. Findings indicated that the principal’s interpersonal behaviors can serve to impact teacher perceptions, and teachers can have a diminished effectiveness when they perceive the school as unjust. The study not only focused on teacher perceptions of justice in the school, it also emphasized the importance of effective conflict-management styles of the principal, reporting that the interpersonal behaviors of the principal have an effect on the character of the school, and the perceptions of organizational justice in the school.

Barry (2008) found that the principal’s ability to manage conflict is a significant and important emotional social competence, and he reported that the emotional intelligence of the principal was correlated with the relational trust of the teachers in the school. Walsh (2005) reported that the ability of the principal to resolve problems and
conflicts is vital to a positive principal-teacher working relationship. Walsh’s (2005) finding is supported in research by Austin and Harkins (2008) that found conflict resolution to be a necessity in principal-teacher collaboration.

Campus-level research has continued to document the divide between principal and teacher. Cox (2006) conducted a study with the purpose to examine the relationships between secondary public school principals and music educators. The study was an exploration of the perspectives of the two groups. The goal was to reduce conflict and enhance the collaborative relationship. Cox (2006) found that principals and music educators had different isolated perspectives. Conversations between the two sides did not tend to happen regularly except during conflicts. Cox (2006) found that points of conflict arose around several issues, including the budget, work outside of contract with no pay, attitude of rigidity on the part of music educators with regard to school and district policies, the perception of principals that music educators sometimes neglect management responsibilities, the scheduling of classes, and cross-curricular demands placed on students. Also, a reason that mostly problem-collaboration was conducted was that principals were preoccupied with daily minutia and had no time for proactive collaboration.

Barnett and McCormick (2004) found that the one-on-one relationship between the principal and each of the campus’s teachers tends to portray the leadership in the schoolhouse. The finding supports previous research that the leadership and followership in a school are interdependent and that the leader’s legitimacy depends on the perceptions of followers (Yukl, 1998).
Research has shown that improving the school requires the principal giving attention to the separation between principal and teacher views by utilizing the appropriate conflict-management behaviors (Somech, 2008). Indelicato (2005) focused on the conflict-handling modes of the principals in a group of highly-rated campuses when those principals managed principal-teacher conflict. He also studied the relationship among the conflict-handling modes and personal and campus characteristics. Indelicato (2005) found that principals with exemplary campuses favored a collaborative process that emphasized the need for principals to listen, to create win-win situations, to make the teacher feel valued throughout the conflict resolution process, and to maintain a student-centered focus.

**Power Bases for Leaders**

The superior-inferior dimension of the principal-teacher relationship necessitates a brief survey of the types of power that principals may access in their quest to communicate and manage conflicts. French and Raven (1968) researched the basis of interpersonal power and identified five types that can be applied to the leadership situations. The types of behavior - reward, coercive, legitimate, referent, and expert - can be divided into two broad categories of personal and organizational. Each of the five types of power has varying degrees of subordinate commitment, compliance, and resistance.

Reward power (French & Raven, 1968) concerns the ability to extend a reward, and it is effective if the subordinate has a desire for the reward. French and Raven (1968) found that leaders may use reward power to offer incentives to subordinates who
comply with a leader’s wishes. Followers who comply may experience increased
commitment after receiving rewards while those who do not comply are denied rewards.
The strength in reward power is not only in the attractiveness of the reward, but also in
the belief by the followership that the leader can and will follow through and give the
reward once the desired behavior is satisfied.

Coercive power (French & Raven, 1968) can be distinguished from reward
power in that coercion extends a negative consequence, or punishment, for undesirable
behavior. If a subordinate complies with a directive because of the risk of punishment,
the leader’s behavior is considered coercive. Followers may resist coercion if the
punishment is not seen as undesirable or severe. Coercive behavior may result in
compliance, but a leader’s pattern of long-term coercive behavior does not tend to foster
commitment by followers.

Legitimate power (French & Raven, 1968) is accessed by the leader through a
formal position in the organization. French and Raven (1968) posited that leaders in
organizations are granted the power to issue directives and the followership should
acknowledge that it is obliged to comply. In this scenario, subordinates follow the
instructions of the leader because it is accepted that the person who occupies the position
must be obeyed. As issues of compliance become farther from the superior’s zone of
authority, subordinates tend to look to other areas for guidance. Thus, followers who
obey directives may do so because they view the leader’s power as legitimate, while
followers who do not follow directives may not view the leader’s power as legitimate in
the organization.
Referent power (French & Raven, 1968) is a source that comes from the leader’s ability to gain influence over the behavior of others because of personal characteristics or the ability to identify with others. Interpersonal skills are the strength of a person with referent power. Trust, respect, and the desire to emulate behavior are benefits to the leader. Followers who view a leader as trustworthy and respected are more likely to be compliant and committed to the wishes of the leader.

Expert power (French & Raven, 1968) comes from possessing a specialized skill or knowledge. A leader can use expertise and information as a source of power because subordinates may not have either. Expert power tends to grow as the leader matures, gains experience and trust within the organization. French and Raven (1968) posit that leaders need some degree of expert power because credibility is important to leading.

In building and maintaining productive relationships with subordinates, a leader should consider the consequences of each behavior. Yukl (2002) found that referent power and expert power build the most commitment, while legitimate power and reward power are most likely to result in simple compliance. Coercive behavior was found as most-likely to produce resistance.

**The Evolution of Conflict-Management Theory**

Mary Parker Follett (1924) argued that the fundamental problem in organizations was not in the scientific management of tasks as Taylor (1911) had described, but in building and maintaining harmonious relationships. Roethlisberger and Dickson (1939) found that informal relationships in the organization are indeed powerful influences in the organization. The implication was that there exists a direct relationship between
production and the organization’s people. Follett (1941) proposed that conflict was a normal occurrence and to be expected, and it should be addressed as such.

Studies conducted via Ohio State in the 1940’s identified the initiating structure and consideration factors as two basic dimensions of leadership behavior. The Leadership Behavior Description Questionnaire (Hemphill & Coons, 1950; Halpin & Winer, 1952) measured the two dimensions and found that initiating structure and consideration are indeed two fundamental leadership behavioral dimensions.

The two schools of thought surrounding task-orientation and relationship-orientation have been extensions of the earlier conceptualizations of leadership (Cartwright & Zander, 1953). The Ohio State studies (Halpin, 1966) found that leaders in general tend to emphasize task orientation, or initiating structure while followers tend to be more concerned with the consideration component of leadership. Also, the studies found that only a slight relationship exists between a leader’s views on how he/she should behave and the views of followers concerning how the leader actually behaves.

Getzels and Guba (1957) formulated a model that considered the source of many of organizational conflicts - institutional versus individual needs. The model posited that the successful leader must balance a set of roles, expectations and personal needs of people. The nomothetic dimension acknowledges that the institution has needs that must be met, and the idiographic dimension acknowledges that individuals who work in the system also have personal needs. See Figure 2.1.
The diagram is designed to assess on-going progress in the interaction of its components. The social system gives rise to the nomothetic dimension that consists of the institution, role, and expectations. The idiographic dimension consists of the individual, personality, and need-disposition. There is constant tension between the institution and the individual, the role in the institution and personality, and institutional expectation and need-disposition. The result of these tensions is observed behavior.

Institutions are purposive, peopled, structured, normative, and sanction-bearing. Roles represent position and status; they also come with expectations and givens; further, roles lie along a continuum and range from required to prohibited. Roles can also complement one another as actors are charged with carrying them out.
Individuals have need-dispositions and motives that may be reflected in the role. When the individual has accepted and become proficient at a role, Getzels and Guba say that he has adjusted. When the individual has fulfilled all of his needs, the individual has integrated. Once the individual has adjusted and integrated, he is said to be fulfilling nomothetic and ideographic needs.

Roles and personality can conflict when expectations differ between the nomothetic and ideographic. Role-personality conflicts can produce a win-lose situation where either the individual or the institution loses. Or, a role conflict can arise that is a product of a dysfunctional institution, caused by disagreement about the definition of roles, disagreement among several referent groups within the institution, or contradictions in expectations between more than one role. Personality conflicts can also arise that produce confusion because of a misunderstanding of expectations.

According to the model, an individual can be effective without being efficient, or vice versa. Satisfaction is derived by attaining both of these components. Efficiency describes the relationship between personal needs and behavior, while effectiveness is the concern of the institution that desires productive behaviors. Providing satisfaction is the central dilemma that is faced by the leader, and the model recognizes this fact in theory and practice.

Three types of leadership-followership styles are presented by the model - nomothetic, ideographic, and transactional. Each style does not represent a correct or incorrect method, only a different one. While the nomothetic is concerned with ensuring that employees adhere to the rules of the institution, the idiographic style is based on
personality. The transactional style does not reveal a clear definition of its method, it is a mediator between the previous two styles, calling for leadership to take conflicting needs/desires into account when leading the organization in order to achieve the maximum results.

Getzels and Guba (1957) address the issue of morale in the model by stating that, when effectiveness and efficiency are met, the follower must also have a sense of identification and belonging. He/she must feel connected to the institution with the knowledge that what he/she is doing is a valuable part of the institution. Good morale cannot be achieved without belongingness, rationality, and identification.

Directing the completion of tasks required by the organization while attempting to satisfy the personal feelings of a subordinate can be a difficult situation for a manager. Fiedler’s (1967) contingency model for leadership constituted an attempt to satisfy the problem of situational leadership. Fiedler and Garcia (1987) found that effective leaders place a high value on task-orientation, and they are skilled at maintaining good interpersonal relationships. Good leaders also possess situational control, or the ability to act appropriately to satisfy the needs of the organization and its people.

Blake and Mouton (1964) continued the research of task-orientation versus relationship-orientation by developing a managerial grid based on two dimensions – a concern for people and a concern for production of results. The grid has served as a conceptual foundation for which to study conflict. The y-axis represents a scale of 1 to 9 that ranges from low to high concern for people; while, the x-axis also ranges from 1 to 9 and represents a low to high concern for tasks.
Blake and Mouton (1970) promoted a problem-solving approach that advocated high concern for people and high concern for task as the best problem-solving strategy for most situations. Other positions on the grid were noted to be useful in certain situations. Blake and Mouton believed that the leader’s behavior when addressing conflict would depend on his/her level of concern for each of the two separate dimensions of people and task.

Building on the work of Blake, Shepard, and Mouton (1964), Kilmann and Thomas (1975) identified the two independent dimensions of assertiveness, or attempting to satisfy one’s own needs, contrasted with cooperation, or attempting to satisfy the needs of others. Thomas emphasized leadership behavior as contingent on the situation.

Thomas (1976) reinterpreted the Blake and Mouton (1964) conflict model and, noting the need to combine the growing literature on conflict-management, synthesized two strains of conflict research literature, including a process model and a structural model. The process model focuses on a sequence of events that occur within an episode of conflict and is intended to be utilized when intervening in events as they are occurring in a conflict episode. The structural model is intended to assist in restructuring a situation in order to aid behavior patterns; its focus is on the conditions that affect conflict behavior in a relationship.

Thomas (1976) suggested that both process and structural models are needed in order to effectively manage conflict. He posited that the structural model is good for creating systemic changes and the process model is helpful in managing on-going
events. The structural model focuses on long-term changes and the process model helps to cope with an unforeseen crisis.

Thomas (1976) found that the process model contained five events – frustration, conceptualization behavior, other’s reactions, and outcome. Frustration is the result of the realization that an individual’s goal will not be met; then, the individual conceptualizes the conflict and copes with the frustration through a behavior. The other party reacts to the behavior and affects the individual in some way. During the episode, the conceptualization of the issue could change for either party. An outcome results and serves to set the stage for other possible future conflict episodes.

Thomas (1976) developed a model for the individual acting within the process model of a conflict episode. The model reflects the possibilities of behavior by either party in the conflict episode. The model reflects a vertical continuum that ranges from unassertive to assertive, and a horizontal continuum that ranges from uncooperative to cooperative. Five possible conflict behaviors fall within the grid. The behaviors, as described in Chapter I of this study, are competing (assertive-uncooperative), collaborative (assertive-cooperative), compromise (somewhat assertive-somewhat cooperative), avoiding (unassertive-uncooperative), and accommodating (unassertive-cooperative). Thomas (1976) posited that any of the five behaviors could result in different outcomes in an on-going episode between two parties.

According to Thomas (1976), the structural model is concerned with parameters which serve to shape an episode. Those parameters are predispositions of both parties, originating from motives and abilities. Second, social pressures play a part in the
episode. Third, incentive structures, or conditions, describe the interrelationship between the concerns of both parties. Fourth, rules and procedures shape the episode. The structural model features conflict between two parties that are influenced by these four influences.

Rahim (1992) devised five styles of handling interpersonal conflict that are based on two basic dimensions: concern for self, and concern for others (Rahim & Bonoma, 1979). The integrating style is characterized by a high concern for self and others; it emphasizes openness and can be compared to Thomas’s (1977) collaboration mode. The obliging style includes a low concern for self and high concern for others and is also known by Thomas (1977) as accommodating. The dominating style is characterized by a high concern for self and a low concern for others; it is also known by Thomas (1977) as competing. Rahim’s (1992) avoiding style is characterized by a low concern for self. The compromising style holds an intermediate position in concern for self and others, whereby parties both give up something in order to reach an acceptable conclusion.

Rahim’s (1983) research objective was to construct factorially independent scales that could measure the five styles of handling conflict. Rahim (1983) noted that conflict instruments under examination that were available at the time did not have factorially independent scales for each of the five conflict modes.

Thomas (1992) later further developed a process model that expands on the previous conceptualization (Thomas, 1976). The episode begins with the individual’s awareness of the conflict, followed by thoughts and emotions, intentions, and behavior. Behavior produces a reaction from the other party, who, in turn, has continued with
thoughts and emotions. Eventually an outcome results and is followed by a heightened awareness of the conflict in a later episode.

Thomas (1992) then developed a set of possible outcomes resulting from a conflict episode. Possibilities include two continuums, the vertical axis that indicates the degree of satisfaction of the party’s concern and the horizontal axis that indicates the degree of satisfaction for the other’s concern. Thomas (1992) posits that a win-lose scenario would mean that the party’s concern is satisfied while the other’s concern is not. A lose-lose outcome would mean that neither party is satisfied, while a lose-win outcome would point to an unsatisfactory outcome for the party and a satisfactory outcome for the other. A win-win outcome, referred to by Follett (1941) as integrative, would mean that both parties are satisfied with the outcome. The fifth possibility is compromise, where both parties give up something in return for receiving concessions, the result being that neither party are completely satisfied or dissatisfied with the outcome.

The evolution of Thomas’s (1992, 1976) conflict-management theory on the uses of competition, collaboration, compromise, avoiding, and accommodation continue to progress and generate validation (Schaubhut, 2007). Landau, Landau, and Landau (2001) and Isenhart and Spangle, (2000) continue to utilize the theory and accept the notion that collaboration should be the first approach to conflict-management and that it is the best foundational philosophy. Other strategies are to be used when situations arise that are not appropriate for collaboration.
Conflict-Management and Gender

Psychological androgyny theory hypothesizes that there are independent masculine and feminine behavioral domains (Bem, 1974). The masculine, or instrumental domain, reflects a cognitive task-oriented approach to problem-solving. It is contrasted by the more expressive feminine domain that emphasizes a concern for the affective needs of others. Yarnold (1984) examined literature on leadership and conflict-resolution and found that Bem’s two dimensions were mirrored in other studies.

Taylor and Miller (1994) posited that gender influences conflicts and conflict-management. Harriman (1996), Marshall (1993), and Hines (1992) identified characteristics that have been associated with masculine and feminine roles. Those characteristics stereotypically describe men as self-reliant, dominant, hard, impersonal, outer-focused, action-oriented, competitive, and assertive. Women have been traditionally viewed as nurturing, passive, sensitive, compassionate, and family-centered; and, the view reflects women as the primary responsible person for the education of children in the household.

Tannen (1990) posited that differences in conflict-management styles of male and female are often due to socialization. As women have become an increasing percentage of the workforce in North America, interest in gender differences in conflict-management has grown, and documentation of women’s experiences has also increased (Brunner, 2000; Eckman, 2004; Grogan, 1996). Grant (1988) contended that organizations tend to reproduce themselves, and the people who hold power, traditionally men, tend to be responsible for promoting the people who are most like
themselves – other men. As a result, this could explain why women, who have been able to advance in organizations, have done so by embracing the male model of behavior (Blackburn, Martin, & Hutchinson, 2006).

Blackburn, Martin, and Hutchinson (2006) investigated the perceptions of principals and teachers as related to gender and its relationship to conflict-management style and school culture. They found that when male and female principal results were compared, male principals who exhibited a dominating conflict management style received lower school culture scores in the domain of teacher collaboration. Female principals, who were seen as having integrating conflict-management styles, received higher school culture scores in the domains of professional development and teacher collaboration.

Gender conflict style differences in organizations have been widely documented (Holt & DeVore, 2005) and those results have often been contradictory (Ruble & Schneer, 1994; Putnam & Poole, 1987). A variety of findings exist on what styles women prefer (Cardona, 1995; Holt & DeVore, 2005; Sone, 1981;). Schaubhut (2007) notes that the general agreement in the literature, when differences in conflict management behaviors are documented, is that men exhibit more competitive behaviors.

Ilmer (1980), and Kilmann and Thomas (1977) found that there may be evidence that males exhibit more competing and less compromising behaviors than females. Rahim (1983) found females to be more integrating, avoiding, and compromising than males; however, females in that study were found to be less obliging than males. Rahim
(1983) found no significant differences for dominating behaviors between male and female.

Shockley-Zalabak (1981) researched managers in five separate organizations. In all, thirty-one male and thirty-eight female managers self-administered the Hall Conflict Management Survey. Strength of preference for conflict styles were examined within situational contexts. When results for male and female managers were compared, no statistically significant differences existed between conflict styles of male and female managers.

Shockley-Zalabak and Morley (1984) researched conflict behaviors of 210 males and females. Participants were from the private sector, governmental agencies, and a university. The Thomas-Kilmann Instrument (1974) was utilized. After comparing males and females in the group of 210, findings indicated no significant differences in avoiding, collaborating, or accommodating modes. Significant differences were found for compromising and competing, with females being more compromising and males showing more competing behaviors.

Shockley-Zalabak and Morley (1984) cautioned against generalizing the finding to other populations because of the differences in student and non-student populations in the study. In the student sample, females showed more of a preference for compromising, and less of an inclination for competitive behaviors than males. However, the non-student group showed no significant differences between males and females for any of the five behavioral modes.
Chusmir and Mills (1989) conducted research through the lens of role theory with 99 males and 102 females participating by completing the Thomas-Kilmann Instrument (1974). The study found no significant differences between the conflict resolution styles of men and women managers at either home or work. Chusmir and Mills proposed that any differences in conflict styles may be more of a function of hierarchical level rather than biological sex. They also suggested that both genders adapt conflict behavior to situations.

Duane (1989) examined gender differences in the conflict management styles of union/management officials who were involved in settling employee grievances. A random sample of 63 men and 7 women were selected to take the Thomas-Kilmann Instrument (1974). Duane found these significant differences: males were more likely to avoid issues than females; women were found to be more competitive than men; and, males were more accommodating than females. Women and men did not significantly differ in collaboration, or compromise.

Eagly, Karau, and Johnson (1992) used meta-analytic methods to review fifty studies that compared leadership styles in male and female principals, finding evidence for some differences. Females in the studies tended to be more task-oriented. There was little evidence to find differences between male and female on measures of an interpersonally-oriented style. Findings indicated that female principals displayed a more participative style, while male principals tended to have a more directive style. The authors caution readers from drawing conclusions about leadership style and gender differences.
Berry (1994) compared conflict-management styles of male and female elementary principals in Missouri finding no significant differences between the conflict-management styles of male and female principals for any of the five conflict management behaviors. Findings suggested that psychological gender-role classification may be a better indicator of conflict-management tendencies.

Sorenson, Hawkins, and Sorenson (1995) conducted research on the male-female comparison using the Rahim Organizational Conflict Instrument II (Rahim, 1983) to measure conflict style preferences for five approaches, and the Myers-Briggs Type Inventory, Form G (Myers & McCaulley, 1985) to distinguish “feelers” from “thinkers.” Females reported significantly higher “feeling” scores than males, while males reported significantly higher “thinking” scores than females. The “feeling” and “thinking” dimensions in Sorenson, Hawkins, and Sorenson’s (1995) research are synonymous with the concern for others and concern for self continuums in the work of Thomas (1976) respectively. Sorenson, Hawkins, and Sorenson (1995) found that both males and females were most likely to choose, in order of preference, integrating, followed by compromising, dominating, avoiding, and obliging. The only significant difference in scores was in obliging (accommodating) with men scoring higher.

One strain of literature suggested that women may traditionally prefer compromising (Holt & DeVore, 2005; Erickson, 1984), accommodating (Sone, 1981), or avoiding (Cardona, 1995). Holt and Devore (2005), focusing on individualistic cultures, reported that men exhibit higher levels of competing behaviors, while women tend to utilize compromise more frequently.
Brahnam, Margavio, Hignite, Barrier, and Chin (2005) compared gender differences in conflict-management styles among information systems professionals. They used the Thomas-Kilman Instrument in researching upper level undergraduate information systems majors at a major university. No significant differences were found for competing, accommodating, and compromising. They did find that women were significantly more collaborative than men, and men were found to be significantly more avoiding than women.

Barbuto, Fritz, Matkin, and Marx (2007) researched the effects of gender, education and age on leadership behavior. In the study, followers rated leadership behavior. No significant differences were reported between men and women concerning transactional and/or transformational leadership behaviors. However, followers rated women has using significantly more pressure tactics than men. The researchers went on to report gender differences in pressuring behavior at lower education levels, but as level of education increased among the leaders, differences in conflict-management styles were diminished.

When controlled for gender and organizational level, results were also inconclusive. Thomas, Thomas, and Schaubhut (2007) examined raw scores and reported that females at higher organizational levels tended to use more assertive behaviors, while using unassertive behavioral modes less often than males at the same organizational level. Schaubut’s (2007) finding is in concert with the previous research by Chusmir and Mills (1989) that reported no significant differences in men and women when taking into account organizational level.
Schaubhut (2007) reported one consistent finding with Thomas, Thomas, and Schaubhut (2007): When compared to men, women tend to report lower levels of competing behaviors while both genders tend to use the more assertive modes of competing and collaborating at higher levels in the organization, and both male and female groups reported using the unassertive modes of avoiding and accommodating less at higher organizational levels.

Overall, research on the differences in conflict-management behaviors, using the variable of gender, appears to be inconclusive. According to Schaubhut (2007), while analysis-of variances revealed significant differences in competing, compromising, accommodating, and avoiding when controlled for gender, no significant difference was found for collaboration. However, Schaubhut (2007) noted that Cohen’s guidelines may be a more appropriate statistical measurement than ANOVA. Using Cohen’s guidelines for interpreting differences between male and female revealed that none of the five behavioral modes were found to be significantly different (Cohen, 1992; Schaubhut, 2007).

Although it has previously been argued that female administrators manage conflict through more compromise (Erickson, 1984), recent studies have documented no significant findings concerning the relationship of principal conflict-management behaviors and gender (Corral-Carlson, 2008; Schaubhut, 2007; Indelicato, 2005; Dillard, 2005).

Postmodern literature emphasized that a contingent approach was most effective in leadership situations (Thomas, 1992; Hargreaves, 1994; Donaldson & Sanderson,
1996), and that a collaborative and integrative problem-solving approach was best in most situations (Henkin, Cistone, & Dee, 2000). Yet, the debate continues concerning male versus female leadership differences (Schaubhut, 2007).

**Conflict-Management and Experience**

Literature that compares conflict-management differences between experienced and inexperienced managers is sparse. An extensive search for the effect of the principal’s years of experience in education, as well as in administration, produced only studies that were related in the sense that experience and conflict-management were studied in work-related situations, only two of them being in school settings (Berry, 1994; DeTurk, 2010). No literature was found that primarily and directly focused on the topic of the conflict-management preferences as related to the principal’s degree of experience. Therefore, this question may serve to begin a larger discussion on the effect of experience on preferred conflict-management behavior. The experience-related strand of literature as a whole proved inadequate to form a compelling hypothesis.

The CPP Global Human Capital Report (2008) reported that 41 percent of the employees surveyed believed that older people handle conflict most effectively. This statistic may give an indication that more experienced managers are better at managing workplace conflict. However, the report falls short of offering a direct focus on the variable of experience.

Barbuto, Fritz, Matkin, and Marx (2007) have noted that there are few studies that focus on the relationship between age and leadership behaviors. These researchers compared three age groups and found that significant differences were
reported by follower ratings. Age 46 and over was rated as highest for transformational leadership and the sub-scales of idealized influence, intellectual stimulation, individualized consideration, and effectiveness. The 36-45 year-old age group received the lowest ratings for intellectual stimulation and individualized consideration. The leader’s age was reported to have no significant effect on influence tactics.

Korabik, Baril, and Watson (1993), in a study focusing primarily on gender differences, compared experienced and inexperienced managers by gender. They reported findings of no gender differences in experienced managers; however, among inexperienced managers, female managers reported themselves as more compromising than their male counterparts. Thus, the interaction of gender and experience appeared to produce different results for males and females with regard to degree of managerial experience.

Drory and Ritov (1997) studied the effects of work experience and an opponent’s power on conflict-management styles. One result was that, when facing low-power opponents, experienced managers appeared to prefer dominating behaviors over avoiding, obliging, and integrating. Inexperienced managers did not appear to change their choices of conflict-management behavior regardless of the opponent’s power.

DeTurk (2010) examined the conflict resolution styles of a group of Nebraska superintendents, utilizing the Thomas-Kilmann Instrument (2007; 1974). He found that the five conflict-management behaviors were utilized to some degree. Regarding level of experience, he found that the more inexperienced superintendents tended to
collaborate with a peer more than those who were experienced. The more experienced superintendents reported more satisfaction with their conflict resolution behaviors.

Berry (1994) reported no significant differences between the conflict-management styles of male and female elementary principals when examining the effects of age and years of administrative experience. These results were not consistent with previous findings that age and avoiding behaviors may be related (Dietrich, 1991; Ziegler, Kehoe, & Riesman, 1985).

Meier (2007) found that principals with more experience had teachers who perceived fewer instances of staff conflict. This finding suggests that more experienced principals may be better at practicing the skill of enabling teachers to work under a loosely-coupled structure. Further, the relevant implication applicable to the current study is that more experienced principals may be better skilled at conflict-management, since the teachers in Meier’s (2007) study reported that perception.

Summary

Chapter II has attempted to emphasize that the literature supports the notion that communication is a vital part of the principalship and that conflict is a reality that exists in organizations. Literature has shown that situational factors call for a flexible array of conflict-management behaviors by campus principals. Possible differences in male and female conflict-management behaviors are questionable, while differences in experienced and inexperienced principals are largely undocumented and in need of further research.
CHAPTER III

METHODOLOGY

Chapter III describes the methodology used in the research. The goal of the chapter is to describe the methodology sufficiently enough that the study can be replicated. Chapter sections report population, questions and hypotheses, the research instrument, the instrument’s validity and reliability, data collection procedures, an overview of methods that includes a description of data analysis procedures, the study’s design, participants, and a brief summary.

Population

The public independent school districts in this study were located in the eastern region of Texas, each one located within Texas Educational Service Center Regions five, six, or seven. The districts were relatively small in student population in 2008-09, the largest having a student enrollment of 905 and the smallest with an enrollment of 109. The 191 campuses that were targeted for the study contained a variety of grade-level arrangements.

Campus principals who acted as a campus’s primary leader during the 2009-10 school-year were invited to participate in the study. One-hundred and ninety-one lead principals were mailed an instrument. Associate/assistant principals were not invited to participate in the study because assistant principals may have a weaker power-base in their relations with campus teachers. Specifically, assistants yield a lesser degree of legitimate power (French & Raven, 1968).
Research Questions and Hypotheses

Five basic questions that focused on the dependent variables (DV) were at the core of this study. Each of the five questions had its own conflict-management behavior that served as the outcome (DV). The five possible behaviors/outcomes were competing, collaborating, compromise, avoiding, and accommodating. Each of the five outcomes had three possible independent variables (IVs) that may be referred to as predictors. The predictors were gender, years of experience in education, and years of experience in administration.

Each of the five questions had the same sub-questions and hypotheses with the only difference in the wording of the question being the outcome behavior (DV). The general hypothesis for this study was that the three predictors (IVs) in the study could not predict any of the five outcomes (DVs). The basic questions, sub-questions, and hypotheses are outlined as follows:

Q1: Is there evidence to suggest that a preference for competitive conflict-management behavior can be predicted?

Q1.1: Can a preference for competitive conflict-management behavior be predicted by gender?

H_{0}1.1: A preference for competitive-conflict management behavior cannot be predicted by gender.

Q1.2: Can a preference for competitive conflict-management behavior be predicted by years of experience in education?
Ho1.2: A preference for competitive conflict-management behavior cannot be predicted by years of experience in education.

Q1.3: Can a preference for competitive conflict-management behavior be predicted by years of experience in administration?

Ho1.3: A preference for competitive conflict-management behavior cannot be predicted by years of experience in administration.

Q2: Is there evidence to suggest that a preference for collaborative conflict-management behavior can be predicted?

Q2.1: Can a preference for collaborative conflict-management behavior be predicted by gender?

Ho2.1: A preference for collaborative conflict-management behavior cannot be predicted by gender.

Q2.2: Can a preference for collaborative conflict-management behavior be predicted by years of experience in education?

Ho2.2: A preference for Collaborative conflict management behavior cannot be predicted by years of experience in education.

Q2.3: Can a preference for collaborative conflict-management behavior be predicted by years of experience in administration?

Ho2.3: A preference for collaborative conflict-management behavior cannot be predicted by years of experience in administration.
**Q3: Is there evidence to suggest that a preference for compromising conflict-management behavior can be predicted?**

Q3.1: Can a preference for compromising conflict-management behavior be predicted by gender?

**H₀3.1:** Compromising conflict-management behavior cannot be predicted by gender.

Q3.2: Can a preference for compromising conflict-management behavior be predicted by years of experience in education?

**H₀3.2:** A preference for compromising conflict-management behavior cannot be predicted by years of experience in education.

Q3.3: Can a preference for compromising conflict-management behavior be predicted by years of experience in administration?

**H₀3.3:** A preference for compromising conflict-management behavior cannot be predicted by years of experience in administration.

**Q4: Is there evidence to suggest that a preference for avoiding conflict-management behavior can be predicted?**

Q4.1: Can a preference for avoiding conflict-management behavior be predicted by gender?

**H₀4.1:** A preference for avoiding conflict-management behavior cannot be predicted by gender.

Q4.2: Can a preference for avoiding conflict-management behavior be predicted by years of experience in education?
H₀4.2: A preference for avoiding conflict-management behavior cannot be predicted by years of experience in education.

Q4.3: Can a preference for avoiding conflict-management behavior be predicted by years of experience in administration?

H₀4.3: Avoiding conflict-management behavior cannot be predicted by years of experience in administration.

Q5: Is there evidence to suggest that a preference for accommodating conflict-management behavior can be predicted?

Q5.1: Can a preference for accommodating conflict-management behavior be predicted by gender?

H₀5.1: A preference for accommodating conflict-management behavior cannot be predicted by gender.

Q5.2: Can a preference for accommodating conflict-management behavior be predicted by years of experience in education?

H₀5.2: A preference for accommodating conflict-management behavior cannot be predicted by years of experience in education.

Q5.3: Can a preference for accommodating conflict-management behavior be predicted by years of experience in administration?

H₀5.3: A preference for accommodating conflict-management behavior cannot be predicted by years of experience in administration.
Research Instrument

The research instrument for this study was a modified Thomas-Kilmann Instrument (TKI, 2007, 1974). The original TKI was developed by Kenneth Thomas and Ralph Kilmann as a tool to examine conflict-management behavior (2007;1974). Whereas the original TKI had no stem leading into two answer choices, a stem was added to the modified instrument in order to narrow the focus of the relationship under investigation in this study.

The Thomas-Kilmann Instrument is held under a strict copyright agreement with CPP, Inc. – formerly known as Consulting Psychologists Press. Although CPP, Inc. allowed three sample questions to be reproduced in this study, it does not allow the TKI in its entirety to be printed in published or unpublished dissertations; therefore, copies of the original TKI, this study’s modified TKI, or related materials such as the individual scoring sheet or graphing chart could not be included in an appendix for reference. Any study that desires to use the TKI or its related materials must obtain written permission from CPP, Inc.

The Thomas-Kilmann Instrument (2007, 1974) is a forced-choice instrument that contains thirty questions. Each question has only two choices: A or B. Upon completion of the exercise, the participant has exactly 30 points. The 30 points are distributed according to the five possible preferred behavioral modes of the participant. The distribution of points determines the participant’s preferred mode(s) of conflict-management behavior.
The instrument employs statements that represent the behavioral modes. One of a mode’s statements is posited against one of another mode’s statement a total of three times throughout the survey. The participant is forced to choose one statement or the other, even if he/she does not agree with either statement. The participant must choose the statement that describes the behavior that he/she would be most likely to use.

Of the five modes - competition, collaboration, compromise, avoidance, and accommodation – each one could earn anywhere between zero and twelve points. Since the instrument employs a forced-choice scenario, as any question is answered, one mode gains a point while the other will not gain a point. Points are not deducted from modes that are not chosen; rather, the mode simply loses the opportunity to gain a point. For example, if competitive and collaborative statements are posited against each other and the participant chooses the competitive statement, competition will earn one point while collaboration will not receive a point.

Participants receive a score for each mode ranging from 0 to 12. It is possible, but unlikely, that each of the five modes could yield an equal score of six, the result of the participant choosing equal numbers of corresponding statements from each mode. Conversely, it is not likely that a participant would score all twelve points on any one behavioral mode; this would require the participant to choose a particular mode’s statement a total of three times each over the other four modes. A scenario where a participant scores a twelve would indicate a clear preferred mode; while, three modes that each score a six would show a preference for balancing conflict-management.
behaviors. In the latter scenario, the participant would not have a clearly preferred mode of behavior.

Instructions for the instrument ask the participant to consider situations in which he/she finds his/her wishes differing from those of another person; then, the participant must choose how he/she usually responds in such situations. The following three examples are items can be found in the original Thomas-Kilmann Instrument (2007; 1974):¹

8. A. I am usually firm in pursuing my goals.
   B. I attempt to get all concerns and issues immediately out in the open.

15. A. I might try to soothe the other’s feelings and preserve our relationship.
    B. I try to do what is necessary to avoid tensions.

26. A. I propose a middle ground.
    B. I am nearly always concerned with satisfying all our wishes.

In the above examples, two conflict-management behavioral modes are pitted against one another, each mode represented by a single statement. In question number 8, choice A represents competition, while choice B indicates a collaborating mode. Question 15 forces the choice between accommodating (A) and avoiding (B) behaviors; while, question 26 forces the choice between compromising (A) and collaborating (B).

Once the participant completes all thirty questions, a specially-designed score sheet is used to tally points. Question numbers 1 through 30 are vertically aligned. Each numbered line horizontally intersects each of the five behavioral mode columns. The

¹ From the Thomas-Kilmann Conflict Mode Instrument by Kenneth W. Thomas & Ralph H. Kilmann. Copyright © 1974, 2002 by Xicom, Incorporated. Xicom, Incorporated is a subsidiary of CPP, Inc. All rights reserved. Further reproduction is prohibited without the Publisher’s written consent.
score sheet is not complete until the scorer tabulates the totals from each of the five columns. The participant’s score for each mode is indicated at the bottom of the score sheet. There is one score for each mode.

For this study, CPP, Inc. granted permission to add a stem to the TKI because of the study’s goal in getting the participant to focus specifically on the principal-teacher relationship. Whereas, the original TKI (2007, 1974) is meant to generalize the relationship between the participant and all other people he/she encounters, in this study the lead campus principal is instructed to focus only on his/her relationship with teachers on the campus and choose the best answer for each question. The introductory stem aids the principal in reflecting on his/her own interpersonal experiences with teachers. In the following example, questions 8, 15, and 26 are from this study’s modified TKI:\(^2\)

8. When interacting with a teacher on my campus,
   A. I am usually firm in pursuing my goals.
   B. I attempt to get all concerns and issues immediately out in the open.

15. When interacting with a teacher on my campus,
   A. I might try to soothe the other’s feelings and preserve our relationship.
   B. I try to do what is necessary to avoid tensions.

26. When interacting with a teacher on my campus,
   A. I propose a middle ground.
   B. I am nearly always concerned with satisfying all our wishes.

Thomas and Kilmann (2007) provide a graph with the TKI that can be used to compare scores to the norm group of 8,000. The graph divides the norm group into three segments by rank, the lowest being the bottom 25 percent, middle being 26\(^{th}\) to 75\(^{th}\)

\(^2\) Items altered with permission from CPP, Inc. From the Thomas-Kilmann Conflict Mode Instrument by Kenneth W. Thomas & Ralph H. Kilmann. Copyright © 1974, 2002 by Xicom, Incorporated. Xicom, Incorporated is a subsidiary of CPP, Inc. All rights reserved. Further reproduction is prohibited without the Publisher’s written consent.
percentile, and high being above the 75th percentile. The norm population will be further discussed in the next section.

The goal of many individuals who have taken the TKI (2007, 1974) has been to learn to better manage interpersonal conflict. By scoring and then ranking scores against the larger group, a participant can know his/her tendencies in situations of conflict. By examining one’s individual results, the participant continues the self-examination process by turning attention to the question of when to use each of the modes, as there is no single best approach for managing interpersonal conflict. The individual must not only have knowledge of what conflict-management behavior is appropriate, but he/she needs to successfully judge the best timing for the behavior.

For purposes of self-examination and learning appropriate timing on the use of each mode, Thomas and Kilmann (2007) have outlined the Uses section as a corollary to the score sheet and graph. The authors also included the Questions to Ask section that is intended to help individuals after they discover the ranking of their own scores. At the end of the completed exercise and after reflection on the self-examination questions, participants in the Thomas and Kilmann (2007) program are left with valuable knowledge to use in the quest to improve conflict-management skills. The Uses and Questions sections were outlined in Chapter I of this study in order to illustrate the complexity of interpersonal conflict-management behavior.

Demographic questions that were useful for gaining information needed to complete this study were added to the last page of the modified TKI. Questions included gender, age, total years in the field of education, total years spent in school
administration, total years as a head/lead campus principal, and whether or not the participant was the lead campus principal on their 2009-10 campus during the 2008-09 school-year.

Validity and Reliability of the Instrument

The Thomas-Kilmann Instrument (2007;1974) was originally normed in 1977 with a group of fewer than four-hundred participants. In the following years, the United States experienced changes that involved a shift from a more centralized workplace structure to a more decentralized and team-based approach; further, the country’s demographic composition became more diverse.

In 2007, the results of the new norming was reported (Schaubhut, 2007). The scores of 4,000 women and 4,000 men, ages 20 through 70, all employed full-time in the United States, were selected from a pool of 59,000 completed instruments that were collected between 2002 and 2005. The group of 8,000 participants was sampled to ensure representative numbers of people by organizational level and race/ethnicity.

CPP, Inc., the publisher of the TKI, had four major goals for the renorming effort (Schaubhut, 2007). First, it sought to increase the diversity of the norm sample in order to more accurately reflect the demographic composition of the United States workforce. Second, there was an effort to reflect conflict preferences at all levels of organizations. Next, CPP, Inc. desired to include individuals with varied levels of educational attainment. Finally, renorming was needed in order to get a sample size that was large enough to allow a generalization to other populations and groups.
The new group was more diverse than the original, much more reflective of the U.S. population, lending to the instrument’s predictive validity. The renorming resulted in minimal changes to the low, medium, and high ranges in the TKI scoring graph (Thomas & Kilmann, 2007).

Kilmann and Thomas (1977) designed the Management-of-Differences Exercise (MODE), later referred to as the TKI, so that social desirability bias would be minimized by forced-choices. The effort was successful in regards to reducing social desirability. Kilmann and Thomas (1977), calculating a social desirability differential, reported a Pearson coefficient of .21, nonsignificant, especially when compared to previous instruments – Blake and Mouton at .94, Lawrence and Lorsch at .88, and Hall at .87.

The forced-choice design has been problematic for those who have sought to examine the instrument’s reliability and validity. Womack (1988) asserts that, “great care must be taken” in interpreting traditional factor analytic techniques used on ipsative data (p. 330). However, Womack (1988) stated that Cronbach’s Alpha is one appropriate statistical test for comparing the MODE’s internal reliability to other instruments. Using Cronbach’s Alpha, Thomas and Kilmann (1978) found an overall average alpha coefficient of .60. More recently, Thomas, Thomas, and Schaubhut (2007) have expressed their belief in the inappropriateness of Cronbach’s Alpha performed on ipsative data.

Evidence supporting the content validity of the instrument may be inconclusive. Ruble and Thomas (1976) used a set of ten semantic differential scales to assert confirmation of the content validity of the MODE - its ability to measure the two
independent dimensions of assertiveness and competitiveness, and the five modes. Womack (1988) concluded that more examination of content validity needed to be performed.

Although construct validity was supported by two studies (Brown, Yelsma, & Keller, 1981; Yarnold, 1984), because of the forced-choice design, Womack (1988) again urges caution in interpreting results. Womack (1988) and Harding (1989) have also expressed concern about the concurrent validity of the MODE because of its development, ipsative nature, and self-assessment format.

Thomas, Thomas, and Schaubhut (2007) reported that test-retest reliabilities are most appropriate on ipsative measures. Thomas and Kilmann (1978) reported that test-retest reliabilities for the MODE were as follows: competing 0.61, collaborating 0.63, compromising 0.66, avoiding 0.68, and accommodating 0.62.

Kilmann and Thomas (1977) noted that finding evidence of the predictive validity of an instrument is usually “the most rigorous and demanding test of the usefulness of an instrument in empirical research. (p. 319)” Harding (1989) stated that it can take “ten years or more to thoroughly validate an instrument. (p. 867)” Womack (1988) and Rahim (1983) expressed concern about the predictive validity of the MODE because of the population that Thomas and Kilmann (1978) used to claim the instrument’s predictive validity.

Rahim (1983) has also posited that analysis-of-variance is inappropriate for the TKI because of the absence of factorially independent scales. Thus, Rahim developed the ROCI-II that contains independent items with independent 5-point Likert scales.
Kabanoff (1987) used the results from peer ratings of conflict behavior as criteria for comparison and did not find evidence of external or predictive validity of the TKI. Goering, Rudick, and Faulkner (1986) compared self-reported MODE scores with actual conflict behaviors and found weak connections between self-reports and coded behavioral styles.

The debate over the validity of the TKI has been contradictory and inconclusive since the development of the ROCI-II and the ensuing debate (Van De Vliert, & Kabanoff, 1990; Ben-Yoav, O., & Banai, M., 1992). However, the instrument continues to be used by practitioners and researchers alike (Schaubhut, 2007).

**Data Collection Procedures**

CCP, Inc., allowed the modification of the original instrument to reflect the narrowed relationship between principal and teacher; however, it would not allow the instrument to be disseminated electronically. Therefore, the modified TKI was bound in a booklet and mailed to the targeted principals at their respective 2009-2010 campuses. Steps were taken in an attempt to yield the highest percentage of participation (Dillman, 2007). Names of the campuses, as well as names of the principals, were stamped on the envelope to ensure accurate delivery. A researcher-addressed envelope complete with pre-paid postage was included with the instrument. A brief letter explained a few particulars to the targeted principals, such as the purpose of the study and contact information.

One week before mail-out, an e-mail message was sent to superintendents and principals in the targeted districts. The message indicated that the hard-copy would be
arriving by mail, the description of the envelope and instrument, as well as brief instructions for completing and returning the instrument. One week after the instrument was due to arrive at campuses, a second e-mail message was sent as an appreciatory note as well as encouragement for additional participation. Once each instrument was returned, each was scored and the collective results were compiled.

**Overview of Methodology**

This study employs a quantitative methodology. Since the study is interested in exploring the relationship between gender and conflict-management behavior, as well as the relationship between experience and conflict-management behavior, the concept of prediction is of interest. Can a preferred conflict management behavior be predicted? That is the central question that is addressed. Therefore, because of the study’s goal of prediction, regression analysis was used (Agresti, 2007; Field, 2005; Creighton, 2007).

Regression analysis is a statistical method that utilizes existing data to predict, within the parameters of a given amount of calculated error, an outcome (Agresti, 2007; Field, 2005). The general formula for regression is as follows:

\[
\text{Outcome}_i = (\text{Model}_i) + \text{error}_i
\]

Simple regression is used to predict an outcome from one independent predictor (Field, 2005). The formula is the same as that of a straight line. In the formula, \(Y_i\) is the outcome, while \(X_i\) is the \(i\)th person’s score on the predictor variable, \(b_1\) is the gradient of the straight line that is fitted to the data, and \(b_0\) is the intercept. \(b_1\) and \(b_0\) are known as the regression coefficients, while \(\varepsilon_i\) is the difference between the line’s predicted score
and participant i’s actual score, also known as the residual term (Agresti, 2007, Field, 2005). The formula for simple regression is as follows:

\[ Y_i = (b_0 + b_1X_i) + \varepsilon_i \]

Multiple regression analysis utilizes more than one predictor variable in order to make a prediction (Field, 2005). Thus, the equation remains the same as that of the simple regression model, with the exception of additional coefficients representing multiple predictors that are added. The formula for multiple regression analysis is as follows:

\[ Y_i = (b_0 + b_1X_1 + b_2X_2 + \ldots + b_nX_n) + \varepsilon_i \]

In this study, logistic regression analysis is used to predict the probability that gender or experience will result in a preference for either more or less of a behavior. Whereas, simple and multiple regression are generalized linear models with outcomes that are continuous, logistical regression analysis is also a generalized linear model with possible multiple outcomes; however, it usually has only one of two possible outcomes (Field, 2005). This model with possible dichotomous outcomes, often referred to as binary, is an either/or scenario. Binary logistic regression focuses on success/failure; its outcomes are not continuous, but contain only two categories (Agresti, 2007). A single outcome can be the only result of binary logistic regression.

With logistic regression, predictors can be either continuous or categorical (Agresti, 2007). Two continuous predictor variables are used in this study: years of experience in education, and years of experience in administration. The only categorical predictor variable used in this study is gender.
For simple or multiple linear regression to be a valid model, observed data must fit a straight line, while logistic regression fits data into an S-shaped logistic curve that is better suited for data meant to result in a categorical outcome (Field, 2005). The linear regression formula cannot be applied directly to logistic regression because outcomes in logistic regression are categorical, not linear. The formula in logistic regression, to be considered a valid regression formula, although it does not contain a linear outcome, must contain the principle of linearity. Since its outcomes are categorical this problem is overcome by expressing the multiple linear regression formula in logarithmic terms.

Thus, the logistic regression formula, while remaining as a generalized linear model, is altered to account for a single predictor, to the following:

\[
P(Y) = \frac{1}{1 + e^{-(b_0 + b_1X_1 + \varepsilon)}}
\]

Like the multiple regression formula, more than one predictor can also be added to the logistic regression formula where \(b_2X_2\) through \(b_nX_n\) represent additional coefficients that represent the additional predictors as follows:

\[
P(Y) = \frac{1}{1 + e^{-(b_0 + b_1X_1 + b_2X_2 + \ldots + b_nX_n + \varepsilon)}}
\]

The challenging part of regression is finding a statistical model that will fit the existing data as a model that will produce an accurate prediction (Agresti, 2007; Field, 2005). SPSS finds the model that is the best fit through the method of least squares by calculating the sum of squared differences (SS) for every potential line. The line with the smallest SS is the line of best fit, or the regression line.

The SS will indicate the line-of-best-fit - the regression line; however, if data points are scattered randomly on the graph, the regression line may be no better at
predicting an outcome than the line that represents the mean of the existing data (Field, 2005). Therefore, SPSS assesses the goodness-of-fit by summing all of the squared differences (SST) from the mean, considered the worst predictor model, then comparing them to the sum of the squares for the line of best fit (SSR). To compare SST to SSR, SPSS simply performs the following computation $SST - SSR = SSM$ where SSM indicates the usefulness of the regression line. If SSM is a large number, the regression line will be a much better predictor than SST; if SSM is small, the regression line will only be slightly better than formulating a prediction based on the mean (SST) (Agresti, 2007).

Logistic regression uses the log-likelihood statistic to assess how well a model fits a data set by comparing observed and predicted values (Field, 2005). Log-likelihood is analogous to the residual sum of squares (SSR) in multiple regression. Both reveal the amount of unexplained information present once the model has been fitted to a data set. As with the SSR in multiple regression models, large values of the log-likelihood statistic indicate poorly fitting models, while smaller values indicate a better fit.

In multiple regression models, SSR is compared to a baseline model in order to assess the usefulness of a model’s regression line (Field, 2005). Since logistic regression outcomes are fitted into categories with no mean, the log-likelihood statistic cannot be compared to a mean. Therefore, another baseline model must be found for the comparison since outcomes are represented as zeroes and ones, each representing differing categorical outcomes. Therefore, the baseline model for logistic regression is the outcome with the highest frequency.
The R-statistic, expressed as negative or positive correlations can range between -1 and 1 as the partial correlation between each of the predictors and the outcome variable (Creighton, 2007). A small R-value for an independent variable indicates a small contribution to the model, while a large R-value indicates a variable’s large contribution to the model.

For logistic regression, the Wald statistic is used for the purpose of assessing the significance of a predictor (Field, 2005). The Wald statistic, while analogous to the R-statistic in simple and multiple regression models, can be prone to inaccuracy in certain circumstances because when the regression coefficient \( b \) is large, the likelihood of a Type II error is greater; therefore, the probability of rejecting a predictor can be increased.

The correlation of determination, \( R^2 \), reveals how much one variable affects variability of the other (Field, 2005). In linear regression, \( R^2 \) is expressed as the difference between SST and SSR, referred to as SSM, divided by SST. \( R^2 \) can range from zero to one. The numerical answer can be multiplied by 100 in order to give the percentage of variance that a predictor(s) has on an outcome. For example, if the \( R^2 \) of a model is .13, the result is that the predictor(s) in question is/are responsible for 13 percent of variance in the outcome.

Whereas the \( R \) and \( R^2 \) in other linear regression models aid in assessing the goodness-of-fit of a regression line, the Nagelkerke \( R^2 \) provides a measure of the significance of a logistic regression model. Hosmer and Lemeshow’s \( R_L^2 \) has been used as the best available measure of analogous multiple regression’s \( R^2 \) until Nagelkerke
(1991) improved the model. SPSS recently added Nagelkerke $R^2$ model and it is reported in this study as an indicator of the effects of the predictors on the outcomes. In logistic regression, Nagelkerke has devised the most accurate formula for $R^2$.

Interpreting the SPSS output of logistic regression is aided by $Exp(B)$ that functions to estimate changes in odds of an event occurring when the predictor variable changes (Field, 2005). First, the original odds are calculated by dividing the probability of an event by the probability of a non-event. Then, odds are re-calculated when the value of the predictor variable is changed by one unit. Finally, the $Exp(B)$ statistic is calculated by dividing the odds after a unit change in the predictor by the original odds. An $Exp(B)$ value over a positive 1 indicates that as the predictor increases, odds of the outcome will increase. A value under a positive 1 indicates that as odds of the predictor increases, the outcome will decrease. As an example, an $Exp(B)$ value of 15.0 would indicate odds that are 15 times greater than the original odds.

Stepwise methods are used in the analysis of logistic regression models to further analyze the impact of predictors (Agresti, 2007; Field, 2005). There are two basic stepwise methods: forward and backward. The forward method begins with a model that contains a constant then searches for the one predictor that best explains the outcome; then it searches for the rest of the predictors in descending order until all are added to the model. The backward (conditional) stepwise begins by including all predictor variables in the model, then systematically removing each, beginning with the one that has the least effect on the outcome variable. The last remaining predictor
variable will be the one that has the largest effect on the outcome variable. The backward (conditional) stepwise is used in this study.

**Design**

Since the study attempted to predict principal responses regarding preferred conflict-management behavior, a quantitative design was used. Field (2005) noted that when using regression analysis, because of the goal of prediction, the terms “predictor” and “outcome” are respectively substituted for the terms “independent variable” and “dependent variable.” The predictors and outcomes in this study are outlined in Table 3.1.

**TABLE 3.1**

**Structure of the Logistic Regression Analysis**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Level of Measurement</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Nominal</td>
<td>Less vs. More Competitive</td>
</tr>
<tr>
<td>Years of experience in education</td>
<td>Scale</td>
<td>Less vs. More Collaborative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less vs. More Compromising</td>
</tr>
<tr>
<td>Years of experience in administration</td>
<td>Scale</td>
<td>Less vs. More Avoiding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less vs. More Accommodating</td>
</tr>
</tbody>
</table>

Predictors were coded before the analysis. Gender was coded as follows: For a male, a zero was entered; while, for a female a one was entered. Years of experience in education, as well as years of experience in administration were entered into separate
columns as reported by participants. Thus, the categorical predictor was gender, while the two continuous predictors were years in education and years in administration which measured the variable experience.

Once cut-off points for the outcomes were established and predictors were entered, the logistic regression analysis was performed. The researcher utilized the backward (conditional) stepwise approach and examined the Wald statistic, the \(-2\) log likelihood, \(Exp(B)\), and the Nagelkerke \(R^2\) for significance. Alpha levels were set at .05 for relevant indicators.

**Categorical Coding**

For the logistic regression analysis, in order to categorize each of the behavioral outcomes as less-preferred, or more-preferred for each participant, cut-off points had to be established that would indicate less or more of a behavior. Then, a determination had to be made on whether or not a behavior was dominant among a group of participants. In preparation for the logistical regression analysis, scores were re-coded and a cut-off point was established for each mode that would indicate less or more of a behavior. Each mode score was then converted from the standard zero to twelve possibility to the either/or scenario where a participant either scored less of a behavior, or more. Scores that fell below cut-off points, indicating less of a mode, were coded as zero, while scores that were above cut-off points were coded as a one.

It is important to note that cut-off points for establishing categories differed among the five modes. Although each mode’s range of possibility fell on or between zero and twelve, results did not span from possible lowest to highest for any of the five
behavioral outcomes. Therefore, rather than dividing the less/more categories at the mid-point of six, cut-off points for each behavioral mode was based on each mode’s distribution of scores with consideration given to the small sample size (N=76).

Since the score ranges and clusters differed among several of the modes, cut-off points also differed. Once cut-off points were established, each participant’s five behavioral mode scores were fitted into the appropriate categories. Table 3.2 outlines the study’s categorical coding as well as raw score numbers after all valid instruments were compiled.

**Participants**

Of the 191 instruments that were sent to campus principals, 91 were returned for a return rate of 48 percent. However, because 15 instruments were incorrectly completed, those potential participants had to be excluded, resulting in a total of 76 cases of participant data that could be considered valid. Therefore, the actual return rate of targeted principals was higher than the percentage of principals who returned reliable data. Because of the invalid instruments, the participation rate was 40 percent. Table 3.3 outlines participant descriptives.
TABLE 3.2
Categorical Coding for the Logistic Regression Analysis (N = 76)

<table>
<thead>
<tr>
<th>Binary Category by Outcome</th>
<th>Raw Score Split</th>
<th>Category by Score</th>
<th>Number of Raw Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>0: Less competitive</td>
<td>&lt;5</td>
<td>0-4</td>
<td>51</td>
</tr>
<tr>
<td>1: More competitive</td>
<td>&gt;4</td>
<td>5-10</td>
<td>25</td>
</tr>
<tr>
<td>0: Less collaborative</td>
<td>&lt;8</td>
<td>3-7</td>
<td>33</td>
</tr>
<tr>
<td>1: More collaborative</td>
<td>&gt;7</td>
<td>8-12</td>
<td>43</td>
</tr>
<tr>
<td>0: Less compromising</td>
<td>&lt;7</td>
<td>0-6</td>
<td>35</td>
</tr>
<tr>
<td>1: More compromising</td>
<td>&gt;6</td>
<td>7-11</td>
<td>41</td>
</tr>
<tr>
<td>0: Less avoiding</td>
<td>&lt;7</td>
<td>3-6</td>
<td>42</td>
</tr>
<tr>
<td>1: More avoiding</td>
<td>&gt;6</td>
<td>7-12</td>
<td>34</td>
</tr>
<tr>
<td>0: Less accommodating</td>
<td>&lt;6</td>
<td>1-5</td>
<td>36</td>
</tr>
<tr>
<td>1: More accommodating</td>
<td>&gt;5</td>
<td>6-9</td>
<td>40</td>
</tr>
</tbody>
</table>
All 76 principals that returned useable instruments reported being the head principal at their campuses in the 2009-10 school-year. Of those 76 principals, 47 were male versus 29 female for a participant percentage of 62 percent male and 38 percent female. 63 principals reported being the head principal on their campuses in the 2008-09 school year, while 13 reported that 2009-10 was their first year on their campuses. Of the 13, one reported that she had been the head principal on campus for only three months since she had begun the job in January of 2010.

The Table on page 89 provides a view of the minimum and maximum scores for the participant group of principals by behavior. For all behaviors, scores did not span the full range of zero to twelve. Means were tabulated, the overall mean of the group resulting in the required score of 30. The standard deviation for each behavior is also reported. Finally, the group of principals is compared to the norm group of 8,000 in Table 3.4. The TKI graph was used to report the exact percentile and ranking.
TABLE 3.4

Overall Results of the Modified Instrument as Compared to

the Norm Group of 8,000\textsuperscript{a} (N=76)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Percentile</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competing</td>
<td>0</td>
<td>10</td>
<td>3.58</td>
<td>2.48</td>
<td>39</td>
<td>Middle 50%</td>
</tr>
<tr>
<td>Collaborating</td>
<td>3</td>
<td>12</td>
<td>7.83</td>
<td>2.06</td>
<td>71</td>
<td>Middle 50%</td>
</tr>
<tr>
<td>Compromising</td>
<td>0</td>
<td>11</td>
<td>6.66</td>
<td>2.37</td>
<td>36</td>
<td>Middle 50%</td>
</tr>
<tr>
<td>Avoiding</td>
<td>3</td>
<td>10</td>
<td>6.54</td>
<td>1.79</td>
<td>58</td>
<td>Middle 50%</td>
</tr>
<tr>
<td>Accommodating</td>
<td>1</td>
<td>9</td>
<td>5.43</td>
<td>2.13</td>
<td>53</td>
<td>Middle 50%</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Schaubhut (2007)

Invalid Instruments

On April 22, 2010, 191 surveys were mailed to head principals of the campuses. A total of 91 surveys were attempted and returned by participants, yielding a return rate of 48 percent. Most of the surveys were returned within two weeks. However, of the 91 returned, only 76 surveys were correctly completed; thus, 15 surveys were invalid and the recorded information on those instruments could not be used in the study.

Since the TKI requires a total of 30 points when correctly completed, any sum less than 30 would indicate an invalid survey because of the reduced possibilities for one or more preferred behavioral modes. The instrument is designed so that 30 points are distributed among the five modes to indicate a participant’s preferred behavior. The
difficult part of the TKI for some participants appeared to be the forced-choice scenario. The instructions at the beginning of the instrument explain that the participant should choose the answer that best describes how he/she might behave. However, several participants did not follow the directions to choose the best answer. Therefore, several instruments were invalidated.

Errors on the invalid instruments were documented. Five surveys contained questions that were not answered and had no stray marks on the page, neither choice, A nor B, were circled. Five instruments had questions that were not answered in accordance with the instructions; choices A and B were either both circled, or a handwritten note was inserted under the choices to indicate that the respondent could not decide on which choice to select. One instrument had a question’s number circled rather than choice A or B. Three of the invalid instruments had consecutive pages of questions that were not were not selected, perhaps because the pages did not open as the respondent attempted completion of the exercise. One instrument was correctly completed by the respondent but it was faulty because an entire page was not inserted into the booklet by the printer.

Valid Instruments

Each valid individual instrument was scored using the TKI score sheet. Each participant score could range between zero and twelve for each of the five behaviors. For the purpose of reporting the frequency of scores for the valid instruments, Table 3.5 provides an overall view of the results behavioral outcome.
### TABLE 3.5

**Individual Raw Score Frequencies (N = 76)**

<table>
<thead>
<tr>
<th>Range</th>
<th>Competing</th>
<th>Collaborate</th>
<th>Compromise</th>
<th>Avoid</th>
<th>Accommodate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>8</td>
<td>14</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>14</td>
<td>7</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>13</td>
<td>16</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>14</td>
<td>12</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>7</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary**

Chapter III has described the study’s population, research questions, the Thomas-Kilmann Instrument and this study’s modified TKI, methods and procedures of data analysis and collection, and participant results as compared to the norm group. The
purpose thus far, has been to propose the research problem of predicting preferred conflict-management behaviors in small-school principals when interacting with teachers, followed by relevant literature, and a description of this study’s quantitative analysis. Chapter IV reports on the overall results of the group of principals by outcome.
CHAPTER IV

RESULTS

The purpose of this study was to examine the influence of gender and experience on the preferred conflict-management behaviors of small-school principals when interacting with campus teachers. The Thomas-Kilmann Instrument (2007, 1974) was modified to focus on the principal-teacher relationship. A description of the population and participants was given, along with a description and rationale behind the use of regression analysis (Agresti, 2007). Finally, a description of the design and structure of the logistical regression analysis was given.

This chapter reports the results of the logistic regression for each outcome in the following order: competition, collaboration, compromise, avoidance, accommodation. The effects of each predictor – gender, years of experience in education, and years of experience in administration - are reported for each outcome. Chapter IV ends with a summary of overall findings that transition to the implications of the study in Chapter V.

Analysis of Research Questions

Q1: Is there evidence to suggest that a preference for competitive conflict-management behavior can be predicted?

Q1.1: Can a preference for competitive conflict-management behavior be predicted by gender?

H₀1.1: A preference for competitive conflict-management behavior cannot be predicted by gender.
A backward stepwise regression (conditional) was performed. The constant was established without the three variables at step 0 (B=-.713, Wald=8.527, df=1, p<.05). Once the three were included in step 1, improvement in the model was significant (chi-square=10.493, p<.05). The three variables combined to explain 18 percent of the variance ($R^2_N=.18$). Years in administration was revealed to be the most significant predictor of a preference for competitive conflict-management behavior at step 1 (Wald=3.251, df=1, p=.071). SPSS predicted that the most significant change in the model would happen if years in administration were removed, as indicated by the change in -2 log likelihood for years in administration if removed (3.793, p=.051). Step 1 revealed that gender was not a significant predictor of a preference for competitive conflict-management behavior (Wald=.435, df=1, p>.05); thus, it was removed and the null was not rejected.

**Q1.2:** Can a preference for competitive conflict-management behavior be predicted by years of experience in education?

**H$_0$1.2:** A preference for competitive conflict-management behavior cannot be predicted by years of experience in education

Step 2 combined years in education and years in administration that continued to explain 17.3 percent of the variance ($R^2_N=.173$). Between these two remaining variables, years in administration made the most significant contribution to the model (Wald=2.974, p=.085). As the results suggest years in administration made the most significant change in the -2 log likelihood (3.385, p=.066) when removed. Thus, after
step 2, years in education was removed as a predictor of a preference for competitive conflict-management behavior (Wald=1.027, df=1, p>.05), and the null was not rejected.

Q1.3: Can a preference for competitive conflict-management behavior be predicted by years of experience in administration?

H₀1.3: A preference for competitive conflict-management behavior cannot be predicted by years of experience in administration.

Years in administration was found to be a significant predictor of principals’ preference for competitive conflict management behavior (Wald=6.914, p<.05) as it continued to account for 15.6 percent of the variance (R² = .156) in step 3. The potential change in -2 log likelihood indicated a significant effect on the model if years in administration were to be removed at step 3 (9.037, p<.05). Further, as years of experience increase, the odds are positive that principals’ preference for competitive conflict management behavior will increase (Exp(B) = 1.139). Thus, the null was rejected. Table 4.1 displays the results to the backward stepwise (conditional) analysis.
### TABLE 4.1

Results of the Backward Stepwise (conditional) Analysis in the Competing Equation

<table>
<thead>
<tr>
<th>Step</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>( \text{Exp}(B) )</th>
<th>( R_N^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>.376</td>
<td>.570</td>
<td>.435</td>
<td>1</td>
<td>.510</td>
<td>1.456</td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>.042</td>
<td>.041</td>
<td>1.054</td>
<td>1</td>
<td>.305</td>
<td>1.043</td>
</tr>
<tr>
<td></td>
<td>Yrs in Admin.</td>
<td>.109</td>
<td>.060</td>
<td>3.251</td>
<td>1</td>
<td>.071</td>
<td>1.115</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-2.719</td>
<td>.904</td>
<td>9.044</td>
<td>1</td>
<td>.003</td>
<td>.066</td>
</tr>
<tr>
<td>2</td>
<td>Yrs. In Ed.</td>
<td>.042</td>
<td>.041</td>
<td>1.027</td>
<td>1</td>
<td>.311</td>
<td>1.043</td>
</tr>
<tr>
<td></td>
<td>Yrs. In Admin.</td>
<td>.099</td>
<td>.057</td>
<td>2.974</td>
<td>1</td>
<td>.085</td>
<td>1.104</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-2.476</td>
<td>.809</td>
<td>9.374</td>
<td>1</td>
<td>.002</td>
<td>.084</td>
</tr>
<tr>
<td>3</td>
<td>Yrs in Admin.</td>
<td>.130</td>
<td>.050</td>
<td>6.914</td>
<td>1</td>
<td>.009</td>
<td>1.139</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-1.874</td>
<td>.513</td>
<td>13.325</td>
<td>1</td>
<td>.000</td>
<td>.154</td>
</tr>
</tbody>
</table>

\( a = p < .05 \)

**Q2:** Is there evidence to suggest that a preference for collaborative conflict-management behavior can be predicted?

Q2.1: Can a preference for collaborative conflict-management behavior be predicted by gender?

\( H_02.1: \) A preference for collaborative conflict-management behavior cannot be predicted by gender.
The backward stepwise (conditional) regression for collaboration established a constant at step 0 (\( B = .265, \text{Wald} = 1.308, \text{df} = 1, p = .253, \text{Exp}(B) = 1.303 \)). Once the three predictors were added at step 1, there was no significant change (chi-square = .748, \( p > .05 \)). The three combined predictors accounted for 1.3 percent of the variance in the model (\( R^2_N = .013 \)).

Gender was revealed to have a minimal effect on the model at step 1, as the change in -2 log-likelihood (.443) was predicted to be non-significant (\( p > .05 \)). However, gender remained in the backward stepwise (conditional) analysis through step 2 (\( \text{Wald} = .552, p > .05 \)), where it combined with years in education to account for 1.2 percent of the variance (\( R^2_N = .012 \)). Then, at step 3, gender remained as the most reliable predictor of the three, but still less than significant (\( \text{Wald} = .449, p > .05 \)), where it contributed to only .8 percent of the variance (\( R^2_N = .008 \)). The null was not rejected.

Q2.2: Can a preference for collaborative conflict-management behavior be predicted by years of experience in education?

\( H_02.2: \text{A preference for Collaborative conflict management behavior cannot be predicted by years of experience in education.} \)

Years of experience in education was not a significant predictor at step 1 (\( \text{Wald} = .295, p > .05 \)); however, it remained in the regression analysis. If removed at step 1, years in education would have had a less than significant change in -2 log likelihood (.295, \( p > .05 \)). Again, at step 2, it was not a significant predictor in the model (\( \text{Wald} = .225, p > .05 \)); however, it remained with gender to account for 1.2 percent of the variance (\( R^2_N = .012 \)). The change in -2 log likelihood (.225) would not have been
significant in step 2 (p>.05); thus, years of experience in education was removed from the model for step 3. The null was not rejected.

Q2.3: Can a preference for collaborative conflict-management behavior be predicted by years of experience in administration?

H₀2.3: A preference for collaborative conflict-management behavior cannot be predicted by years of experience in administration.

Of the three predictors, years in administration had the least effect on principals’ preference for collaborative conflict-management behavior in step 1 (Wald=.073, p>.05). The change in -2 log likelihood at step 1 (.074) was far from significant (p=.786). And, years in education contributed little to the overall model as the Nagelkerke R² indicated a drop of only .1 percent of the variance between step1 (Rₙ²=.013) and step 2 (.012) when the predictor was removed from the backward stepwise (conditional) analysis. The null was not rejected.

Table 4.2 displays the results of the backward stepwise (conditional) analysis.
### TABLE 4.2

Results of the Backward Stepwise (conditional) Analysis in the Collaborating Equation

<table>
<thead>
<tr>
<th>Step</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>$R_N^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>-.330</td>
<td>.497</td>
<td>.442</td>
<td>1</td>
<td>.506</td>
<td>.719</td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>-.020</td>
<td>.037</td>
<td>.295</td>
<td>1</td>
<td>.587</td>
<td>.980</td>
</tr>
<tr>
<td></td>
<td>Yrs in Admin.</td>
<td>.013</td>
<td>.048</td>
<td>.073</td>
<td>1</td>
<td>.786</td>
<td>1.013</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.694</td>
<td>.717</td>
<td>.935</td>
<td>1</td>
<td>.333</td>
<td>2.001</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>-.360</td>
<td>.485</td>
<td>.552</td>
<td>1</td>
<td>.458</td>
<td>.698</td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>-.014</td>
<td>.030</td>
<td>.225</td>
<td>1</td>
<td>.635</td>
<td>.986</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.696</td>
<td>.717</td>
<td>.942</td>
<td>1</td>
<td>.332</td>
<td>2.005</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
<td>-.319</td>
<td>.476</td>
<td>.449</td>
<td>1</td>
<td>.503</td>
<td>.727</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.388</td>
<td>.297</td>
<td>1.702</td>
<td>1</td>
<td>.192</td>
<td>1.474</td>
</tr>
<tr>
<td>4</td>
<td>Constant</td>
<td>.265</td>
<td>.231</td>
<td>1.308</td>
<td>1</td>
<td>.253</td>
<td>1.303</td>
</tr>
</tbody>
</table>

* $a = p < .05$
Q3: Is there evidence to suggest that a preference for compromising conflict-management behavior can be predicted?

Q3.1: Can a preference for compromising conflict-management behavior be predicted by gender?

H₀3.1: Compromising conflict-management behavior cannot be predicted by gender.

At step 0, the constant (B=.158, Wald=.473, df=1, p=.492) was established without the three predictors. Once the three were added at step 1, there was a significant change to the model (chi-square=8.034, df=3, p<.05). The combined effects of the three predictors revealed a 13.4 percent variance (R²ₙ=134). Gender was the most significant predictor at step 1 (Wald=2.187, p=.139). The change in -2 log likelihood would not have been significant if gender had been removed at step 1 (p>.05); however, the other two predictors were of even lesser significance at that point.

Gender remained in the stepwise analysis for step 2, combined with years in administration to account for 13.2 percent of the variance (R²ₙ=.132). The change in -2 log likelihood for gender at step 2 (2.235, p>.05), and the continued minimal effect of gender on the model at step 2 (Wald=2.190, p>.05) resulted in its removal for the third and final step of the analysis. Thus, the null was not rejected.
Q3.2: Can a preference for compromising conflict-management behavior be predicted by years of experience in education?

$H_0$3.2: A preference for compromising conflict-management behavior cannot be predicted by years of experience in education.

In step 1, years of experience in education was the least significant contributor to the backward stepwise (conditional) regression model (Wald=.105,p=.746); therefore, it was the first predictor removed. The change in -2 log likelihood if the term were removed at step 1 was not significant (.105,p>.05). At step 1, it combined with the other two predictors to account for 13.4 percent of the variance ($R_N^2=.134$). Once it was removed for step 2, it only accounted for a .2 percent drop in the variance, leaving gender and years in administration at a combined 13.2 percent variance ($R_N^2=.132$). The null was not rejected.

Q3.3: Can a preference for compromising conflict-management behavior be predicted by years of experience in administration?

$H_0$3.3: A preference for compromising conflict-management behavior cannot be predicted by years of experience in administration.

Years of experience in administration did not prove to be a significant contributor to the model in step 1(Wald=1.731,p>.05), or in step 2 (Wald=3.056,p>.05)), but it remained alone in step 3 as a significant predictor of principals’ preference for compromising conflict-management behavior (Wald=4.585,p<.05). Years of experience in administration was found to have a negative relationship with principals’ preference for compromising conflict-management behavior as indicated by the values of $Exp(B)$ in
step 1 (.930), step 2 (.921), and step 3 (.905). In step 3, it accounted for 9.7 percent of
the variance (R^2_N=.097). The null was rejected.

Table 4.3 reports the results for the compromising equation.

TABLE 4.3
Results of the Backward Stepwise (conditional) Analysis
in the Compromising Equation

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.(^a)</th>
<th>Exp(B)</th>
<th>R^2_N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>.769</td>
<td>.520</td>
<td>2.187</td>
<td>1</td>
<td>.139</td>
<td>2.157</td>
<td>.134</td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>-.012</td>
<td>.038</td>
<td>.105</td>
<td>1</td>
<td>.746</td>
<td>.988</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yrs in Admin.</td>
<td>-.073</td>
<td>.055</td>
<td>1.731</td>
<td>1</td>
<td>.188</td>
<td>.930</td>
<td>.134</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.748</td>
<td>.752</td>
<td>.988</td>
<td>1</td>
<td>.320</td>
<td>2.112</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>.769</td>
<td>.520</td>
<td>2.190</td>
<td>1</td>
<td>.139</td>
<td>2.158</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yrs in Admin.</td>
<td>-.082</td>
<td>.047</td>
<td>3.056</td>
<td>1</td>
<td>.080</td>
<td>.921</td>
<td>.132</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.574</td>
<td>.525</td>
<td>1.194</td>
<td>1</td>
<td>.275</td>
<td>1.775</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Yrs in Admin.</td>
<td>-.100</td>
<td>.047</td>
<td>4.585</td>
<td>1</td>
<td>.032</td>
<td>.905</td>
<td>.097</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>1.003</td>
<td>.450</td>
<td>4.954</td>
<td>1</td>
<td>.026</td>
<td>2.725</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) = p<.05

Q4: Is there evidence to suggest that a preference for avoiding conflict-management
behavior can be predicted?

Q4.1: Can a preference for avoiding conflict-management behavior be predicted by
gender?

H_{04.1}: A preference for avoiding conflict-management behavior cannot be predicted by gender.

The backward stepwise (conditional) regression for the outcome of avoiding was performed. At step 0, the constant was established (B=-.211, Wald=.839, df=1, p=.360). Once the three predictors were added to step 1, the model did not experience a significant change (chi-square=1.274, p=.735). The predictors combined to account for 2.2 percent of the variance ($R^2_N=.022$). Gender was not a significant contributor to the model in step 1 (Wald=.532, p>.05), but remained for step 2.

For step 2, gender was still not a significant contributor (Wald=.533, p>.05) and was removed from the regression for step 3. The change in -2 log likelihood for gender if removed was also not significant at step 1 (.537, p=.464), or at step 2 (.538, p=.463). Once gender was removed after step 2, the overall variance fell from 2.2 percent ($R^2_N=.022$) to 1.3 percent in step 3 ($R^2_N=.013$). The null was not rejected.

Q4.2: Can a preference for avoiding conflict-management behavior be predicted by years of experience in education?

H_{04.2}: A preference for avoiding conflict-management behavior cannot be predicted by years of experience in education.

Years in education was the least significant contributor to the model at step 1 (Wald=.017, p=.895). The change in -2 log likelihood at step 1 if the predictor were removed was also the least significant (.017, p=.895). Once the predictor was removed after step 1, the variance remained unchanged after step 2 at 2.2 percent ($R^2_N=.022$).
Thus, years in education was found to have no significant relationship to principals’ preference for avoiding conflict-management behavior, and the null was not rejected.

Q4.3: Can a preference for avoiding conflict-management behavior be predicted by years of experience in administration?

H₀4.3: Avoiding conflict-management behavior cannot be predicted by years of experience in administration.

Years in administration remained in the regression analysis through step 1 (Wald=.787, p>.05) and step 2 (Wald=.970, p>.05). The change in -2 log likelihood if the predictor was removed at step 1, was not significant (.823, p>.05), neither was it at step 2 (1.043, p>.05). Finally, at step 3 it was confirmed to have no significant contribution (Wald=.681, p>.05). Years in administration accounted for 1.3 percent of the variance in step 3 ($R^2_N=.013$). The null was not rejected.

Table 4.4 shows the results to the backward (conditional) regression for avoiding.
TABLE 4.4

Results of the Backward Stepwise (conditional) Analysis in the Avoiding Equation

<table>
<thead>
<tr>
<th>Step</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig. *</th>
<th>Exp(B)</th>
<th>R_N^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>-.366</td>
<td>.501</td>
<td>.532</td>
<td>1</td>
<td>.466</td>
<td>.694</td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>.005</td>
<td>.037</td>
<td>.017</td>
<td>1</td>
<td>.895</td>
<td>1.005</td>
</tr>
<tr>
<td></td>
<td>Yrs in Admin.</td>
<td>-.045</td>
<td>.050</td>
<td>.787</td>
<td>1</td>
<td>.375</td>
<td>.956</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.208</td>
<td>.716</td>
<td>.084</td>
<td>1</td>
<td>.772</td>
<td>1.231</td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>-.366</td>
<td>.501</td>
<td>.533</td>
<td>1</td>
<td>.465</td>
<td>.694</td>
</tr>
<tr>
<td></td>
<td>Yrs. In Admin.</td>
<td>-.041</td>
<td>.042</td>
<td>.970</td>
<td>1</td>
<td>.325</td>
<td>.960</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.275</td>
<td>.498</td>
<td>.305</td>
<td>1</td>
<td>.581</td>
<td>1.317</td>
</tr>
<tr>
<td>3</td>
<td>Yrs in Admin.</td>
<td>-.032</td>
<td>.039</td>
<td>.681</td>
<td>1</td>
<td>.409</td>
<td>.968</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.064</td>
<td>.402</td>
<td>.026</td>
<td>1</td>
<td>.873</td>
<td>1.066</td>
</tr>
<tr>
<td>4</td>
<td>Constant</td>
<td>-.211</td>
<td>.231</td>
<td>.839</td>
<td>1</td>
<td>.360</td>
<td>.810</td>
</tr>
</tbody>
</table>

a = p < .05
Q5: Is there evidence to suggest that a preference for accommodating conflict-management behavior can be predicted?

Q5.1: Can a preference for accommodating conflict-management behavior be predicted by gender?

H\textsubscript{0}5.1: A preference for accommodating conflict-management behavior cannot be predicted by gender.

The backward (conditional) stepwise regression analysis was performed for the principals’ preference for accommodating conflict-management behavior. The constant was established before the three predictors were added B=.105,Wald=.210,df=1,p=.647). Step 1 did not yield a significant change (chi-square=2.184,df=3,p=.535). The three combined predictors accounted for 3.8 percent ($R^2_N=.038$) of variance in the model at step 1. The change in -2 log likelihood if gender was removed was not significant (p=.25). Gender was not a significant contributor at step 1 (Wald=1.264,p>.05).

At step 2, gender remained in the regression, paired with years in education. The overall variance of the two combined predictors was 3.6 percent ($R^2_N=.036$). The -2 log likelihood if gender were removed was not significant (1.508, p=.219). Again, gender was not a significant contributor (Wald=1.488,p>.05).

Gender remained in the regression at step 3 as the most significant contributor to the model. The overall variance fell to 2 percent ($R^2_N=.020$). The -2 log likelihood if gender were removed was not significant (1.147,p=.284). Once again, gender’s predictive ability proved not significant (Wald=1.147,p>.05). The null was not rejected.
Q5.2: Can a preference for accommodating conflict-management behavior be predicted by years of experience in education?

H₀5.2: A preference for accommodating conflict-management behavior cannot be predicted by years of experience in education.

Years of experience in education was added to step 1. The change in -2 log likelihood if the term were removed was not significant (.935, p=.334). The Wald statistic (.921) was not significant (p>.05), yet the predictor remained in the equation for step 2 where years in education was not significant (Wald=.929, p>.05). Thus, years of experience in education was removed after step 2. The null was not rejected.

Q5.3: Can a preference for accommodating conflict-management behavior be predicted by years of experience in administration?

H₀5.3: A preference for accommodating conflict-management behavior cannot be predicted by years of experience in administration.

Years of experience in administration was added at step 1. The -2 log likelihood if removed was the least significant (.096, p=.756) of the three predictors. Once years in administration was removed, the overall variance fell only .2 percent, from 3.8 ($R^2_N=.038$) to 3.6 percent ($R^2_N=.036$). The predictor was the least significant (Wald=.096, p>.05) of the three predictors in the equation. The null was not rejected.

Table 4.5 shows the results to the backward (conditional) regression for the accommodating behavioral outcome.
### TABLE 4.5

Results of the Backward Stepwise (conditional) Analysis in the Accommodating Equation

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>-.562</td>
<td>.500</td>
<td>1.264</td>
<td>1</td>
<td>.261</td>
<td>.570</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>-.036</td>
<td>.037</td>
<td>.921</td>
<td>1</td>
<td>.337</td>
<td>.965</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yrs in Admin.</td>
<td>.015</td>
<td>.048</td>
<td>.096</td>
<td>1</td>
<td>.757</td>
<td>1.015</td>
<td>.038</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.930</td>
<td>.722</td>
<td>1.659</td>
<td>1</td>
<td>.198</td>
<td>2.535</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>-.595</td>
<td>.488</td>
<td>1.488</td>
<td>1</td>
<td>.222</td>
<td>.551</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yrs in Ed.</td>
<td>-.029</td>
<td>.030</td>
<td>.929</td>
<td>1</td>
<td>.335</td>
<td>.971</td>
<td>.036</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.932</td>
<td>.722</td>
<td>1.665</td>
<td>1</td>
<td>.197</td>
<td>2.538</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
<td>-.508</td>
<td>.476</td>
<td>1.138</td>
<td>1</td>
<td>.286</td>
<td>.602</td>
<td>.020</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>.300</td>
<td>.295</td>
<td>1.035</td>
<td>1</td>
<td>.309</td>
<td>1.350</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Constant</td>
<td>.105</td>
<td>.230</td>
<td>.210</td>
<td>1</td>
<td>.647</td>
<td>1.111</td>
<td></td>
</tr>
</tbody>
</table>

a = p < .05
**Summary**

The backward (conditional) stepwise regression analyzed the preferred conflict-management behaviors of the small-school principal when interacting with teachers on the campus. The data analysis produced empirical evidence supporting the notion that a preference for competitive conflict-management behavior could not be predicted by gender or years in education, but it could be predicted by years in administration. As years in administration increased, so did a preference for competitive conflict-management behavior.

Further, findings were that gender, years in education, and years in education could not predict preferences for collaborating, avoiding, or accommodating behaviors. Gender and years in education were also found to have no significant predictive ability associated with a preference for compromising behaviors. However, findings revealed that a preference for compromising could be predicted by years in administration. An inverse relationship existed. As years in administration increased, a preference for compromising behaviors toward teachers decreased.

Table 4.6 outlines the questions, hypotheses, results, and factors of significance. Further discussion of the results of this study, the data analysis, and implications of the findings are presented in Chapter V.
### Table 4.6

**Summary of Overall Analysis**

<table>
<thead>
<tr>
<th>Question</th>
<th>Hypothesis</th>
<th>Accept/Reject</th>
<th>Factors of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is no evidence to suggest that a preference for competitive conflict-management behavior can be predicted.</td>
<td>Rejected</td>
<td>See sub-questions</td>
</tr>
<tr>
<td>1.1</td>
<td>A preference for competitive conflict-management behavior cannot be predicted by gender.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>1.2</td>
<td>A preference for competitive conflict-management behavior cannot be predicted by years in education.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>1.3</td>
<td>A preference for competitive conflict-management behavior cannot be predicted by years in administration.</td>
<td>Rejected</td>
<td>$R^2 = .156$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wald = 6.914, p &lt; .05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$Exp(B) = 1.139$</td>
</tr>
<tr>
<td>2</td>
<td>There is no evidence to suggest that a preference for collaborative conflict-management behavior can be predicted.</td>
<td>Not rejected</td>
<td>See sub-questions</td>
</tr>
<tr>
<td>2.1</td>
<td>A preference for collaborative conflict-management behavior cannot be predicted by gender.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>2.2</td>
<td>A preference for collaborative conflict-management behavior cannot be predicted by years in education.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>2.3</td>
<td>A preference for collaborative conflict-management behavior cannot be predicted by years in administration.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>3</td>
<td>There is no evidence to suggest that a preference for compromising conflict-management behavior can be predicted.</td>
<td>Rejected</td>
<td>See sub-questions</td>
</tr>
<tr>
<td>3.1</td>
<td>A preference for compromising conflict-management behavior cannot be predicted by gender.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>3.2</td>
<td>A preference for compromising conflict-management behavior cannot be predicted by years in education.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>3.3</td>
<td>A preference for compromising conflict-management behavior cannot be predicted by years in administration.</td>
<td>Rejected</td>
<td>$R^2 = .097$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wald = .585, p = .05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$Exp(B) = .905$</td>
</tr>
<tr>
<td>Question</td>
<td>Hypothesis</td>
<td>Accept/Reject the Null</td>
<td>Factors of Significance</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>4</td>
<td>There is no evidence to suggest that a preference for avoiding conflict-management behavior can be predicted.</td>
<td>Not rejected</td>
<td>See sub-questions</td>
</tr>
<tr>
<td>4.1</td>
<td>A preference for avoiding conflict-management behavior cannot be predicted by gender.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>4.2</td>
<td>A preference for avoiding conflict-management behavior cannot be predicted by years in education.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>4.3</td>
<td>A preference for avoiding conflict-management behavior cannot be predicted by years in administration.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>5</td>
<td>There is no evidence to suggest that a preference for accommodating conflict-management behavior can be predicted.</td>
<td>Not rejected</td>
<td>See sub-questions</td>
</tr>
<tr>
<td>5.1</td>
<td>A preference for accommodating conflict-management behavior cannot be predicted by gender.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>5.2</td>
<td>A preference for accommodating conflict-management behavior cannot be predicted by years in education.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
<tr>
<td>5.3</td>
<td>A preference for accommodating conflict-management behavior cannot be predicted by years in administration.</td>
<td>Not rejected</td>
<td>None</td>
</tr>
</tbody>
</table>
CHAPTER V

DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

This study sought to explore the principal-teacher relationship on small-school campuses by examining the preferred conflict-management behaviors of principals when interacting with teachers. The five conflict-management behaviors – competition, collaboration, compromise, avoiding, and accommodation – were identified as ways that principals manage principal-teacher conflict. Gender and experience were examined as possible predictors of each of the behaviors.

Two basic questions were at the core of this study: Can gender predict a preference for conflict-management behavior in small-school principals in Texas Education Agency service center regions 5, 6, and 7? And, can experience predict a preference for conflict-management behavior in small-school principals in Texas Education Agency service center regions 5, 6, and 7? The two levels of experience under examination were overall years in education, and years in administration.

The overall findings in this research supported some of its hypotheses and generated some agreement with prior research. Results found that gender did not have a significant predictive ability; while, in the realm of experience, experience in education also had no significant predictive effect. Experience in administration was not found to be a significant predictor of the principals’ preference for collaboration, avoiding, or accommodating.

A portion of this research may serve to generate future studies, mostly in the realm of experience and how it relates to the principal's preference for conflict-
management behavior. Experience in administration was found to have a positive relationship with, and a significant effect (<.05) on predicting the group of principals’ preferences for competitive conflict-management behaviors. Analysis also revealed that years of experience in administration had a significant effect (<.05) on predicting principals’ preferences for compromising conflict-management behaviors; more specifically, it was a negative relationship, with a preference for compromising behaviors decreasing as administrative years of experience increased.

The following discussion will interpret the findings of this study in the context of the literature. Implications of the study’s findings for practice, preparation of school leaders, education policy, and future research will be considered. Finally, the overall conclusions of the study are discussed.

**Competition**

**Gender**

The study’s finding concerning gender and a preference for competitive conflict-management behavior is consistent with other studies that support the hypothesis that gender cannot consistently and reliably predict competitive conflict-management behaviors (Schaubhut, 2007; Brahnam, Margavio, Hignite, Barrier, and Chin, 2005; Berry, 1994; Shockley-Zalabak, 1981). Other smaller-scale studies also continue to support this conclusion (Corral-Carlson, 2008; Indelicato, 2005 Dillard, 2005).

However, the assumption that gender does not matter means dismissing other findings that contradict the suggestion that gender differences exist. Since gender studies began, it has been assumed, and sometimes documented that women and men
can have different behavioral predispositions. This previous research has suggested that males prefer competitive behaviors while females tend to prefer more compromising behaviors (Thomas, Thomas, & Schaubhut, 2007; Holt & DeVore, 2005; Eagly, Karau, and Johnson, 1992; Shockley-Zalabak, 1984; Ilmer, 1980; Kilmann & Thomas, 1977).

Several of the studies have been used to examine the competitive behaviors of managerial leaders in a variety of contexts; however, only five of them examine school principals. Eagly, Karau, and Johnson’s (1992) study is one that could be relevant in its finding that male principals in general tend to be more autocratic or directive, while females are more democratic or participative in style. However, Corral-Carlson (2008), Berry (1994), Indelicato (2005), and Dillard (2005) all examined some aspect of the principal and found that no significant differences existed between male and female principal conflict-management behaviors.

The setting for this study could to a degree explain the finding that male and female principals did not differ in their behavioral preferences for interacting with teachers. All of the districts in this study were under a population of 1,000 students. A study in a larger environment might reveal differences in principal preferences.

Experience

This study found that overall years of experience in education could not predict a preference for competitive behaviors; however, years of experience in administration was a significant predictor of a preference for competitive conflict-management behaviors. The finding concerning years in administration is not consistent with previous research that found no differences when comparing experienced and
inexperienced groups of male and female principals (Berry, 1994; Indelicato, 2005). However, it must be noted that no satisfactory literature could be found that strictly examined years of experience and competitive conflict-management behaviors as a single predictor.

It could be argued that more experienced principals should be more secure in their leadership abilities and embrace more collaborative approaches to interpersonal conflict-management with teachers (Meier, 2007). However, small school environments may foster a more competitive approach for the principal who has the benefit of hindsight through years of experience. For example, he/she routinely employees inexperienced personnel or sometimes has teachers who may lose focus on priorities and need redirection. Time is of the essence and competitive behaviors may be more efficient.

Under the pressures of accountability and high-stakes testing, competitive leadership behaviors could be fostered in small-school settings where resources are limited and decisions must be made without delay. Inexperienced principals may not realize the urgency of some decisions, thus opting for more time-consuming less-direct behaviors. Or, it could be that newer principals have more recently been through colleges that encourage compromise among staffs, while more experienced principals become accustomed to being sole decision-makers.

deTurk (2010) noted that inexperienced superintendents preferred to seek input from peers when facing conflict; while, the more experienced superintendents reported more self-reliance and comfort with their own conflict-management behaviors. This
assumption, if it is to be taken as valid and applicable to superintendents, could be applied to principals as well. As administrators gain more experience, it could be that they become more comfortable with competitive behaviors, and more likely to prefer them when managing principal-teacher conflict.

**Collaboration**

*Gender*

Gender was not found to have any significant effect on predicting a preference for collaborative conflict-management behaviors, a finding that is consistent with previous research (Schaubhut, 2007; Thomas, Thomas, & Schaubhut, 2007; Sorenson, Hawkins, & Sorenson, 1995; Berry, 1994; Chismur & Mills, 1989; Duane, 1989, Shockley-Zalabak, 1984; Shockley-Zalabak, 1981). It should be noted that Schaubhut (2007) used analysis of variance in addition to Cohen’s guidelines for effect size, finding no significant differences in either interpretation (Cohen, 2992).

The finding may not be consistent with previous research that reported has females to be more collaborative than men (Brahnam, Margavio, Hignite, Barrier, and Chin, 2005). However, it should be noted that collaboration is a more aggressive behavior than compromise, avoiding, or accommodating. True collaboration means attempting to satisfy both parties through extensive efforts and may require a self-confidence that might be explained by variables other than gender.

*Experience*

The finding concerning experience as an insignificant predictor of collaboration is slightly supported by previous research (Berry, 1994). The finding suggests that
collaboration may be more of a function of other situational factors or the individual, rather than dependent on years of experience in either education or administration. Further, if enabling is somehow related to collaborating, it could be argued that more experienced principals foster staff’s with less conflict because of a tendency for more experience principals to supply their teachers with the necessary skills and confidence to work in a loosely-coupled environment (Meier, 2007).

**Compromise**

**Gender**

The finding that gender is not a significant predictor of compromising conflict-management behavior supports previous research (Schaubhut, 2007; Thomas, Thomas, & Schaubhut, 2007; Brahma, Margavio, Hignite, Barrier, & Chin, 2005; Berry, 1994; Duane, 1989; Shockley-Zalabak, 1981). However, it contradicts some previous studies that suggest that women often display more compromising behaviors (Holt & DeVore, 2005; Erickson, 1984; Shockley-Zalabak, 1984; Rahim, 1983; Ilmer, 1980; Kilmann & Thomas, 1977).

Schaubhut (2007) does provide data that could lead to the belief that there is a significant difference in male and female compromising behaviors. However, the use of ANOVA as was used in part of the Schaubhut (2007) study is suspect when examining scales that are not factorially independent of one another (Rahim, 1983), or when examining large sample sizes (Schaubhut, 2007). The ipsative nature of the TKI lends itself to the more valid interpretation of Cohen’s statistic (Cohen, 1992). Since, in the case of compromise, Cohen’s statistic revealed no significant difference between male
and female in the Schaubhut (2007) report, the conclusion may be drawn that the male and female principals in this study possess no significant differences in preferences for compromising conflict-management behaviors.

**Experience**

This study found a significant negative relationship (<.05) between years of experience in administration and compromising conflict-management behaviors, offering support for the notion that more experienced principals are more compromising in interpersonal relationships with teachers. Meier’s (2007) finding that more experienced principals have less instances of staff conflict could lend support to the idea that increasing experience tends to lead to less compromising behaviors, reducing staff conflict. However, this argument is weak at best and in need of further research.

The finding in this study that an increase in administrative experience means a decrease in compromising behaviors further validates the notion that has been found concerning the positive relationship between years of experience in administration and the more aggressive behavior of competition. If a principal prefers more competition, it could be that he/she will prefer less compromise. One interpretation of this condition could be that the more experienced principal is familiar with best-practices and is less willing to compromise, while the other explanation could be that principals, like others, may become comfortable in the status quo and less likely to change or entertain new or alternative methods.

This finding also means that as experience in administration remains small, compromising behaviors are more frequent. Since more inexperienced principals are
often younger and have more recently been in training programs that emphasize teamwork and compromise one could speculate that the inexperienced principal is more progressive and more willing to compromise.

However, the other explanation could be that the less experienced principal does not yet know best-practices that come with years of experience in administration; thus, the more inexperienced principal may be more willing to compromise because of a lack of prior experience. This assumption implies that the principal has better judgment than teachers, and in some cases because of prior experience or a focus on variables outside of the classroom walls, it could be that the more experienced principal needs to exhibit less compromise in some situations.

The setting of the small-school principal can be unique. The literature concerning small schools as related to degree of principal experience is sparse at best. The implication of this finding in this particular setting could be that smaller schools call for less compromising behaviors from administrators, and experienced principals recognize the fact, while inexperienced principals do not yet understand or accept that compromise is not best, or that it can be disregarded in favor of other more competitive behaviors.

**Avoiding**

*Gender*

Gender was not found to be a significant predictor of a preference for avoiding conflict-management behaviors. This finding is supported in the research (Schaubhut, 2007; Thomas, Thomas, & Schaubhut, 2007; Berry, 1994; Chismur & Mills, 1989;
Shockley-Zalabak, 1984; Shockley-Zalabak, 1981). However, other research suggests that women tend to use avoiding more than men (Cardona, 1995; Rahim, 1983). Still, other research suggests that men are more avoiding than women (Brahnam, Margavio, Hignite, Barrier, and Chin, 2005; Duane, 1989). With conflicting and inconclusive findings in the literature, this study adds to the view that gender is not a predictor of avoiding behaviors; male and female are similar in their use of it.

Traditionally, avoiding has been viewed as a feminine characteristic, a passive means to remain non-confrontational. Perhaps this view has been perpetuated because traditionally women did not have the opportunity to advance in organizations because of gender discrimination. More recent research on gender differences and organizational level has noted that, as opportunities for women have increased women have adopted more aggressive behaviors in order to take advantage of the possibility of promotion (Thomas, Thomas, & Schaubhut, 2007).

Avoiding has also become associated with a somewhat stereotypical view of an administrator, male or female, who hides from problems behind the desk, waiting for time to pass and a problem to resolve itself. Research has shown that the use of avoiding is a valid and useful tactic given the right circumstances; however, like other behaviors, it can be overused (Thomas, 2007). Whether or not it has been overused in educational administration consciously or unconsciously will require more validation.

Experience

The finding that experience has no significant predictive effect on avoiding behaviors could not be substantiated in the literature. It could be argued that research
findings by Drory and Ritov (1997) might contest this assumption with evidence that experienced managers tended to use dominating behaviors with low-power opponents, gravitating away from avoiding behaviors with increased experience. However, Drory and Ritov (1997) also found that inexperienced managers tend to be inflexible with conflict-management modes. Therefore, the most accurate statement that could be made with regard to their research as related to avoiding behaviors is that inexperienced managers in their study were not selective with regard to which is the best conflict-management behavior for the situation, while experienced managers do tend to show flexibility with regard to the five possible behaviors in conflict situations.

**Accommodating**

*Gender*

This study’s finding that gender cannot predict accommodating behavior is supported in the literature (Schaubhut, 2007; Thomas, Thomas, & Schaubhut, 2007; Brahnam, Margavio, Hignite, Barrier, and Chin, 2005; Berry, 1994; Shockley-Zalabak, 1984; Shockley-Zalabak, 1981; Chismur & Mills, 1989). Thomas, Thomas, and Schaubhut (2007) noted that when males and females are on the same level in the organization, males may use accommodating behaviors more often than females. Also, men and women have reported using accommodating less at higher organizational levels in the organization, lending argument to the notion that organizational level may be a better predictor than gender (Thomas, Thomas, & Schaubhut, 2007). There is also evidence to suggest that, in general, men are more obliging (Sorenson, Hawkins, & Sorenson, 1995; Rahim, 1983) or accommodating (Duane, 1989) than women, while
traditional literature has supported the assumption that women tend to be more accommodating in conflict-management behavior (Sone, 1981).

Experience

No significant predictive effects were found for experience toward accommodating conflict-management behaviors in this study. This finding has not been supported in the literature, nor has it been contradicted. Drory and Ritov (1997) have noted that experienced managers tend to avoid obliging behaviors when facing low-power opponents, favoring a more aggressive approach. Accommodating behaviors may be more a function of organizational level rather than experience (Thomas, Thomas, & Schaubhut, 2007).

Implications for Leaders

Practice

The implications of these findings for small-school principals call for self-examination. If the results are accepted as fact, the more experienced small-school principal may need to re-examine his/her competitive conflict-management behavioral tendencies and determine if they are beneficial to the school or the result of an uncompromising comfort zone. Conversely, the inexperienced principal may need to increase his/her competitive behaviors when appropriate. One problem for the inexperienced administrator is that experience is often the best means to learn what is appropriate while the problem for the experienced administrator is the inflexibility that can develop over time.
Concerning the phenomenon that increasing experience means a decreasing preference for compromise, experienced principals may need to consider that compromise is not a weakness but a valid technique to managing interpersonal conflict. Conversely, inexperienced principals may need to consider that compromising behaviors may not always be best for the situation. Often, decisions must be made in order for the school to move forward and in order for conflicts to be settled once and for all.

If the work of Thomas (2007) is to be taken as valid, in light of the findings of this study, the inexperienced principals may have several shortcomings. Thomas (2007) has noted that managers who exhibit more compromise may often lose sight of larger issues, and they may compromise the core beliefs of the organization. Too much compromise can also foster a campus with a climate of gamesmanship where bargaining and trade-offs can de-emphasize trust and deflect attention toward meaningless and/or time-consuming issues.

For the inexperienced principal, being less competitive toward teachers may lead to other problems that can be detrimental to the school. Being unaware of his/her own power and/or influence, unskilled or uncomfortable using competing, or being hesitant to take a firm stand when it is needed can be negative results. Also, being too concerned for the feelings of others can mean compromising organizational goals and fostering faculties who are not focused on the larger goals of the school. And, Thomas (2007) has noted that followers can become frustrated or resentful when a leader does not lead decisively, or in a timely manner.
The more experienced principal in this study who has a preference for more competitive behaviors may consider that those leaders who do not compromise enough may also affect negative results. Faculties who are dependent on a single decision-maker may exhibit low morale, underachieve, or become unassertive. They can be disconnected to one another, fall victim to group-think, underperform, or be afraid to speak out, express themselves, or take risks.

Too little compromise can also diminish the potential influence of a principal. Thomas (2007) has noted that the value of bargaining is that it can foster more long-term production at the expense of smaller issues. Not enough compromising behavior can also result from undervaluing the opinions or abilities of teachers; it can also lead to unnecessary power struggles. All of these problems deflect away from the primary goal of student success.

To the campus principal, male or female, the findings of this study should stand to reassure the campus administrator that gender is not a significant factor. Situational leadership calls for principals who have the knowledge and skills to carry out any of the five conflict-management behaviors when appropriate. Research by Erickson (1984) noted that the androgynous school administrator is best, regardless of gender, because he/she can react to a situation without regard for cultural stereotypes or expectations. Berry (1994) has also confirmed that when individuals score high on both masculinity and feminine scales, he/she is better equipped to respond effectively to situational leadership scenarios.
Preparation

CPP Human Global Capital Report (2008) noted that conflict-management training is critical for managers but still lacking in most preparation programs worldwide. Many managers who participated in that report indicated no conflict-management training – fifty-seven percent in the United States, sixty percent in Brazil, seventy-two percent in Belgium, and seventy-three percent in France. However, ninety-five percent of those who did receive training reported that it helped them in the workplace.

The implication of the findings in this research for the preparation of principals is that an increased focus on managing conflict may be needed in order to teach potential principals about situational leadership. Inexperienced principals are perhaps more influenced by the more recent college preparatory experience that encourages compromise and collaboration; whereas, the principal with increasing experience may not have the benefit of continuing training and may have a lesser view of the importance of collaborative approaches and compromise in day-to-day interpersonal relationships.

Preparatory programs need to move beyond the discussion of gender differences in conflict-management and teach each conflict-management behavior as though it were a skill. The five behaviors that can be used to potentially improve the school need to be taught from the standpoint that each one has advantages and disadvantages, and each one can be overused or underused. Differences in gender were not found to be significant in this study, and many others continue to emphasize that situational leadership is most
effective and that any of the conflict-management behaviors can be used by either male or female, depending on the scenario.

Lang (2009) has called for increased attention to conflict-management skills in training programs for business leaders because of a changing society. Hence, school leadership preparatory programs may need an increased focus on managing interpersonal conflict. Further, an increased focus on the intricate interpersonal conflicts that are characteristic in small environments could be an important skill set for small-school principals. Perhaps more competitive behaviors are best in small schools. Although this notion is contrary to modern administrative philosophies, best-practices should be viewed as a continuous improvement model, not a once-and-for-all mentality.

Cook (2008) has recently emphasized the need for school superintendents with the skills to manage conflicts. He asserts that since the decade of the 1980’s, the educational system in the United States has been under attack by many different parties. Cook (2008) outlines previous research that brings to light the many types of conflicts that superintendents face because of society’s criticism of the school modern American system. The research suggests that conflict-management and conflict-resolution skills are a necessity for postmodern school leaders.

With regard to the political environment of small campuses, flexibility in the sense that the five behaviors are to be viewed as a means-to-an-end may need to be emphasized. For example, administrators should continue to be trained that they are to be leaders of the larger group and decisions should be made for the benefit of all on the
campus. One instance of interpersonal conflict-management behavior may not satisfy a personal whim, but it could mean making a decision that is best for the campus.

Policy

Policy-makers may want to take heed of the attention that is being called to conflict in the workplace (CPP, 2008). CPP’s Global Human Capital Report notes the costs of ineffective conflict-management in the workplace worldwide as indicated by lost production, personal attacks, sickness, excessive absences, and project failures. Legislation that addresses the problem of conflict in the workplace could focus on this need to use human resources more efficiently by encouraging preventative measures in the workplace.

Law-makers may need to consider the implications of any possible legislation because of the effects that it can have on the behaviors of those at the campus level. For example, it has been argued that No Child Left Behind (2001) created pressures and unintended outcomes that took the form of academic dishonesty (Kidd, 2010; Bruhn, Zajac, Al-Kazemi, & Prescott, 2002; Cummings Maddu, Harlow, & Dyas, 2002; Evetts, 2006; Storm & Storm, 2007). Direct approaches by school leaders are fostered when school districts are held to specific goals such as increased test scores with the impending threat of sanctions. NCLB, to some degree could explain the more competitive and less compromising experienced administrator in this study.
Research

In the area of research, conflict-management has been studied as a male versus female type of approach in the early part of the 20th century. The old paradigm needs to move away from biological gender comparisons and move toward the notion that leadership behavioral actions or reactions can be studied as tactical maneuvers that serve to improve relationships and the school.

Research surrounding the effects of experience on conflict modes is sparse. More studies are needed that explore the positives and negatives that administrators can expect as they gain experience. Administrators learn early on in training programs that collaborative methods can be best in most circumstances; however, an increased emphasis on the effects could serve to benefit researchers and practitioners alike.

Research on small schools and conflict-management is sparse. This study focused solely on the small-school atmosphere and stopped short of making comparisons to larger campuses. Perhaps important insight could be gained through researching the differences between school settings of various sizes.

Research on situational leadership has evolved throughout the past one-hundred years into the models by Blake and Mouton (1985) and Thomas (2007). The behavioral modes have been clearly articulated, along with the uses and misuses of each. Further, researchers continue to complete quantitative works that attempt to validate or refute previous findings surrounding conflict-management theories. Several pieces of literature that were examined for this study were quantitative works that were relevant and useful.
Larger numbers of participants can often be examined through quantitative methods; however, research on the topic of interpersonal conflict-management from a principal’s perspective could be enriched through qualitative studies. Interpersonal relationships are hallmarks in schools, and effective leaders know how to cultivate them and how to interact with teachers and students in ways that further the goals of the school while preserving the dignity of individuals. Scientific studies might be enhanced by a more qualitative turn toward illustrating the behavioral modes of the campus principal.

**Conclusion**

Interpersonal relations can be complicated. For campus principals, interpersonal conflict-management behaviors may become even more complex when considering that the campus leader must often assume the roles of boss, friend, advisor, confidant, and sounding-board, while keeping in mind that the school has its own set of needs aside from its individuals. Thus, situational leadership calls for judgment and discretion. Overt conflict between principal and teacher is rare and often can be resolved readily, but the interpersonal subtleties that can be viewed as conflicts in themselves exist on a day-to-day basis and can be the more difficult test for a principal.

Gender studies have been a valuable learning tool for students of conflict-management. Traditional views concerning differences between men and women continue to generate controversy. However, the time has passed for gender as a relevant discussion. The more urgent need in schools is for males and females alike to learn masculine as well as feminine behaviors and to use them when appropriate. Gender
studies need to continue to evolve into a larger discussion of most effective campus principal methodologies.

This study has suggested that experience may impact conflict-management behaviors. Campus principals should be cognizant of the possibility that their views and behaviors can change over time, and they should continuously strive for best-practices, realizing that interpersonal relationships are of utmost importance regardless of inexperience or experience. All principals have one thing in common: To do what is best for the school and its students and to earn the respect of others in day-to-day interpersonal relationships.

In seeking to simultaneously satisfy interpersonal conflicts and the goals of the school, the campus principal needs self-knowledge. Self-awareness and on-going self-assessment can be keys to good management of personnel. For a principal, understanding one’s own tendencies and prejudices, or at least acknowledging that they exist, can enhance good situational leadership. Personal feelings can often cloud decisions, and principals often identify this when it occurs with teachers, but the phenomenon also applies to principals.

From this study, campus principals, policy-makers, and researchers should realize that managerial knowledge surrounding conflict-management is a societal need. School principals are closest to the interpersonal happenings on school campuses, and they are also responsible for seeing the big picture. And, they must not lose focus on system goals because of the interpersonal conflict that is a reality in all schools. Policy-makers should also realize the effects that conflicts can have on the workplace and
policies should reflect the fact. Finally, researchers must fill any void in the knowledge-base in the broader quest to solve the problem of conflict-management in schools. In all of these efforts, the primary focus must remain on each student’s best interest.
REFERENCES


Kidd, T. (2010). The role of ethical frames and values on teacher interaction with academic policies. Doctoral Dissertation: Texas A&M University. College Station, TX.


Kuczma, M. J. (2008, Sept.). School site leadership team behaviors of principals and teachers in selected low socioeconomic elementary schools that exceeded their adequate yearly progress requirements. Doctoral Dissertation: University of La Verne. La Verne, CA.


VITA

Name: Bradley Dean Vestal

Address: c/o Dr. Mario S. Torres
Department of Educational Administration
Texas A&M University
College Station, Texas 77845-4226

Education: B.S., Kinesiology, Texas A&M University, 1991
M.Ed., Educational Administration, Midwestern State University, 2002
Ph.D., Educational Administration, Texas A&M University, 2011