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CHOICES:
AN EXPLORATORY STUDY OF THE DECISION-MAKING BEHAVIORS
OF SCHOOL SUPERINTENDENTS

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY



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Dedication

This work is dedicated to the students and staff that are served by school superintendents. May they be served well.

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Abstract

Decision-making practices of school superintendents have previously been studied in the context of decision-making in response to a program or initiative, identifying decision-making styles, and ethical decision-making. Administrative mindfulness provides the construct to explore the cognitive mindset of superintendents as they make decisions. Prospect theory provides the conceptual framework to explore the process used by superintendents as they frame decisions, determine reference points, and evaluate options based on those reference points.

The qualitative research design of this study employed semi-structured interviews as the primary method of data collection. Cross-case analysis was used to highlight variations in the data and to identify patterns within the data.

Findings in the study referenced the substantial influence deferring to experts by superintendents played during their decision-making as they gathered information about a dilemma, determined their reference points, and evaluated options. Each school superintendent in the study provided definitive cognitive processes used in his decision-making reflecting attributes of administrative mindfulness. When discussing a decision of regret, each subject identified an absence of at least one attribute of administrative mindfulness.

Reference points, in the decision-making processes of superintendents, were discovered to be value-laden and unique to the superintendent rather than being quantifiable as situated in behavioral economics. However, reference points in both

superintendent decision-making and behavioral economics provide a tool for evaluating various options and assessing risk.

The study concluded that the overlay of administrative mindfulness on a school superintendent's decision-making process provides multiple opportunities to enhance decision-making. Those improvements to the decision-making processes are dependent upon the management of a superintendent's ego, a commitment to deferring to experts, and cognitive effort on the part of the superintendent to seek improvements in his decision-making practices.

Keywords:

decision-making, dilemma, school superintendent, administrative mindfulness, prospect theory, reference points

Chapter 1: Introduction to the Study

The concept of decision-making has captivated the human spirit for centuries. The strategies for decision-making vary based on the attributes of the individual decision-maker permuted by the decision-maker's life experiences both personally and professionally. Many of us may have been taught as young people Benjamin Franklin's method for decision-making.

“My way is to divide half a sheet of paper by a line into two columns; writing over the one Pro and over the other Con. Then during three or four days' consideration, I put down under the different heads short hints of the different motives, that at different time occur to me, for or against the measure. When I have thus got them altogether in one view, I endeavor to estimate their respective weights; and where I find two, one on each side, that seem equal, I strike them both out. If I judge some two reasons con equal to some three reasons pro, I strike out five; and thus proceeding, I find where the balance lies; and if after a day or two of further consideration, nothing new that is of importance occurs on either side, I come to a determination accordingly.”

—Benjamin Franklin

Consider a childhood decision: whether to spend hard-earned money for a new bike or a baseball glove. Benjamin Franklin's strategy may be used to list all the pros and cons of each option. However, even though the final list definitively points to the baseball glove being the most practical and logical choice, the bicycle ends up garnering the child's savings and is soon in the garage. This is simple evidence that rationale man and decision-making man are not always inextricably parallel. If not always rationally, how then *does* man make decisions?

Buchanan & O Connell (2006) argue, “The study of decision making, consequently, is a palimpsest of intellectual disciplines: mathematics, sociology, psychology, economics, and political science, to name a few. Philosophers ponder what our decisions say about ourselves and about our values; historians dissect the choices leaders make at critical junctures. Research into risk and organizational behavior springs from a more practical desire: to help managers achieve better outcomes (p. 32).” The purpose of this research is to use decision analytics frameworks to describe the decision-making of school superintendents. It is hoped that evidence can be used to inform school leaders about decision-making processes and factors that affect decisions.

Although rational decision-making is based on reason or facts, other factors can influence decision-making. Bernoulli (1738), contended that individuals make decisions not by the price of an item, but instead by the expected utility that the item yields. Bernoulli’s expected utility theory further elaborates that context of the decision-maker (e.g. how much wealth the person already has when deciding how much to gamble) may affect the particular decision being made (Schumpeter, 1954). Simon (1948), halfway through the 20th century, rejected the classical notion that decision-makers behave with perfect rationality. He argued that because of the challenge and cost of acquiring information, executives make decisions with “bounded rationality” – they don’t have every detail of information related to the decision, but instead must be satisfied with *good-enough* information and the accompanying *good-enough* decisions made with that information (Simon, 1948).

In more recent explorations about decision-making, Daniel Kahneman and Amos Tversky (1986) challenged Bernoulli's expected utility theory with the notion that people may identify factors that cause them to decide against their economic interest even if they know better. Kahneman and Tversky's research further asserted that the framing and evaluating of options by an individual when making decisions might lead them to override more rational decisions. The term *reference point* used by Kahneman and Tversky (2000) indicates a neutral point that separates what the individual decision-maker views as gains or losses. Researchers who have elaborated on Kahneman and Tversky's concept of reference points, assert that goals can become an example of a reference point that supersedes rational choice (Heath, Larrick, & Wu, 1999).

For the purpose of this study, this researcher will explore decision-making of school district superintendents. The decisions of a superintendent affect the lives of hundreds, possibly thousands, of children in a community. Now consider that decisions not only affect the education of children, but also future opportunities of children. It is an understatement to claim that superintendents face enormous responsibilities and their decisions have far reaching effects.

Here is a small sampling of the decisions that a public school superintendent may be faced with today.

- The Common Core curriculum was adopted by the state. The local school district has reconfigured the objectives at each grade level to support that effort.

Legislation is currently being considered that could repeal that curriculum. How

should the district proceed and what should be taught to current and future students?

- Legislation at the state level is focused on how to adequately fund education. A statewide rally is planned for a school day. Should school be dismissed so that teachers and staff can participate in the rally?
- Students are assessed by the state to determine if they are eligible for high school graduation. More and more days are required by the state for either testing or test preparation. Personally, you struggle with how much time is dedicated to the assessment process but your personal feelings don't match the state's plan. How do you guide the district?
- The state says any child reading below grade level in 3rd grade will not be promoted to 4th grade. This affects approximately one-third of your district's students. Research indicates that retention is not in the best interest of these students if future success is the goal. How do you respond and navigate the district through this new mandate?

A recent body of research focused on superintendent decision-making contended there is a continuum of decision-making approaches exercised by superintendents. There is not a single approach that is applicable to every situation (Noppe, Yager, Webb, & Sheng, 2013; Polka, Litchka, Calzi, Denig, & Mete, 2011). In decision-making, it is rarely possible to guarantee a best solution; therefore, Tarter and Hoy (Hoy, 1995) reiterate Simon's assertion that individuals 'satisfice' by finding alternatives that meet minimal standards. The decision-making models explored in Tarter and Hoy's research

(classical, administrative, mixed scanning, incremental, garbage can, shared, and political) have appropriate uses; exploring the contingencies for the usage of each model is a purposeful and productive approach to best match strategy with situation (Hoy & Miskel, 2001; Tarter & Hoy, 1998).

The literature points to a challenge associated with preparation for the decisions demanded of the superintendents. Although research has been conducted to explore the various approaches superintendent's use when decision-making, Bosket, Lumby, and Fidler (2005), and Heck and Hallinger (2005), maintain that many superintendent preparation programs have failed to prepare superintendents to apply research findings to problem-solving and decision-making. Noppe et al. (2013) recommend, in the summation of their research, that studies to further explore the problem-solving of superintendents would merit research attention. They also state that incorporating those findings into superintendent preparation programs would be valuable.

The Polka et al. (2011) and Noppe et al. (2013) studies utilize surveys of superintendents to ascertain what decision-making and problem-solving approaches are commonly used by superintendents. The approaches from which the superintendents may choose in the survey are predefined in from previous research (Hoy, 2008). Additionally, the studies analyzed the frequency of various dilemmas faced by superintendents. Discussion in the Noppe et al. (2013) study contended, when referencing decision-making skills, that the success as the chief administrator in the school district depends on these honed skills. "The dilemma for superintendents includes no shortage of critics, the ever-present need to analyze the politics and navigate the land

mines, astute public relations skills, and constant preparation for and attention from the media (Watkins, 2008, p. 148).” If developing decision-making skills is as critical to superintendent success as researchers assert (Brown & Dibbon, 2009; Honig & Coburn, 2008; Hoy, 2008; Noppe et al., 2013; Polka et al., 2011), how do school district superintendents define and develop greater decision-making and problem-solving skills?

Dynamic decision tasks have the following characteristics: (a) they require a series of decisions rather than a single decision, (b) these decisions are interdependent and (c) the environment changes as a consequence of both the decision-makers actions as well as other external factors (Edwards, 1962). Typically such tasks involve “circular causality” where A affects B which in turn affects A again. Such feedback loops can induce either positive or negative gains.

In a sequence of studies, Sterman (1994) has argued that a primary cause of the failure to learn and develop greater decision-making skills is the inability of people to form adequate mental models of dynamic tasks. Studies indicate that the presentation of information to individuals regarding different aspects of performance, such as behavior, strategies, or outcomes may improve decision-making (Ilgen, Fisher, & Taylor, 1979; Kluger & DeNisi, 1996). More particularly, for decisions made by managers, leaders, politicians, etc., literature explains that the necessary feedback is often lacking because (i) outcomes are commonly delayed and not easily attributable to a particular action; (ii) variability in the environment degrades the reliability of the feedback, especially where outcomes of low probability are involved; (iii) there is often no information about what the outcome would have been if another decision had been taken; and (iv) most important

decisions are unique and therefore provide little opportunity for learning (Einhorn & Hogarth, 1978). A school superintendent's work certainly falls in the category of this type of leadership and may likely lack quality feedback as defined above. How then can a superintendent enhance decision-making skills if the necessary feedback may be lacking?

Research indicates that a focus on the decision-maker, such as the individual superintendent, may be a way to understand how different factors interact to influence decisions. Studying how the individual views dilemmas and makes decisions, as well as engaging the decision-maker in reflecting upon their personal decision-making process, may be productive for understanding factors affecting decisions of leaders. Through an exploration of superintendent decision-making, a greater understanding of the cognitive factors that influence the decisions of an individual may occur. The study of choices by superintendents and decisions that led to those choices may provide insight that not only benefits future research but informs the practice of school district leadership in a meaningful way.

Problem Statement

The practice of decision-making is an inescapable responsibility of the school superintendent as the chief executive officer of the school district. Tarter and Hoy (2008) utilize case studies to provide a pragmatic setting for the decision-making approach to be situated and explored. Recent studies (Noppe et al., 2013; Polka et al., 2011) of superintendent decision-making reference Tarter and Hoy's approaches (Tarter & Hoy, 1998). In those studies, predetermined approaches are provided to superintendents as

options from which they can select a preferred method based on the context of the problem being solved. The findings and discussion from the Polka et al. (2011) study and replication of that study by Noppe et al. (2013) provide demographic backgrounds of the subjects and an exploration of the patterns of decision-making evidenced when superintendents are faced with a dilemma.

Although these studies have provided exceptional insight into how superintendents approach dilemmas, a problem still exists that calls for exploration. On the individual superintendent level, research that intentionally explores the cognitive decision-making behaviors of individual superintendents is limited. Superintendents are human beings with individual biographies and biases that result in distinct decision-making behaviors. How does a single superintendent faced with a dilemma cognitively act when making a decision? What goes on in the thinking processes of a school district leader – in that quiet, introspective portion of themselves, personally and professionally – to frame the decisions being made? Research has not examined in-depth the thinking of superintendents that results in the decisions they make.

Purpose of the Study

The complex environment for leading schools calls upon researchers to explore areas that would support the profession of school superintendents. One problem for public school superintendents is that they are so mired in the day-to-day practice of serving their districts that they often have little time to dedicate to refining their practice as a decision-maker. The purpose of this study is to explore how superintendents mindfully identify problems, frame those problems, evaluate possible solutions, and then

makes decisions incorporating reference points. The research proposes to: (1) add to the body of scholarly research related to the decision-making of superintendents; (2) provide insight into the decision-making behaviors of effective superintendents; and, (3) provide intellectual tools for superintendents to hone their practice and benefit the school districts they serve. The following questions guide the research:

Primary Research Question:

When faced with a problem or dilemma, what attributes of administrative mindfulness does a superintendent exhibit when framing the decision, evaluating options, and determining reference points for the decision?

Secondary Research Questions:

- 1) What attributes of a problem or dilemma cause it to require the personal decision-making attention of the school superintendent?
- 2) How does a superintendent frame decisions?
- 3) What other stakeholders frame decisions being made by a superintendent and how does that affect the decision-making behavior of the superintendent?
- 4) How does a superintendent identify reference points and use them when making decisions?
- 5) How does a superintendent evaluate options or possible outcomes of a decision?
- 6) What barriers has a superintendent identified that hinder mindful decision-making?
- 7) What gestational changes in decision-making behaviors, over the course of a career, can a superintendent articulate?

Terms and Definitions

This study of superintendent decision-making behaviors utilizes the following conceptual definitions:

Administrative Mindfulness:

Administrative mindfulness is described by five attributes that allow leaders to constantly scan the organization responding mindfully with effective decisions.

Those attributes include: (1) preoccupied with failure – constantly scan the organization for problems large and small, mostly small; (2) reluctant to accept simplifications – seek to understand the subtleties of situations; (3) sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations; (4) committed to resilience – be strong and flexible to cope with any negative outcomes that emerge; and (5) deferring to expertise – choose the best person for the work, regardless of title or rank (Weick & Sutcliff, 2001).

Contingency Theory of Decision-Making:

Six decision-making models were analyzed in an attempt to determine which model was most effective: classical, administrative, incremental, mixed scanning, garbage can, and political. The result: there is no one best way to make a decision, but rather it was the situation that determined which strategy was most likely to yield an acceptable result—a contingency theory of decision-making. (Tarter & Hoy, 1998)

Dilemma:

An obstacle or predicament that requires a leader to make a decision that will move the organization forward with as little distress to the system as possible (Hoy, 2008).

Evaluating:

The phase of decision-making where the decision-maker assesses the value of each prospect and chooses accordingly. (Kahneman & Tversky, 1979)

Expected Utility Theory:

A theory of decision-making, credited to Bernoulli in 1738, that states that the decision maker chooses between risky or uncertain prospects by comparing their expected utility values (e.g., the weighted sums obtained by adding the utility values of outcomes multiplied by their respective probabilities) (Schumpeter, 1954)

Framing:

The phase of decision-making where the decision-maker constructs a representation of the acts, contingencies, and outcomes that are relevant to the decision. (Kahneman & Tversky, 1979)

Mindfulness:

The simple act of drawing novel distinctions (Langer, 1997) that can lead to a number of diverse consequences, including (1) a greater sensitivity to one's environment, (2) more openness to new information, (3) the creation of new

categories for structuring perception, and (4) enhanced awareness of multiple perspectives in problem-solving (Langer & Moldoveanu, 2000).”

Mindlessness:

Mindlessness, or automaticity, occurs when actors automatically react to situations without forethought or cognitive processing. Mindlessness is acting like an automaton programmed to react to new situations based on past experiences instead of the present (Langer, 2000).

Prospect Theory:

A theory of decision-making that evolved after a critique of expected utility theory. It is a descriptive model of decision-making under risk. Under prospect theory, value is assigned to gains and losses rather than to final assets; also probabilities are replaced by decision weights. The value function is defined on deviations from a reference point and is normally concave for gains (implying risk aversion), commonly convex for losses (risk seeking) and is generally steeper for losses than for gains (loss aversion) (Kahneman & Tversky, 1979)

Reference Point:

In prospect theory, this is the point or state relative to which gains or losses are evaluated. The reference point graphically is neutral and items placed on either side of the reference point are termed as gains or losses, advantages or disadvantages (Kahneman & Tversky, 1979).

Chapter 2: Review of Literature

Introduction

This study is an exploration of how an individual superintendent makes decisions in response to dilemmas or problems. The topic of the decision and the decision made are of less consequence in this study than the behaviors exhibited by the superintendent as the decision is made. The conceptual capital applied to the study brings together evidence on superintendent decision-making, the construct of mindfulness, and prospect theory. Mindfulness and prospect theory form the conceptual framework that informs the empirical part of the study.

Decision-Making

John Dewey, in 1910, may have introduced the notion of decision-making as a sequence of decomposed stages that converge on a solution (Dewey, 1933). Barnard, in his writings of the 1930s, contended that executives, as compared to say scientists, do not have the luxury of making their decisions on the basis of orderly rational analysis, but depend largely on intuitive or judgmental responses to decision-demanding situations (Barnard, 1938). Simon (1960) established a dominant line of research in organizational theory with his model of decision-making processes as a three phase “intelligence-design-choice” sequence. Psychologist and sociologists explored the concept of rationality by challenging economists’ notion that decision makers armed with complete information about alternatives and their consequences simply select the one that maximizes their utility (Lindblom, 1959; March & Simon, 1993; Simon, 1948). Although Simon discredited economic rationality, he still contended that decision-making

was cerebrally rational – that decision-making could be decomposed into a sequence of simple, programmed steps.

Simon asserted his view that decision-making is a bounded rational process – bounded by the information available to man - sequentially journeying from the stage of problem definition toward that of final choice (Herbert, 1976). Of challengers to Simon's views, some suggest that respondents' selective recall of events in studies was more logical and sequential than in reality (Schwenk, 1985) and some suggest that sequential models are less plausible where organizations have ambiguous goals, many decision makers, and diffuse actions (Allison, 1971; Cohen, March, & Olsen, 1972; March & Simon, 1993; Weiss, 1982). Evident in the review of decision-making literature is that Simon's contentions spurred research queries on many fronts.

Langley et al. (1995) continue, past the initial critique of Simon's bounded rationality concept, to enumerate the researchers who have participated in the evolution of decision-making research particularly in the arena of organizational decision-making. The historical trail of decision-making research that they provide in the article highlights man's search for sense-making related to decision-making. For the purpose of this study, recapping the entire historical timeline is not necessary and decision-making theories will be highlighted later in this review of literature. However, important to note from the article, its authors describe passionately three properties that they contend are rarely present in the mainstream literature of organizational decision-making.

“First, while the concept of ‘decision’ itself may imply distinct, identifiable choice, in fact many decisions cannot easily be pinned down, in time or in place. Second, rather than proceeding merely as the linear unfolding of

sequences of decomposed stages, more or less, decision making processes are driven by the emotion, imagination, and memories of the decision makers are punctuated by sudden crystallizations of thought. Third, even when a decision can be isolated, rarely can the process leading up to it. (Langley et al., 1995, p. 261).”

This list serves as fodder for this research challenge.

Identifying and understanding the problem at hand is the first step in decision-making. Barnard (1938) identifies three kinds of decisions: intermediary, appellate and creative. Intermediary decisions stem from formal communications from superiors that need implementation; appellate decisions emerge from the appeals of subordinates in such matters as job conflict and role ambiguity; and creative decisions originate in the initiative of the executive concerned. Drucker (2006) takes a different approach and identifies two types of decisions – generic or unique. Generic decisions come from established principles, policies, or rules. Unique problems are not subject to the general principals or rules and therefore require creative decisions. The focus of this study is most closely tied to those decisions where no established protocol or precedent exists. However, neither Barnard’s nor Drucker’s definition fully explains the decision-making focus of the study, that of decisions involving a dilemma.

The Merriam Webster On-Line Dictionary ("Dilemma," 2015) defines the term *dilemma* as “a situation in which you have to make a difficult choice. Choice is the key term. In order for a decision to be required, options must be available. However, one cannot be misled into thinking that choice infers defined options. Referencing Barnard (1938) and Drucker (2006), the options may not be defined but instead may even be

created by the decision-maker. Dilemma in this study is used as a consistent term to reference the problem or predicament that requires a decision.

In superintendent decision-making literature, dilemmas are defined by Tarter and Hoy (2008) as obstacles or predicaments that require a leader to make a decision that will move the organization forward with as little distress to the system as possible. Other research posits that dilemmas faced by school superintendents are inherent within the institution of school itself (Ogawa, Crowson, & Goldring, 1999). The contention, by identifying that inherency, is that choices when facing a dilemma are not solutions, but merely the selection of one alternative over others. As Lowy (2008) explains, "A critical task of leadership is recognizing, acknowledging, and interpreting the enterprise's core dilemmas in a timely and useful fashion (Lowy, 2008, p. 1). Tarter and Hoy (2008) contend that unique problems that require creative decisions often change the thrust of an organization. Further asserted is that, if the decision requires a creative solution, the decision-maker must be open to a wide range of options to address the dilemma. If these dilemmas are ever-present and can change the trajectory of the organization, the decision-making of a superintendent when faced with a dilemma merits exploration.

Decision-Making of School Superintendents

Gone are the days of the one-room school house where the teacher was the sole decision-maker. In intensely stark contrast today, (Shapiro & Gross, 2013) provide the backdrop of decision-making in public schools..

"In the beginning of the 21st century, in an era of wars, terrorism, hurricanes, financial uncertainty, and high-stakes testing, educational leaders are faced with even more daunting decision-making difficulties than in a more

tranquil period. Educational leaders now face profound moral decisions, regarding their classrooms, schools, school districts, and higher educational institutions in an ever-changing and challenging world. Beyond the normal ethical decisions they must make, they also need to take into account evaluation plans, psychological assistance, conflict resolutions, and global events and threats that impact their communities. The most difficult decisions to solve are ethical ones that require dealing with paradoxes and complexities (p. 3).”

As one reflects on the genesis of public education and the dramatic variance in its setting, one could identify a plethora of dilemmas that a superintendent faces today in contrast to those faced in the inception of public education.

In 1941, T.O. Hall published “The Dilemmas of a School Superintendent” in the *Peabody Journal of Education*. Many of the dilemmas that Hall referenced still exist today: political influences, unprepared but popular teachers, problems of revenues, matters of curriculum, supervision, and several other factors influencing teaching and learning (Hall, 1941). The 2005 National Superintendent of the Year, Monte Moses, provided the following summary of topics facing superintendents:

- Revenue and expenditure limitations;
- Increasingly diverse and complex students and families;
- High public expectations and accountability for student achievement;
- Rapid advances in knowledge and technology;
- Business and political concerns about public education;
- International competition in education;
- More legal and law enforcement issues;
- Violence, racism, and substance abuse;
- Choice and vouchers;
- Growing state control of education;
- Increases in student enrollment; and
- Erosion of public confidence and common agreement about public education.

The list, although more specific in the 21st century, has varied little since published by T.O. Hall in 1941.

These subjects and the dilemmas that accompany them, as well as general administrative decision-making, have generated a considerable amount of research dealing with superintendent decision-making (Callahan, 1966; Glass, 2003; Konnert & Augenstein, 1995; Leithwood & Steinbach, 1992; Leithwood, Steinbach, & Raun, 1993). The knowledge-base related to superintendent decision-making has been generated from a variety of theoretical perspectives and have added to the body of scholarly literature related to the practices and attributes of school district managers. A variety of studies have a more specific focus including gender (Brunner & Schumaker, 1998; Grogan & Smith, 1999; Shakeshaft, 1989; Shakeshaft et al., 2007), professional practices (Bjork, 1993; Glass, Bjork, & Brunner, 2001), leadership (Bridges & Hallinger, 1995; Leithwood, Begley, & Cousins, 2005) and accessing position (Maienza, 1986; Tallerico, 2000).

The public school superintendent's role, by virtue of the complexity of a school district, is inherently fraught with dilemmas (Houston & Eadie, 2002; Kowalski, 1995; Leithwood, 1994). Houston and Eadie (Houston & Eadie, 2002) argue that defining the superintendent as simply the manager of the district is no longer an accurate depiction. Instead, they contend "the superintendents who in our experience are most effective ... function as full-fledged, contemporary CEOs, seeing themselves more fully as leaders, not just chief administrators (p.19-20)."

An approach for school leaders to use when crafting decisions is provided by Tarter and Hoy (2008). Their work is focused on the decisional processes used by leaders and the superintendent's response to a dilemma through decision-making. Optimal decision-making is referenced by Tarter and Hoy (1998) as "rational, deliberate, purposeful action, beginning with the development of a decision strategy and moving through the implementation and appraisal of results (p. 212)."

Tarter and Hoy (2008) contend, "mindful decision-making is not a mechanical skill. When models are depicted as diagrams or schemata, it is tempting to view them as lockstep procedures to be followed blindly. This is as wrong as seeing all decision-making as idiosyncratic as to deny patterns (p. 9)." Although the research of Tarter and Hoy can be applied to various school leadership roles, for the purpose of this study and from this point forward, it will be solely referenced in the context of the superintendency.

Tarter and Hoy (1998) analyzed six decision-making models in an attempt to determine the model that was most effective for educational leaders: classical, administrative, incremental, mixed scanning, garbage-can, and political. The classical model is described by Tarter and Hoy as being an optimizing model, one that is straightforward. "The manifest assumption of the model is that there is one best solution to problems that can be discovered and implemented. (Hoy, 2008, p. 10)." Simon (1979) explained that the classical model of rationality requires knowledge of all the relevant alternatives, their consequences and probabilities, and a predictable world without surprises. Simon further contended these conditions, however, are rarely met for the problems that individuals and organizations face.

The administrative model is explained as a modified version of the “optimizing” or classical model. Simon (1948) first identified this model in the 1930s as a result of finding that managers would often make decisions that were reasonable, but not ideal; in other words, the decision satisfied the situation but hardly maximized it. This administrative model is also referred to as the satisficing strategy.

The third model identified is the incremental model. It is explained as a strategy of successive limited comparisons (Hoy, 2008). “Decision makers consider only those alternatives that are similar to the existing situation and only those differences between the current state and proposed outcomes (Hoy, 2008, p. 42).” As the name implies, this decision-making model was made have up a series of “baby steps”—each step monitored to note the effect of the change, thus trying to avoid negative consequences on a larger scale. Tarter and Hoy noted that the model lacked direction or was not grounded in a focused outcome or objective. If a decision was made and nothing bad happened as a result, it was a good decision; likewise, if something bad resulted, it was not catastrophic in that it had only been a small change. To use Lindblom’s (1959) phrase, they ‘muddle through’ the decision-making process.

The fourth model is the mixed scanning model. Thomas (1984)) defines it as a mixture of shallow and deep examination of data—generalized consideration of a broad range of facts and choices followed by detailed examination of a focused subset of facts and choices. Mixed scanning differs from the incremental model in that it is grounded in policy, but it mirrors the cautious, measured decisions of the incremental model. It is

guided by two questions: (1) What is the basic mission of the organization? and (2) What incremental decisions will move the organization in that direction? Mixed scanning has its roots in medicine, as the doctor is guided by the general mission of the patient's health and making decisions to that end.

The fifth model is the garbage-can model, also referred to as irrational decision-making (Hoy, 2008). Cohen et al. (1972), discuss the garbage-can model when an organization operates on the basis of a variety of inconsistent and ill-defined preferences. It can be described better as a loose collection of ideas than as a coherent structure; it discovers preferences through action more than it acts on the basis of preferences. In the garbage-can model, solutions are suggested for problems that do not yet exist, but that actually demand that a problem be found. Tarter and Hoy (2008) sum up the model by stating: "The garbage-can model explains why solutions are proposed to problems that do not exist, why choices are made that don't solve problems, why problems persist in spite of solutions, and why so few problems are solved (2008, p. 59)." However, other researchers do not consider the garbage-can a model at all, but rather a way of describing irrational decision-making (Padgett, 1980). In short, within the bureaucracy of an organization it is easy for problems to become separated from appropriate choices due to ambiguity within the system, thus providing an image of someone rummaging around inside a garbage can hoping to find a problem that may fit a solution they already developed.

The last decision-making model analyzed by Tarter and Hoy (2008) is the political model. This model used in organizations in which politics replaces the

procedures for decision-making and personal goals displace organizational ones. Two key ideas underlie the political dimension of decision-making. First, people in organizations have differences in interests resulting from functional, hierarchical, professional, and personal factors (Hickson & University of Bradford. Management, 1986; Pettigrew, 2014). Second, people in organizations try to influence the outcomes of decisions, so that their own interests will be served, and they do so by using a variety of political techniques (Bacharach & Lawler, 1980; Pfeffer & Lammerding, 1981). The political model, then, functions to satisfy an individual's goals and relies on power as opposed to organizational policy or objectives taking precedence. This model lies at the opposite end of the continuum of decision-making models with classical on one end and political on the other.

In further analyzing each of the six decision-making models (classical, administrative, incremental, mixed scanning, garbage-can, and political) in an attempt to determine the model that was most effective, Tarter and Hoy (2008) constructed a comparison of the models.

| | CLASSICAL | ADMINISTRATIVE | MIXED SCANNING | INCREMENTAL | GARBAGE CAN | POLITICAL |
|--------------------------------|---|--|---|---|--|--|
| <i>Setting goals</i> | Organizational objectives are set prior to alternatives | Objectives usually are set prior to alternatives | Policy guidelines are set prior to alternatives | Objectives and alternatives are intertwined | Objectives emerge spontaneously | Objectives emerge spontaneously but are personal |
| <i>Means-ends analysis</i> | Always begins with a means-ends analysis | Frequently begins with a means-ends analysis, but occasionally ends change | Broad ends and tentative means focus the analysis | No means-ends analysis; means and ends are not separable | Means and ends are independent; chance connects them | Personal ends determine organizational means |
| <i>Test of a good decision</i> | The best means to an organizational end | A satisfactory organizational outcome | A satisfactory organizational outcome | Decision makers agree that the decisions are in the right direction | Participants agree that solution and problem match | Personal objectives are accomplished |
| <i>Decision process</i> | Optimizing organizational goals | Satisficing | Adaptive satisficing | Successive comparing | Connecting by chance | Politicking to achieve personal ends |
| <i>Alternative search</i> | Find and consider alternatives | Search for a reasonable set of alternatives | Limit search to alternative close to the problem | Limit search to alternatives close to the problem | Scan for a match among solutions, problems, and participants | Find personal satisfying alternatives |
| <i>Underpinning</i> | Theory | Theory and experience | Theory, experience, and comparison | Experience and comparison | Chance | Power |
| <i>Perspective</i> | Normative ideal | Descriptive and normative | Descriptive and normative | Descriptive | Descriptive | Descriptive |

Table 2.1: Comparison of Decision-Making Models (Hoy, 2008, p. 85)

Additionally, Tarter and Hoy (2008) went about researching the various approaches and matching the approaches to the appropriate circumstances. What they discovered was that the best approach was the one that fit the circumstances at hand. With this in mind, they set about identifying the contingencies for selecting the decision strategy.

As seen in Table 2.2, optimizing works well when problems are clear and narrow. Satisficing is effective when information is incomplete. Incremental involves incomplete information, complex decisions, and uncertain outcomes. Stated simply, the best results for decision-making are obtained by the thoughtful selection of the best model to fit the situation.

| Model | Appropriate Circumstance |
|----------------------|---|
| Optimizing | narrow, specific problems, complete information |
| Satisficing | incomplete information, definable satisfactory outcomes |
| Adaptive satisficing | incomplete information; decisions complex; outcomes uncertain, guiding policy exists |
| Incremental muddling | incomplete information; decisions complex; outcomes uncertain; no guiding principles; short-term strategy until policy guidelines are established |
| Garbage can | to understand fortuitous decisions |
| Political | to understand irrational decisions |

Table 2.2: Summary of Matching the Decision-Making Model with the Appropriate Circumstance (Hoy, 2008, p. 87)

Tarter and Hoy (2008) concluded that there was no one best model for decision-making; instead, it was the context of the decision that determined the strategy that was

most likely to yield an acceptable result – a contingency theory. Their contention is that context and situation matter when choosing an approach to decision-making. Therefore, understanding both the dilemma and the environment in which that dilemma is situated would appear to be important when superintendents make decisions.

Recent studies have explored the application of the contingency theory of decision-making by studying superintendents' decision-making, with emphasis on context and situation when faced with a dilemma. In 2011, a study was conducted by Polka, Latchkey, Caizi, Denig and Mete (2011) in five Mid-Atlantic States. For the study, a survey was created by the researchers containing seven decision-making categories: 1) classical; 2) incremental; 3) garbage can; 4) shared; 5) satisficing; 6) mixed scanning; and 7) political. Five statements were created to describe each category. The five survey statements used to describe classical contain descriptors such as rational, factual, and connections between the means and the ends. Incremental decision-making descriptors focused on the process, procedures, and the use of data. Administrators utilizing the garbage can category are those who rummage around for the choices available for solving the problems in a way that appears to lack rational thought. Shared decision-making are involved in the decision-making process. Satisficing is focused on making decisions that most people favor, that meet the needs of those affected, and that satisfy those affected by the decision. The mixed scanning category is grounded in considering the school mission, vision, goals, and policies when making decisions. Descriptors in the survey statements used to define the political category include bargaining, compromise, power brokering, and administrator priorities.

The survey contained three parts: A) demographic data, B) decision-making/problem-solving approaches, and C) personal and professional dilemmas. Part A, the demographic data section, collected information about respondents' background, experiences, and current school demographics. Part B of the survey focuses on superintendents' problem-solving and decision-making approaches. It gathered information about the use of each of the seven problem-solving and decision-making approaches: classical, incremental, garbage can, shared decision-making, satisficing, mixed scanning, and political. Part C of the survey was designed to explore personal and professional dilemmas that superintendents encounter in district leadership. This part of the survey consisted of questions designed to examine various types of leadership dilemmas.

Findings from the Polka, et al. (2011) study of 258 superintendents from Delaware, Maryland, New Jersey, New York, and Pennsylvania identified the incremental and classical approaches as those most frequently used by superintendents to make decisions and solve problems related to school administration. However, the shared decision-making model and mixed scanning were also approaches frequently used by superintendents followed by the satisficing approach and the garbage can approach which were both employed by superintendents but not to the same level of frequency as the incremental, classical, shared decision-making, and mixed scanning.

There were significant differences in the approaches used based on administrative experiences, school district setting, and student population. The context of the school

district influenced the decision-making approaches more than the background and experiences of the superintendent according to the findings of this sample.

The superintendents of this sample reported the frequency of facing a variety of dilemmas presented in the study. However, when asked to identify those dilemmas that caused them the most stress, the sample superintendents identified that personal life versus professional life was the most stressful dilemma, followed by leadership versus management, trust versus change, and problems versus predicaments. Differences in the findings were articulated in the study based on gender, years of experience, school setting such as rural or urban, or size of school district.

Findings from the replicated study (Noppe et al., 2013) indicated that the incremental and classical approaches were those approaches most frequently used by superintendents. However, mixed scanning approaches were used less often by superintendents in rural and small enrollment districts in this study. Unlike previous research in the Mid-Atlantic States, this study found that the garbage can approach was used significantly more often by superintendents from smaller rural districts compared to superintendents in larger urban settings. Additionally, this study found a variety of articulated differences between responses of female superintendents and their male counterparts which was not found in the Mid-Atlantic States. Participants of this sample reported that they encountered the same 12 dilemmas as documented in previous research (Polka, Litchka, Caizi, Denig, & Mete, 2011) and presented in school leadership literature for nearly a century (Hall, 1941). Finally, and unlike findings from previous research, this study found that superintendents with schools on the NCLB Needs

Improvement List confronted the long-term goals versus short-term results dilemma significantly more often than those superintendents with schools not on the watch list. Also, superintendents who had two or more schools on the improvement list used the political approach more often than superintendents with fewer than two schools on academic watch lists. These findings could be linked to school boards, community groups, and employee groups demanding short-term, quick-fix solutions to improve student achievement. Frequently, media reports of poor student achievement to the public cause a knee-jerk reaction by school boards and school leaders to respond quickly and make bold statements to improve student achievement. Both research groups, in their summaries related to the Polka-Denig survey, encouraged a deeper study of the superintendents' responses to dilemmas and the accompanying problem-solving approaches to those dilemmas.

Even though the Polka et al. (2011) and Noppe et al. (2013) each provide valuable insight into the varying approaches used by superintendents as they face dilemmas, what is lacking is a deeper look into how and why superintendents make the decisions they do. The data from each study provide patterns of decision-making and variances based on demographics, gender, context, etc. There is a need to take a more intimate look into the cognitive processes superintendents when faced with a dilemma. For example, what drives a superintendent when making a decision? What is a superintendent thinking when he frames a decision? What does a superintendent think about when considering options as she faces a dilemma?

Before jumping to the decision-making process of a superintendent, it is appropriate for the purpose of this study to consider how a superintendent – as an individual - processes information. The next section of the literature will review the construct of mindfulness– what a superintendent does when faced with a new dilemma and the information that accompanies it.

Mindfulness

"Thoughtful administrators are more inclined to be guided by theories, as imperfect as they are, than by impulse or the biases of dubious beliefs.
Make mindfulness a habit of mind."

"Mindfulness transforms chance into serendipity."
(Hoy, 2013)

Mindfulness originated from the 2,500 year old Buddhist tradition and has been referred to as a psychological process, a technique or method of reflection, and also a skill (Bishop et al., 2004; Germer, 2005; Hayes & Shenk, 2004). From a psychological vantage point, mindfulness is intentionally paying attention to present moment reality with an orientation of acceptance and curiosity marked by non-evaluative observation. In theory, when practitioners notice that attention has wandered from this orientation, they gently reorient the mind back to a more flexible or open state of awareness (Germer, 2005; Kabat-Zinn, 1990).

Ellen Langer, who for nearly four decades has explored the partner concepts of mindfulness and mindlessness, refers to mindfulness as “the process of drawing novel distinctions (Langer & Moldoveanu, 2000, p. 1)” which keeps us situated in the present. Although that definition is brief, the process of drawing novel distinctions can lead to a number of diverse consequences: (1) a greater sensitivity to one’s environment, (2) more

openness to new information, (3) the creation of new categories for structuring perception, and (4) enhanced awareness of multiple perspectives in problem-solving (Langer & Moldoveanu, 2000)

When we are mindful, we are actively drawing new distinctions, noticing new things, and are engaging in mindful choices that enhance our awareness of our own surroundings and perspective (Langer, 2000). Mindfulness “leads the mind back from theories, attitudes and abstractions . . . to the situation of experience itself (Varela, Thompson, & Rosch, 1991, p. 22).” Being mindful prevents individuals from being ensnared in preconceived notions and enables those individuals to be more conscious of different variables as they make decisions (Kabat-Zinn, 1994). In contrast, when we are in a state of mindlessness, we act like automatons that have been programmed to rely upon previously formed categories, distinctions and experiences (Langer & Moldoveanu, 2000)

The Elements of Mindfulness

The mindful practitioner attends, in a non-judgmental way, to his or her own physical and mental processes during ordinary everyday tasks to act with clarity and insight (Epstein, 1999). In a discussion of mindful medical practitioners, exemplary physicians seem to have a capacity for critical self-reflection that pervades all aspects of practice including being present with the patient (McPhee, 1981), solving problems, eliciting and transmitting information, making evidence-based decisions, performing technical skills, and defining their own values (Westberg & Jason, 1994). In every profession, not just medicine, there will be tasks and decisions specific to that field of

practice; however, the truly mindful individual is able to apply and identify mindful, attentive practices when observed in their profession or the profession of another.

Mindfulness is defined by elements that, together, comprise the construct identified by Langer (1997). The elements include: a greater sensitivity to one's environment, openness to new information, the creation of new categories for structuring perception, and enhanced awareness of multiple perspectives in problem-solving. Understanding each of these elements will assist in understanding the superintendent's decision-making and identifying behaviors may be considered mindful or mindless.

A great sensitivity to one's environment. Mindfulness has, as a basal property, a heightened awareness to situation, context, and surroundings (Langer, 1997). Langer (1997) views mindfulness as being alert to the situation and highly aware of context. Information processing is a constant, active element of mindfulness not in the sense of an audio or video recording of situations, but instead in capturing and manipulating stimuli as the individual encounters it. Seeing the world in new ways is one of the greatest avenues for creativity and personal engagement with the world (Csikszentmihalyi, Rathunde, & Whalen, 1997) but this does not tend to occur unless one is in tune with her environment.

For a leader who may frequently change situations, such as a school superintendent, the ability to situate himself into the environment at hand can be a regular, ongoing challenge. (Carson & Langer, 2006) provide attributes of mindful individuals who are able to engage with their environment.

“Mindful individuals are truly authentic in that they are fully engaged with the environment and are busy noticing

novel aspects of the situation, rather than devoting attentional resources toward winning the approval of others or toward bolstering fragile self-esteem. On the other hand, those who disengage with the moment and expend their attentional resources on impressing others or 'putting up a good front' enter a mindless state (p. 31)."

A superintendent may transition in a given day from a discussion of PreK curriculum, to policy discussions with city leaders, to conversations about employee performance, to an analysis of diesel fuel costs, etc. These transitions among various topics would require high levels of cognitive attention expended and appropriated by the superintendent.

Openness to new information. Langer (1989) shares that a mindful state also implies openness to new information and a lack of new information could actually be harmful. Consider a person who might have never heard a flood warning alarm before. Just because that sound was unfamiliar, ignoring it could be harmful. Physical harm is a more obvious consequence for an unwillingness or inability to incorporate new information. In addition, a lack of receptivity to new information can create a glass ceiling on the growth of an individual intellectually, socially or emotionally (Langer, 1997). Langer (1989) argues that our minds, however, have a tendency to block out small, inconsistent signals. For a school superintendent, one could wonder if ego, experience, or other behaviors could impede a superintendent's ability to be open to new information. The results of that lack of openness to new information could certainly affect decision-making.

Hoy, Gage and Tarter (2006) describe mindfulness as "playful and nimble and avoids the traps of narrow contexts and the anesthetic of routine by trying to notice the

new and different (p. 239).” Consider a tightly sealed vault as the visual representation of mindlessness in relation to new information. No matter how valuable the contents and information that are within, it is impossible for new items to be considered as the seal on the vault is a hindrance to additional, potentially even more valuable, information. A superintendent is an educational leader with, likely, vast experience as an educational decision-maker. It could be tempting for a superintendent to exclude information and consider that his experience provides ample information for decision-making.

In practical matters, one can maintain such a fixation with established information that, when new information or questions are interjected, the individual is unable to discern that new variables have entered the thought arena. In *The Unschooled Mind*, Howard Gardner (1991) recounted the failure of even “good” schools to go beyond the rote and superficial teaching of knowledge. In a classic example provided by Gardner of how traditional didactic instruction can lead to mindlessness, second graders were given the following problem: There are 26 sheep and 10 goats on a ship. How old is the captain? 88% of students from traditional classroom settings answered 36, and not a single student commented that the problem didn’t make sense, despite the fact that these were students scoring above the 85th percentile on average on standardized tests. In comparison, nearly a third of the students in the more mindful “constructivist” classroom questioned the sense of the problem (Kamii & Lewis, 1991). Although adults could quickly criticize these young children, how often is a school superintendent deluged with information and yet asked to make critical decisions regarding that information? Is the

superintendent open to looking for and considering new information, or does she use information to reinforce held beliefs?

The creation of new categories for structuring perception. Mindlessness relies on old categories, whereas mindfulness is the creation of new ones. Mindlessness is characterized by routine responses, habits, complying with senseless orders, etc. (Langer, Blank, & Chanowitz, 1978). There is in all of us an inclination toward routines to order and simplify experience. Habit is a reason people find formal rules and regulations so appealing. When teachers and administrators simply follow rules or comply with senseless orders, they are mindless; they turn mindful as they substitute their judgments for routine responses. Mindlessness grows out of routine and general comfort that things are being done correctly, that is, according to standard procedures. The single-minded pursuit of outcomes typically promotes mindlessness unlike an emphasis on process (Hoy et al., 2006)

Langer (1989) asserts when an individual is faced with critical decisions, the person brings to the decision-making front previous knowledge. Those who are mindless operate from a state of reduced attention that tends to lead to mechanically employing cognitively and emotionally rigid, rule-based behaviors. Trapped in previously created categories these individuals easily confuse the stability of their assumptions with stability in the world, thus giving themselves a false reading of their surroundings

A practical example of mindlessness and a failure to create new categories for information, would be when a superintendent makes decisions because every other

superintendent is making them. Following the crowd requires a reduced state of cognitive attention and will likely gain a more simplified experience.

Enhanced awareness of multiple perspectives in problem-solving. The final key quality of mindfulness, according to Langer (1997), is the awareness of more than one perspective in problem-solving. Researchers, such as Churchland (1988), are making efforts to explain human brain functions in terms of parallel functions of a computer. One could argue that, once information and algorithms are obtained, results can be replicated with accuracy and consistency. The deficit to this model of thinking is that whatever function is being conducted is the manifestation of all knowledge on the subject to date. Langer's construct of mindfulness implies that receptive knowledge is ongoing and that the mind as computer metaphor (Gigerenzer & Goldstein, 1996) is doomed to be outdated and obsolete without interjecting new knowledge as it is discovered or obtained.

A superintendent is constantly receiving updated information – changes in laws, dynamic situations involving students and staff, frequent changes in financial data, etc. “Ambiguous situations naturally make us more mindful than familiar situations because they demand much more processing. However, ambiguous situations do not necessarily serve learning or nurture a general disposition toward mindfulness (Ritchhart & Perkins, 2000, p. 33).” One may question how ambiguity can enhance problem-solving and the mindfulness that ensues. If a superintendent can see obstacles or problems taking on this ambiguous nature, he can encounter the problem and become a learner seeking new information and knowledge. The process that ensues is one of sense-making of the

situation and in the process of making sense, alternatives get explored because the learner isn't just striving for a correct answer but rather building a series of connections and abstractions that will facilitate later transfer to new situations (Perkins & Salomon, 1989).

Administrative Mindfulness

Although Langer's focus on mindfulness spans a wide range of human behaviors, more specific focus for the purpose of this study is directed toward mindfulness and mindful decision-making as a practice of administrators, particularly superintendents. Langer foreshadows in her book *Mindfulness* a challenge for leaders: "The most important task for any CEO, and for the rest of us, is choosing what to be mindful about. Rather than spending all day inspecting every expense account or widget in the factory, the mindfully mindful executive chooses where to pay attention" (Langer, 1997, p. 199).

In *Administrators Solving the Problems of Practice*, the following is a contention worthy of specific attention: "Mindful decision-making is not a mechanical skill. When models are depicted as diagrams or schemata, it is tempting to view them as lockstep procedures to be followed blindly. This is as wrong as seeing all decision-making as so idiosyncratic as to deny patterns (Hoy, 2008, p. 9)." In their definition of mindfulness as an administrative practice, Weick and Sutcliffe (2001), contend that to be administratively mindful is to have a rich awareness of detail and an advanced ability to discover and correct errors before they escalate into major crises.

There are five delineated elements of mindful administration provided by Weick and Sutcliffe (2001). These researchers contend when a leader, CEO, manager, etc. is mindful the following behaviors are exhibited: (1) preoccupied with failure – constantly

scan the organization for problems large and small, mostly small; (2) reluctant to accept simplifications – seek to understand the subtleties of situations; (3) sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations; (4) committed to resilience – be strong and flexible to cope with any negative outcomes that emerge; and (5) deferring to expertise – choose the best person for the work, regardless of title or rank. Weick and Sutcliffe (2001) contend from their research that organizations that can demonstrate these attributes, will produce more highly reliable and consistent results.

Denhardt (2010) notes, “Organizations are indeed the products of individual human actions, actions with special meaning and significance to those who act (p. 1).” While few leaders would argue that the elements of administrative mindfulness are valuable attributes of an organization, a challenge exists for leaders to make daily decisions that will eventually lead to an organization behaving mindfully. Understanding how decisions are made will provide context for the exploration of the decision-making of superintendents in this study.

Theories of decision-making are rooted in pre-twentieth century research and philosophy (Buchanan & O'Connell, 2006). Because there is a great deal of research and empirical evidence related to utility theories, I have included the seminal work to address the concept of expected utility theory. The primary focus for this study, however, will be on the emergence of prospect theory as an alternative to expected utility theory and as a foundational theory for modern decision-making arenas of uncertain outcomes that is appropriate when studying superintendent decision-making. Bandwagon theories are

mentioned, briefly, for two reasons: (1) there is a deluge of marketing, social media, and popular literature influencing and informing the decision-making of public school superintendents and (2) superintendents do not make decisions in isolation from the decisions of others in the same profession.

Ward Edwards (1954) defined the domain of judgment and decision-making in a classic *Psychological Bulletin* article, by bringing together concepts from economics, decision theory and psychology. Edwards also led a vigorous research program that compared actual performance to idealized models of inference and decision. Herbert Simon (1948) introduced the concept of bounded rationality.

Decision theory is an approach that uses available information to make optimal decisions under uncertainty (Morgan, Henrion, & Small, 1992). In classical decision theory, uncertainty is represented by assuming a set of possible states (or options) of the system with a known probability for the occurrence of each state (Von Neumann & Morgenstern, 1953). The decision-maker, in the case of this study, a school superintendent, chooses or devises an action in response to a dilemma. In order to better understand how an individual's decisions are made, two theories – expected utility theory and prospect theory - related to decision-making are reviewed.

Expected Utility Theory

Bernoulli's (1738) Expected Utility Theory was conceived as a normative model of an idealized decision maker, not as a description of the behavior of real people. In Schumpeter's (1954) words, it "has a much better claim to being called a logic of choice than a psychology of value" (p. 1058). Expected Utility Theory states that the decision

maker chooses between risky or uncertain prospects by comparing their expected utility values (e.g., the weighted sums obtained by adding the utility values of outcomes multiplied by their respective probabilities). An analysis of the expected utility theory reveals four substantive assumptions – cancellation, transitivity, dominance, and invariance.

Cancellation. A key qualitative property associated with expected utility theory is the cancellation of any state of the world that yields the same outcome regardless of one's choice. In other words, you can ignore states of the world in which your choice would not affect the outcome. For example, one route home carries a 1 percent chance of being killed in a car crash and a 10 percent chance of being killed by a gunman. Another route home carries a 10 percent chance of being killed by a gunman and a 20 percent chance of being mugged. The likelihood of being killed by a gunman is then ignored because, in essence, it is the same across both cases and the decision is influenced by the chance of being killed in a car crash or being mugged. Cancellation is necessary to represent preference between prospects as the maximization of expected utility. This notion has been captured by different formal properties, such as the substitution axiom of von Neumann and Morgenstern (1953), the extended sure-thing principle of Savage (1954), and the independence condition of Luce and Krantz (1971).

Transitivity. Transitivity is represented in the statement: If A is preferred to B, and B is preferred to C, then A should be preferred to C. For example, if bananas are preferred to apples, and apples are preferred to peaches, then bananas should be preferred to peaches. This property is likely to hold when the options are evaluated separately.

However other research, such as that by Tversky and Kahneman (1979), indicates that transitivity may not hold when further consequences of an option are considered or the options are considered in other decision-making contexts (Kahneman & Tversky, 1979). A person may prefer peaches over bananas if they are attending a peach festival even if bananas are usually their favorite fruit.

Dominance. Dominance is represented in the statement: If option A produces a better outcome (higher utility) than B given at least one possible state of the world, and does not produce a worse outcome in any other possible state, then A should be preferred to B. This represents the most obvious principle of rational choice: if one option is better than another in one state and at least as good in all other states, the dominant option should be chosen. For example, if Car A has better gas mileage than Car B and all other states of the two are the same (color, options, engine size, price, etc.) then Car A is the most rational choice. However, research (Kahneman & Tversky, 1979) has shown that people making decisions may bypass that rational logic and choose Car B. Therefore, dominance as an attribute of decision-making may be violated.

Invariance. An essential condition for the theory of choice that claims normative status is the principle of invariance: different representations of the same choice problem should yield the same preference. For example, if the price of an item is represented as 20% off of the original price or 80% of the original price, the response should be the same by the prospective buyer. However, research has shown that buyers respond differently depending on the presentation of the price of the item being sold (Kahneman & Tversky, 1979).

As the attributes of Expected Utility Theory were challenged in the research and subsequent literature, issues arose and efforts surfaced to explain behaviors of decision-making that were not congruent with Expected Utility Theory. Kahneman and Tversky (1979) substantially disrupted the thinking and research related to choice theory when they presented their critique of expected utility theory as a descriptive model of decision-making under risk and put forward their own model - prospect theory.

Conceptual Framework

Kahneman and Tversky's (1979) prospect theory provides a theoretical lens for viewing the way a school superintendent frames a situation and evaluates options when faced with a dilemma. The personal experiences and perceptions of the superintendent, as explained in the theory, influence each phase of the decision-making process. Through this study, the decision-making behaviors of superintendents will be explored to determine the role of reference points in that decision-making process. Also, in the study, the phases of the decision-making process outlined in prospect theory – framing and evaluating of options – will be explored in an attempt to inform the practice of superintendent decision-making.

After an exploration of the literature, this researcher contends that each phase identified in prospect theory – framing, evaluation and identifying a reference point – is really a 'decision within a decision' for the superintendent. The complexity of this decision-making process calls for both personal and organizational cognitive attention from the superintendent during each phase. The mindfulness or mindlessness of the superintendent affects not only the final choice or final decision being made in response

to a dilemma, but also affects each phase of the decision-making process. On a personal decision-making level, the elements of mindfulness that were reviewed in the literature - a greater sensitivity to one's environment, more openness to new information, the creation of new categories for structuring perception, and an enhanced awareness of multiple perspectives in problem-solving - all appear to be critical to the decision-making effectiveness of the superintendent (Langer, 1997).

Further complicating the decision-making process is the role the superintendent plays as a CEO of the organization. Administrative mindfulness, according to Weick and Sutcliff (2001) calls for the superintendent facing a dilemma to consider each of the variables that will allow the district to function well as a system. Each element of administrative mindfulness places demands on the cognitive attention of the superintendent: (1) preoccupied with failure - constantly scan the organization for problems large and small, mostly small; (2) reluctant to accept simplifications - seek to understand the subtleties of situations; (3) sensitive to operations - detect problems, make continuous improvements, never lose sight of day-to-day operations; (4) committed to resilience - be strong and flexible to cope with any negative outcomes that emerge; and (5) deferring to expertise - choose the best person for the work, regardless of title or rank. These attributes of administrative mindfulness are further categorized into two groups: anticipation (preoccupied with failure, reluctant to accept simplifications, sensitive to operations) and containment (committed to resilience, deferring to expertise) (Weick & Sutcliff, 2001). These elements could demand further cognitive attention as to timing related to framing and evaluating options in a superintendent's decision-making.

With such a barrage of expectations, how does a superintendent face dilemmas with various personal and organizational demands on his cognitive attention? The quest of this study will be, using prospect theory as a conceptual framework, to explore how a school superintendent frames a dilemma, evaluates options, and identifies reference points in his decision-making process. It is the contention of this researcher that these cognitive activities of prospect theory by the superintendent are conducted either with or without demonstrating the attributes of administrative mindfulness. The extent to which the attributes of administrative mindfulness are present in each phase of the decision-making process are likely to affect the quality of the superintendent's decision-making outcomes.

Prospect Theory

We know that choices are not always rational and that the attributes of cancellation, transitivity, dominance and invariance are often violated. Applied to this study, this means that superintendents as decision-makers may not always make rational, predictable choices. How then do those superintendents make choices?

Kahneman and Tversky (1979) contend that when faced with risky prospects – decisions where risk or high value is involved - people typically make choices that are not consistent with the expected utility theory. In these situations, people underweight outcomes that are merely probable in comparison with outcomes that are obtained with certainty. This tendency, called the certainty effect, contributes to risk aversion in choices involving sure gains and to risk seeking in choices involving sure losses. People, also, generally discard components that are shared by all prospects under consideration. This

tendency, called the isolation effect, leads to inconsistent preferences when the same choice is presented in different forms (Camerer & Weber, 1992; Kahneman & Tversky, 1979, 2000; Tversky, 1972).

For a school superintendent, the application of this research requires an exploration of the thinking of superintendents to determine what they believe to be risky or certain and to further explore the way superintendents respond to information in various forms. A further review of Tversky and Kahneman's research provides a theoretical foundation for this study.

In *Econometrica*, published in March of 1979, Tversky and Kahneman (1979) contend, "In the light of these observations we argue that utility theory, as it is commonly interpreted and applied, is not an adequate and descriptive model, and we propose an alternate account of choice under risk (Kahneman & Tversky, p. 1)." Tversky and Kahneman, provide three arguments to defend the use of a normative analysis to predict and explain actual behavior when faced by choice. First, people are generally thought to be effective in pursuing their goals, particularly when they have incentives and opportunities to learn from experience. Second, competition favors rational individuals and organizations. Optimal decisions increase the chances of survival in a competitive environment, and a minority of rational individuals can sometimes impose rationality on the whole market. Third, the intuitive appeal of the axioms of rational choice makes it plausible that the theory derived from these axioms should provide an acceptable account of choice behavior (Tversky & Kahneman, 1986).

Kahneman and Tversky (1979) explained that options available when individuals make decisions are framed by the experiences and perceptions of the decision-maker. Risky prospects are characterized by their possible outcomes and by the probabilities of these outcomes. The same option can be framed in different ways. For example, the possible outcome of a gamble can be framed as a gain or loss (Kahneman & Tversky, 2000) that may affect a person's willingness to gamble.

From this rationale, two phases in the choice process are distinguished in prospect theory: framing and evaluation. In the framing phase, the decision-maker constructs a representation of the acts, contingencies, and outcomes that are relevant to the decision. In the evaluation phase, the decision maker assesses the value of each prospect and chooses accordingly (Kahneman & Tversky, 2000). For the study, these elements of prospect theory explain that the perceptions of the dilemma and the options are dependent upon the experiences and perceptions of the school superintendent.

Kahneman and Tversky (1979) illustrated the influence of the decision-maker's experiences and perceptions as part of the phenomenon of the framing effect that stood in contrast to the implications of the normative model. They demonstrated a reversal of preferences between two alternatives when the outcomes were framed positively rather than negatively. Specifically, they presented participants with the 'Asian disease' problem.

Imagine that the United States is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimates of the consequences of the programs are as follows:

If Program A is adopted, 200 people will be saved.
If Program B is adopted, there is 1/3 probability that 600 people will be saved and 2/3 probability that no people will be saved.

A substantial majority of respondents choose program A; they prefer the certain option over the gamble.

The outcomes of the programs are framed differently in a second version:

If Program A is adopted, 400 people will die.
If Program B is adopted, there is 1/3 probability that nobody will die and 2/3 probability that 600 will die.

Further examination shows that the results of A and A are identical in both versions and the results of B and B are identical in both versions. In the second frame, however, a large majority of people chose the gamble.

This example provides an articulation of prospect theory in which choices between gambles and sure things are resolved differently by the decision-maker depending on how the outcomes of the choices are perceived. Tversky and Kahneman (1986) proposed that decision makers tend to select a sure thing over a gamble when the outcomes are good. However, if both outcomes appear to be negative, they tend to reject the sure thing and accept the gamble.

A decision-maker's background knowledge and experiences are already in place when a choice or dilemma is presented and those personal elements are used to frame the dilemma. The presentation of the situation and the presentation of possibly options are evaluated by the decision-maker, in this study a school superintendent, previous to a decision being made. Therefore, presentation of the situation and various options can

have an influence on the outcome due to how the options and dilemma are perceived by the superintendent.

The following figure illustrates prospect theory graphically. The y axis represents the reference point or point of neutrality where choices are neither gains nor losses. The y axis also references the perceived psychological value when making a decision, not a monetary value. On the right of the y axis are those values that are perceived as gains and on the left of the y axis those values that are perceived as losses. In contrast to utility theory, the perception of the decision maker drives the determination of whether the choice is a gain or loss.

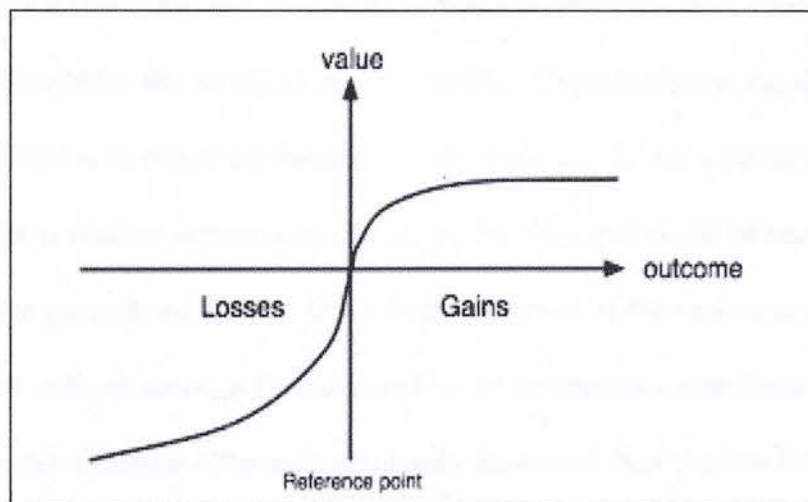


Figure 2.1: Prospect Theory (Kahneman & Tversky, 1979)

As shown in Figure 2.1, when data are represented from problems of choice in which options or prospects are framed in terms of gain or loss, the value function is (i) defined on gains and losses as related to the reference point, (ii) generally concave for gains and convex for losses, and (iii) steeper for losses than for gains indicating that individuals are risk averse by nature (Kahneman & Tversky, 1979). For the practitioner

who is a decision-maker, this means that the reference point is the place where, based on perceptions and experiences, the decision-maker deems that to be the dividing point between options that the decision-maker views as a gain or as a loss.

Kahneman and Tversky (1979) contend in their prospect theory that there is a greater aversion to loss that drives decision-making than the decision-makers hunger for gain. These properties of the value function are reported by Kahneman and Tversky in studies of risky choice among monetary outcomes (Fishburn & Kochenberger, 1979; Kahneman & Tversky, 1979; Payne, Laughhunn, & Crum, 1980) (Hershey & Schoemaker, 1980) and human lives (Eraker & Sox Jr, 1980; Fischhoff, 1983).

To situate this in the decision-making framework of a school superintendent the dilemma could overlay the prospect theory graphic. Hypothetically, the dilemma being faced is the decision to rehire a principal or terminate her. If the superintendent's reference point is student achievement, rehiring the principal could be seen as a loss as test scores have gone down the last few years. However, if the superintendent's reference point is school culture, rehiring the principal could be seen as a gain because the attributes of school culture have each positively increased over the last few years. This is a tangible example of a dilemma (rehiring or terminating a principal) is situated based on what the superintendent's reference points are and what the superintendent views as a gain or loss. Those attributes and variables could likely be dissimilar among superintendents which result to differing responses to the dilemma.

Reference Points

Important to revisit from Figure 2.1, is the concept of a reference point. A reference point is used to code and compare gains or losses in reference to a particular value. The general principle is straightforward: when an option is compared to the reference point, the comparison is coded in terms of advantages and disadvantages of that option (Kahneman & Tversky, 1979). The reference point, graphically, is considered neutral. To further explain, the reference point is determined by the decision-maker and has no numerical value but instead has a relative value as assigned by the values of the decision-maker. For example, honesty could be a reference point when hiring. Honesty has no inherent numerical value; however, if an employer places high value on honesty in its employees than anything below the reference point would influence the employer not to hire the individual.

An interesting case occurs when the reference point is the status quo and maintaining the status quo is an option to the decision-maker. Because the disadvantages of any alternative to the status quo are weighted more heavily than its advantages, a powerful bias in favor of the status quo exists (Samuelson & Zeckhauser, 1988). Applying this to the hypothetical situation above regarding the rehiring of a principal, the status quo of generally leaving individuals in their roles unless something substantial occurs is an example of using the status quo as a reference point rather than a particular desired attribute of the principalship.

Kahneman and Tversky (1979) in their prospect theory highlight the significance of the identified reference point. The reference point, the state relative to which gains or

losses are evaluated, is espoused by Kahneman and Tversky to be a moving part that they contend makes prospect theory more complex than utility theory. Although the reference point separates losses from gains or advantages from disadvantages, it is important to note that the reference point is often non-numeric (Kahneman & Tversky, 2000). An example of the reference point being non-numeric would be a decision maker trying to decide between two options for automating a payroll system rather than produce a payroll by hand. The reference point would be the hand-constructed payroll (status quo) and the two options would be evaluated. Hypothetically, one new option could be viewed as a gain and one as a loss. Or, both could be viewed as gains or losses but each to a greater degree.

Because prospect theory addresses cognitive decision-making, the use of a reference point gives the decision-maker a value from which options can be compared (Kahneman & Tversky, 2000). Consider a person who is trying to choose between various offers of employment. The reference point could be the values the decision-maker holds as most important in his/her world of work. Examples might include autonomy at work, salary, potential for promotions, etc. Each employment option could be compared to the reference point(s) and then the decision-maker would determine which job offer provides the most gains. As you can see from this basic example, the reference point is rarely a simple unit of measure or dollar value which enforces the contention of Kahneman and Tversky that prospect theory depends on the perceptions and experiences of the decision maker (Kahneman, 1991, 2011; Kahneman & Tversky, 1979, 2000; Tversky & Kahneman, 1986). Kahneman and Tversky (2000) explain that

those perceptions and experiences influence both framing of the dilemma, or problem at hand, and the evaluation of the options or choices available to the decision-maker.

Let us apply prospect theory as a lens for viewing superintendent decisions. If a superintendent is asked to hire a new principal, there may be multiple reference points for evaluating the candidates such as leadership abilities, enthusiasm, curriculum knowledge, etc. The superintendent could see the hiring of each candidate as a gain or loss relative to each reference point. It is not assuming that all superintendents go through that mental exercise; however, according to Kahneman and Tversky (2000), decision makers view options relative to reference points. In the case of principal hiring, hypothetically, Candidate A might be viewed as a loss related to curriculum knowledge but as a gain when viewed in the area of leadership ability. This is a practical application of reference points in the realm of superintendent decision-making.

Framing and Evaluation: Phases of the Choice Process

Prospect theory distinguishes two phases in the choice process: a phase of framing and editing, following by a phase of evaluation (Kahneman & Tversky, 1979). The first phase consists of a preliminary analysis of the dilemma that frames the effective acts, contingencies, and outcomes. When a problem is framed, it is controlled by the way the choice problem is presented as well as by the behaviors of the decision-maker (norms, habits, expectations, etc.). For a superintendent, an example of framing and editing would be the dilemma of building a new elementary school. Various elements – current enrollment trends, ages of school buildings, tax rates, current indebtedness – could be reviewed by the superintendent. While this might appear to be a very concrete activity,

simultaneous to the review of data is the personal decision-making context of the superintendent in response to related questions. When does a school building become too old to inhabit? Are there any other building projects of a greater priority than the building of an elementary school? What are the political elements at play in the decision-making context?

In the second phase, the prospects or options are evaluated and the prospect or option with the highest value to the decision-maker is selected. According to prospect theory, the decision-maker has two ways of choosing between prospects: by determining that one dominates the other or by comparing the values of each option (Kahneman & Tversky, 2000). In the example of the potential building of a new elementary school, the reference point might be the passage of a bond election. The options to be evaluated may not just be to build or not to build a new elementary. The options may extend to how many square feet to build, what elements to include in the building, etc. Among those options there may be an element(s) of risk that influence the superintendent's decision-making. The decision to not pursue the bond election and not build an elementary could have a negative effect on future bond elections. Thus, the dynamic and complex environment for decision-making: framing and editing the decision then evaluating options.

Tversky and Kahneman (1986) share, "Prospect theory is an attempt to articulate some of the principles of perception and judgment that limit the rationality of choice (p. S273)." The framing of decisions depends on many factors: the context of the choice, the nature of the display of information, the language of the presentation, etc. Tversky

and Kahneman (2000) contend that these variables begin to establish some common rules of framing decisions. Further, they contend based on their research that, although the assumption of the reality of decision-making is often defended by the argument that people learn to make correct decisions effective learning takes place only under certain conditions: it requires accurate and immediate feedback about the relation between the situational conditions and the appropriate response (Kahneman, 2011).

To situate prospect theory in a practitioner's world, financial professionals were studied as decision-makers. An anticipated outcome was that the financial professionals might behave differently from students in a lab for two reasons: (1) although the latter generally face one-shot independent choices without any systematic feedback on uncertainty resolutions, financial professionals are evaluated on the basis of their overall performance in a usual reference period and (2) financial professionals are trained to diversify risks and to evaluate the contribution of an asset to their overall portfolio.

In the study, the financial professionals behaved according to prospect theory and violated expected utility maximization systematically. However, their behavior deviated from the assumptions that are commonly made in modeling financial decision-making under prospect theory in two respects. First, the financial professionals were considerably less averse to losses than what is typically observed in laboratory studies using students, and what is assumed in behavioral finance. Second, a sizeable proportion of the professionals were, in fact, not loss averse, but displayed an opposite type of behavior, gain seeking. They focused mainly on gains and downplayed the possibility of losses. Such behavior can be linked to the financial crisis at the time of the study. The

professionals in the study were private bankers and money managers handling \$300 million on average (Abdellaoui, Bleichrodt, & Kammoun, 2013). This study confirmed findings of (Kliger & Levy, 2009) and (Gurevich, Kliger, & Levy, 2009) who estimated prospect theory using data from real financial actors. They used data from European options based on the S&P 500 index and US options written on the stocks of 30 companies leading the S&P 100 index, respectively. Their parameter estimates were consistent with prospect theory although the degree of loss aversion was less pronounced than typically observed in student samples.

These studies, situated in the financial market, explored the concept of framing choices in ways that could be evaluated mathematically. This practical application of prospect theory can be extended from mathematical and economic situations to a typical situation of choice where the probabilities of outcomes are not explicitly given and decision weights may vary based on the particular events being considered rather than being consistent with stated probabilities (Tversky & Kahneman, 1986). Although various anomalies can be explained through prospect theory, there are still a limited number of field studies. Levitt and List (2008) note five factors that could cause human behavior to systematically vary between the lab and the outside world: 1) the presence of moral and ethical considerations; 2) the nature and extent of scrutiny of one's actions by others; 3) the context in which the decision is embedded; 4) self-selection of the individuals making the decisions; and 5) the stakes of the game. They show examples of how each of these factors affects the generalizability of lab results from prior economics research. Applicability has been confined to experiments, with only a limited number of

field studies taking place (Barberis, 2012). The list of variances provided by Levitt and List creates inquisitiveness about the behaviors of individuals as participants in field studies.

It is worthy of note that when individuals are faced with dilemmas or decisions, there are instances when distractions influence decision-making. One distraction is the bandwagon affect. Bandwagons are diffusion processes, they have been described in prior research on decision-making as ranging from highly rational behaviors based on positive externalities (Katz & Shapiro, 1985) to conformist behaviors driven by social pressures toward isomorphism (Abrahamson & Rosenkopf, 1990). Bandwagons are processes whereby individuals or organizations adopt an idea, technique, technology or product because of pressures caused by the number of organizations that have already adopted it (Fiol & O'Connor, 2003). In the previous discussion of reference points and prospect theory, options on either side of the reference point were framed as gains or losses. In the case of bandwagons, the decision-maker's reference point would involve superimposing the values of others on the graph and making the opinions or choices of others the reference point for decisions. In the case of a school superintendent, an example would be the decision of all neighboring school districts to adopt a particular instructional resource or program. If on a bandwagon, instead of using an instructional reference point such as research or best practice, the superintendent would use the choices of others to drive her decision-making about choosing instructional resource or program and the prospect theory would be trumped by external influences. This bandwagon process does not identify the decision as a good or bad one, but instead

illustrates that an external source would drive the decision-making process rather than the framing and evaluation processes of the decision maker herself.

Chapter 3: Research Method

Overview

The purpose of this investigation was to add to the existing body of knowledge about the decision-making processes of school superintendents and find ways to improve those processes for superintendents practicing now and in the future. The study's design uses multiple bounded cases. The intention was to identify themes within each case as well as cross-case themes. Prospect theory and administrative mindfulness were used to identify themes within and across cases. Qualitative techniques were used to make observations. The research design is a comparative case study.

School superintendents are individuals who approach dilemmas and make decisions. The purpose of this research is to explore, in-depth, the decision-making behaviors of individual school superintendents when facing a dilemma. Prospect theory, the theoretical lens for this study, outlines elements in the decision-making process (Kahneman & Tversky, 1979). Because a goal of this research is to benefit the decision-making practice of school superintendents, following Lincoln and Guba's (2002) case study structure – the problem, the context, the issues, and the “lessons learned” – is a reasonable option for this study.

A data gathering deployment that allows the researcher to explore the cognitive activity of the superintendents is appropriate for this study. First, the data needed to understand the subjects' paradigms (Denzin & Lincoln, 2005) must be in-depth and detailed. Second, to discern themes that are common to more than one case or are unique to an individual case, cross-case analysis (Stake, 1995; Yin, 2009) is an appropriate

approach. Third, instruments such as surveys may not provide subjects an ample window to divulge cognitive processes for decision-making (Patton, 2002). Finally, the research question requires an opportunity for the researcher to elicit thoughts or cognitive processes that illuminate what is occurring in a subject's mind during the decision-making process. For these purposes, a research design that employs semi-structured interviews served as the primary method of data collection.

Utilizing the selection criteria outlined in this chapter, three school superintendents were identified and invited to participate in the study. Using semi-structured interviews, an exploration of the decision-making processes of the superintendent subjects provided insight into how those educational leaders approach dilemmas. In particular, attention in the interviews was given to (1) how the superintendents edit and frame decisions as well as evaluates options in their decision-making processes and (2) how the attributes of administrative mindfulness are utilized in the decision-making process of the superintendents.

Because multiple superintendents were interviewed, a comparative case study was a suitable method for this study. By analyzing the cases individually as well as comparing them to each other, the comparative case analysis has the potential to identify common themes related to effective decision-making behaviors. Each superintendent in the study was presented identical dilemmas and the comparative case analysis provides a lens to examine decision-making behaviors relative to others responding to the same dilemma. Additionally, any behavior that is effective and replicated in multiple contexts by more than one superintendent can be examined more diligently in light of the

attributes of administrative mindfulness being displayed during the cognitive activity of the decision-maker.

The rationale for the qualitative design of this study and, more specifically, a comparative case study is provided. Subject selection, utilizing a purposeful sample, is explained including the strategy for identifying criteria for the sample selection. The strategies for the mechanics of the study including the approval process, the interview schedules, and the processes to ensure confidentiality are provided in this chapter.

The data collection procedures, the data gathering instruments, how the interviews were conducted, and a description of the method used to prepare the researcher for the actual interview situations are included. Lastly, the methods for coding and analyzing the data are described.

Data Source

The unit of analysis for this study was the school superintendent. Purposeful sampling was used to determine superintendents who would best inform this study. Purposeful sampling is used to select information-rich cases or individuals whose study will illuminate the questions under study (Patton, 2002). For this study, cases that represent effective decision-making practice were sought. These cases involve those subjects that display the potential from whom the most could be learned.

The selected sample of superintendents was intentionally similar in their professional attributes. Engaging subjects in the study that practice the craft of superintendent decision-making within a similar demographic context lends itself to this

study and provides opportunities for cross-case analysis. Attributes specifically sought in subjects and the rationale for each attribute include:

- *Geographic location.* Besides being logistically more efficient, choosing superintendents in the same geographical area would give them the same general educational setting in which they serve as superintendents. General issues related to school law, state educational activities, etc. would be similar.
- *Stage of career.* Choosing superintendents who have ten or more years of administrative experience and have served as their current district's superintendent for six or more years provide three benefits to the study. First, superintendents are potentially less reticent about sharing about their decision-making than a superintendent new to a school district. Second, at this juncture in their career they have likely had a wide array of diverse, decision-making experiences to inform the study. Finally, superintendents with the first two characteristics likely have experienced the ramifications of living with decisions that had both positive and negative outcomes in their district. The insight gained from superintendents with these career attributes may be particularly beneficial in informing the study.
- *Reputation:* Subjects were sought who have been sought out consistently by professional organizations, legislators, and leaders - inside and outside of education - for their decision-making abilities.
- *Organizational structure:* Subjects were sought who were not the sole administrator at the district level of the school system. Interview questions will

seek to determine what superintendents do when they need additional decision-making resources. The researcher is curious as to where superintendents look to find counsel, within the organization or outside the organization, while editing and framing when faced with a dilemma. Without subjects who serve with other leaders at the district-level, the answers to these questions could not be obtained.

Three superintendents were chosen as subjects for the study. The strengths of a sample this size include: (1) having three subjects allows the researcher to engage in an in-depth portrait of the cases, (2) having strategically-sized sample, permits a within-case analysis as well as a cross-case theme analysis, and (3) having the smaller sample size allows for exploration of the nuances of decision-making which is critical because the focus of this study is the superintendent's cognitive exercise of decision-making. The weaknesses of this small sample size include: (1) the potential for the findings to be challenged based on utility, (2) the temptation for others to generalize specific findings to a larger segment of the administrative population, and (3) the potential for a demand for additional research expanded to a larger population to explore the credibility of the findings.

Approvals, Scheduling, Confidentiality

Superintendents chosen for the study, based on the above criteria, were contacted by telephone by the researcher. The phone call was introductory in nature to the study. Potential subjects were notified that they would be receiving a packet from the researcher that includes: a letter from the researcher, general information regarding the study of superintendent decision-making, and a request for participation. Time commitment and

interview details were included. A copy of the Informed Consent from the University of Oklahoma was included.

Once the subjects confirmed their willingness to participate in the study, interviews were scheduled. The interviews were offered to be scheduled at a district location of the superintendent's choice or off-site from the superintendent's school district. The choice was left to the superintendent with the goal of providing a location that would be most conducive to comfortable conversation within the interviews and to minimize disruptions to the interview process. Each superintendent made the choice to have the interview take place in the subject's office. Knowing that school was in session and a school emergency could occur, the researcher made certain that a method of interrupting the interview to address an emergency was in place at each interview session.

Data Gathering Instruments

Upon receipt of the consent forms for the study, a biographical and professional data sheet was provided to the subject for completion. When requested by a subject, a copy of the subject's resume was deemed adequate by the researcher as it contained the information on the data sheet. Interview questions were the same for each subject and presented in the same order. While the initial questions were read verbatim to each subject, follow-up questions by the researcher were unique and were clarifying questions based on the initial answers from the respondents.

Data Collection

The researcher understands that there are inherent challenges with the interview process. Challenges identified are related to unexpected participant behavior, as well as

graduate students' ability to create good instructions, phrase and negotiate questions, deal with sensitive issues, and do transcriptions (Roulston & Lewis, 2003). Additionally, the literature challenges whether the phrasing of interview questions leads to subtle persuasive questions, responses, or explanations (Suoninen & Jokinen, 2005).

Researcher's Preparation for the Interview

While the effort to prepare for the interview is substantial, "it all comes to naught if you fail to capture the actual words of the person being interviewed. The raw data of interviews are the actual quotations spoke by the interviewees. Nothing can substitute for these data: the actual things said by real people. That's the prize sought by the qualitative inquirer (Patton, 2002)."

In preparation for the interview, the researcher explored three methods of probing that would best support the researcher's desire to obtain the superintendent's decision-making story. These strategies of probing (Ericsson & Simon, 1993) were studied as potential methods to question subjects in order to gain insight into their cognitive processes. In the first method, subjects are encouraged to think aloud (Van Someren, Barnard, & Sandberg, 1994) through the steps of the process in which they were engaged. For the purpose of this study, the process is decision-making and specific research attention was given to the framing and editing of the superintendent's decisions. The think aloud method was utilized multiple times in the interview process and even explained to the subjects. It proved effective as a comfortable term and means by which the subjects shared their cognitive processes. The second method of probing, asks the subjects to explore their learning to benefit succeeding behavior. For the purpose of this

study, it would be clarifying questions that extract thoughts on what the subjects learned from reflection on their own decision-making. Because of the vast field experience of the subjects in the arena of decision-making, this probing method was utilized frequently in the interview process and was also applied to the section of the interview related to regrets and decision-making. Additionally, because each subject proved to be comfortable with reflecting on their own past and current decision-making behavior, this method was a natural method for the subjects to reflect on their cognitive processes. The third method of probing is called retrospective verbalization, the recall of steps used in a process immediately after the process has concluded. The third method was not utilized in this study, as it was not applicable to the purpose of the interviews. Additionally, in an effort to maintain a strong rapport with the subjects, probing about specific topics, timing, or details of the stories they shared would have been counter-productive to the goal of gaining decision-making insight to the subjects.

Techniques for Analyzing Data

After the interviews were complete, the tape recordings of the interviews were transcribed. A written transcript of each interview was made. The style of the transcription was literal, as in a court document. Originally, the intention was to edit the data to purge directions and unrelated discussion that occurred. The purpose of that process would have been, during editing, to review the criteria of relevance to the task, consistency with preceding and following verbalizations, and relatedness of the verbalization to possible information stored in memory before actually disregarding any part of the data (Ericsson & Simon, 1993). The researcher made the determination,

following the interviews and then reading the transcripts that presenting the verbatim transcript to each subject, without editing, had merit. Reading the literal transcript reinforced the rapport established during the interview as the subjects had shared authentically of their decision-making experiences. The subject reviewed each interview transcript. The transcript was then returned to the researcher after an opportunity was provided to redact or correct any information in the transcript. Each section of the transcript was initialed to indicate being checked by the subject. The subjects made no changes to the transcripts.

As the transcriptions were read and evaluated, attributes were color coded to identify patterns and significant information. For example, the attributes of administrative mindfulness, when identified in the responses of the subjects to vignettes that were presented, were highlighted in various colors. The recap of those responses is found in Table 4.1 and the specific responses to the vignettes are organized in Appendices D, E, F and G.

With further analysis of the data, various cognitive activities of the superintendents were identified. For example, when a superintendent shared background knowledge that he used when entering the decision-making process that was coded as framing. In the cross-analysis with the other subjects, similarities and differences in framing and editing as well as in evaluating options was noted. These patterns in the analysis of data led to various generalizations and anomalies among the subjects' responses.

Limitations and Delimitations of the Study

There were limitations and delimitations to this study. This qualitative case study was delimited by participant selection, by the researcher's decision to identify subjects based on a limited set of characteristics – geographic location, stage of career, reputation, and size of district in which the superintendent served.

Wiersma (2009) shares that because qualitative research occurs in the natural setting, it is extremely difficult to replicate studies. We cannot make causal inferences from case studies, because we cannot rule out alternative explanations. This case study involves the individual behaviors of three school superintendents. The behavior of this one unit of analysis may or may not reflect the behavior of similar entities.

One further limitation of the study is the interviews were bounded by time and the activities (Stake, 1995) of the superintendent subjects. Patton (2002) stated that perceptual data are in the eye of the beholder. The superintendents used their perceptions and experiences to frame the dilemmas presented in the interviews and their responses during this study reflected their perceptions and experiences at that particular point in time.

Lincoln and Guba (2002) posit that trustworthiness of a research study is important to evaluating its worth. Trustworthiness involves establishing: (1) credibility - confidence in the 'truth' of the findings; (2) transferability - showing that the findings have applicability in other contexts; (3) dependability - showing that the findings are consistent and could be repeated; and (4) confirmability - a degree of neutrality or the extent to which the findings of a study are shaped by the respondents and not researcher

bias, motivation, or interest. This body of research exhibits those attributes and therefore is of value to the field of educational research related to superintendent decision-making.

Chapter 4: Findings

Introduction

The purpose of this research study was to explore how a superintendent mindfully identifies dilemmas, frames those dilemmas, evaluates possible solutions, and then makes decisions incorporating reference points. The research proposes to: (1) add to the body of scholarly research related to the decision-making of superintendents, (2) provide insight into the decision-making behaviors of effective superintendents, and (3) provide intellectual tools for superintendents to hone their practice and benefit the school districts they serve.

The interviews for this study were divided into sections with each section having an intended function in obtaining data. Vignettes were presented to ascertain what attributes of administrative mindfulness were exhibited by the superintendents when decision-making. Dilemmas were presented to explore what captured the cognitive attention of the superintendents. Subjects were asked questions about various decision-making practices, reference points, and finally each superintendent was asked if a particular decision-making algorithm was used on a regular basis. If an algorithm or approach was used on a regular basis, the superintendent was asked to describe it. While each section had a particular function, the responses of the superintendents in each section produced rich data that transcended each section and benefitted the entire study.

Evidence in this section is organized around the constructs of administrative mindfulness and prospect theory. The findings are further divided into themes related to the constructs. As a reminder from the review of literature, the first three constructs of

administrative mindfulness (preoccupation with failure, reluctance to simplify, sensitivity to operations) are labeled as anticipation attributes and the final two attributes (commitment to resilience and deference to expertise) are labeled as containment attributes (Weick & Sutcliff, 2001). No attribute of administrative mindfulness is deemed more valuable than another in this study or, previously, in the research literature. Instead, each attribute plays a unique role in decision-making. In this study, some attributes were more prevalent and appeared to play a more substantial role in the subjects' decision-making practice than others.

While administrative mindfulness refers to the cognitive mindset of a decision-maker, prospect theory focuses more on the actual process of making a decision. Kahneman and Tversky (1979), in prospect theory, assert that the framing and evaluating of options by an individual when making decisions might lead them to override more rational decisions. In order to evaluate options, the decision-maker must first identify a reference point for that decision.

In the findings of this study, patterns evolved that merit recognition as they provide a lens into why certain decision-making behaviors are viewed as effective when utilized by school superintendents. Additionally, further illumination is provided regarding the role the attributes of administrative mindfulness play in decision-making effectiveness. Once the attributes of administrative mindfulness and their role are deconstructed in the findings, one can situate those behaviors to see how the superintendent's reference points influence the decision-making process.

Each subject in this study referred frequently to the maturation process of his decision-making skills. Decisions of regret, while not a source of pride, were referenced by the subjects to be a critical role player in developing more mature decision-making skills. Additionally, decisions made early in their careers, were sources of either affirmation of great learning and professional development for the superintendents. The references the superintendents made to the evolution of their own decision-making are imbedded in the appropriate sections based on the construct or theory which relates to their responses.

Organization of the Findings

The findings are divided into two major sections— administrative mindfulness and prospect theory. The first major section explains the data related to administrative mindfulness. Within that section, two dominant attributes of administrative mindfulness identified in this study are described further – deference to the expert and sensitivity to operations. In the section about deference to the expert, two particular activities of superintendents are discussed. First, the role of the superintendent's ego and how that influences his decision-making is examined. Evidence is provided that leaders have an ego and the management of that ego is a factor that influences their decision-making. Next, evidence is discussed related to how effective superintendents identify and utilize experts in their decision-making processes.

The second attribute of administrative mindfulness that dominated the evidence is sensitivity to operations. Sensitivity to operations, as an attribute of administrative mindfulness, is a cognitive awareness that operations in an organization have an

interconnectivity with each other while simultaneously giving consideration to the primary purpose or function of the organization. Evidence in the study supports the superintendent's need to define the dilemma and, more importantly, define it in the context of the operations of the district. The second part of the section explores the evidence related to the superintendent's deeper understanding of how various behaviors on his part could be used to anticipate problems in the organization.

Both deference to the expert and sensitivity to operations are proactive rather than reactive behaviors of a school superintendent. The evidence in the study's findings will suggest that anticipating problems and anticipating results of various choices, while previously identified in the literature as attributes of administrative mindfulness, are also behaviors of superintendents who are effective decision-makers.

Prospect theory provides the conceptual framework for this study and is the focus of the second major section of the findings. For this study, the processes outlined in prospect theory are applied to the decision-making of school superintendents. Three aspects of prospect theory are utilized to organize this section of the findings – framing, reference points, and evaluating options. When framing a decision, the findings suggest two dominant threads of focus during that process. First, context matters and influences the decision-making behaviors of the school superintendents. Second, information-gathering and other behaviors that help a superintendent clarify the context of the decision were consistently identified as important to effective decision-making.

The second aspect of prospect theory reviewed in the findings is the decision-maker's identification of reference points. Evidence is provided to explain how

superintendents create their reference points for decisions. Following that, the findings provide insight into how various factors – such as great public attention – influence the identification of a superintendent’s reference points related to a decision.

The final aspect of prospect theory that is explained in the findings relates to how a superintendent evaluates options before making a decision. The first section shares the findings related to this study’s subjects behaviors related to exploring the intended and unintended consequences of various options. The second portion of the findings focuses on the pace of the decision-making process and, in particular, how long a superintendent should spend evaluating options before making a final decision.

Administrative Mindfulness

To ascertain the role administrative mindfulness played in the superintendents’ decision-making behaviors, four vignettes were presented to each of the superintendents. These vignettes represent dilemmas that could likely be encountered by a school superintendent in his everyday practice. The four vignettes included:

Vignette A: A parent has called the superintendent’s office, spoken with you, and relayed a concern about the music that was played before the football game on Friday night. The parent said the lyrics were offensive and was appalled that you would let the music be played. The music contained racial slurs and vulgar language.

Vignette B: On a Friday evening, a teacher employed by the district is cited for driving under the influence. The Chief of Police notifies you of the situation late at night. You have not dealt with a situation like this previously. You know that a superintendent in a nearby district had a similar situation about two years ago; however, that superintendent has made some questionable decisions recently and is engaged in challenging discussions with the school board of that district.

Vignette C: A nearby district is highlighted in the paper for its exceptional fine arts program. In your district, you have a leader who is

struggling in this area. Two board members mention to you that they are concerned that the district is not keeping pace in fine arts with the neighboring district.

Vignette D: You have been asked by a board member to interview a friend of the board member's family for a teaching vacancy. The board member says the person is an outstanding candidate. A team of principals and central office administrators interview the person. You are not included in the interview team. The team feels strongly the person is not a good fit for teaching in the district.

From the superintendents' responses to the vignettes, attributes of administrative mindfulness were coded and patterns were observed. Table 4.1 provides a summary of the attributes of administrative mindfulness demonstrated by each superintendent in response to the dilemmas in the vignettes. The numbers represent the portion of responses to the four vignettes in which that particular administrative mindfulness attribute was demonstrated. For example, "2/4" next to deference to the expert would mean that in two of the four responses provided by the superintendent, he referred to deferring to an expert.

| Attribute of Administrative Mindfulness | Subject A | Subject B | Subject C |
|--|------------------|------------------|------------------|
| Preoccupied with failure – constantly scan the organization for problems large and small, mostly small; | 3 / 4 | 3 / 4 | 1 / 4 |
| Reluctant to accept simplifications – seek to understand the subtleties of situations; | 3 / 4 | 2 / 4 | 4 / 4 |
| Sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations | 3 / 4 | 4 / 4 | 4 / 4 |
| Committed to resilience – be strong and flexible to cope with any negative outcomes that emerge | 2 / 4 | 3 / 4 | 2 / 4 |
| Deferring to expertise – choose the best person for the work, regardless of title or rank | 4 / 4 | 4 / 4 | 4 / 4 |

Table 4.1 Administrative Mindfulness Attributes in Response to Vignettes

What this table shows is that certain attributes of administrative mindfulness are more common than others as superintendents make decisions. Related to this study, the two specific attributes of administrative mindfulness that were most prevalent among the subjects were deferring to experts and sensitivity to operations. Appendices D, E, F and G provide more specific details and responses, but trends provided strong evidence that when superintendents face a dilemma they consistently seek the expertise of others and try to understand the dilemma while being sensitive to the operations of the school district. Because of the volume of evidence related to those particular attributes of administrative mindfulness, they are discussed further below.

Deference to the Expert

Weick and Sutcliffe (2001) explain deferring to the expert as choosing the best person for the work, regardless of title or rank. The evidence obtained in this study provides insight into how the decision-making of superintendents is influenced by choosing whether or not to utilize the expertise of others. Additionally, the findings provide evidence about cognitive processes superintendents use to differentiate between dilemmas that require the expertise of others and those that need only their own decision-making ability. Each subject of the study affirmed the value of deferring to the appropriate expert as a behavior of masterful decision-makers.

Superintendent's Ego. All leaders have an ego. A superintendent's mindful or mindless management of his ego influences the effectiveness of his decision-making. Each superintendent in the study presented himself as a confident leader. Each clearly articulated that being able and willing to identify and defer to experts is an attribute of highly effective decision-makers. Each also acknowledged that, while competent to make decisions alone, it requires a measure of humility to acknowledge that others may have greater insight about a situation. Subject C provided an example, a decision of regret, where ego was a hindrance to mindful decision-making.

"The first year I was a superintendent in a rural school district outside of a major urban area. It had been one of these really tricky calls whether there was going to be any precipitation on the ground the following morning to warrant calling a snow day. My immediate neighbor, the urban school district superintendent, made the decision early in the evening to call school out and I was stubborn. I thought, 'Well gee. We can have

school. We don't have the kind of bus routes they have. We are a small district. We can adjust. We will be okay - you know, we will have school.' Well, the next morning, it was treacherous and my phone began to ring. This was like an hour before the start of school. My phone was ringing off the hook by very angry parents wanting to know why we were having school and I realized I had made a horrible mistake. So I did something I have never ever done since. I did call off school right there on the spot - an hour before school started. Then I told all of the teachers that were already there, 'You can go home. We are not having school.' It was too little, too late. It did help put out the fire a little bit, but for quite some time afterward parents were quick to remind me 'Boy, you really fouled up on that snow day.'"

Subject C had already acknowledged he would not replicate that decision so he was asked what he would do differently. "I would have the same response I had last night when my good friend, the superintendent of that urban district, called off school in his district. Knowing that my next door neighbor cancelled school, I quickly followed suit. When you know a decision is made to turn out a school district of forty-six thousand students that are your next door neighbor, it would probably be a pretty good idea if you would follow suit to turn out your ten thousand students!"

"[As a first year superintendent], I thought I was doing what would please the patrons in my community. I was having school and I felt a strong responsibility to have school - not close school down regardless. Again, over the years my thinking on that has changed. I should not worry about the patrons so much as just this needs to be purely a

safety-driven decision. If there is any threat to the students' safety, then we need to call off school. Period - and not worry about what people think."

At times, the superintendent determines he is the only expert needed when faced with a dilemma. Each subject in the study credited experience as the greatest refiner's fire for determining when to ask for assistance and expertise from others and when to make decisions alone. Subject B, when responding to Vignette A about the inappropriate music dilemma, shared that in a large school district the superintendent must decide which decisions in which to be involved. "One of the challenges of the superintendency is being able to draw the line of the things that you should be engaged with and things that you shouldn't. I had a mentor say that you should fight for principle and negotiate preference." Subject B stated that he has used that and tried to build it into decision-making. "It is a privilege of the superintendency or being a principal. By the time you get to those positions, you should have developed beliefs about teaching and learning. You know how kids should be treated and how kids should not be treated. I think you have earned the right to those principles and have earned the right to set those expectations. Somebody else might do it differently and there is nothing wrong with that." Hearing this response from Subject B in person, a quiet confidence was denoted that came from years of experience to help this superintendent know when it is okay to rely on his own expertise and when the situation demands that he seeks the expertise of another.

Decision-making effectiveness is influenced by knowing when and why to engage the expertise of others. From the previous example of a snow day early in his career, ego

was an obstacle to effective decision-making for Subject C as he did not see the neighboring superintendent as an expert.. However, in the findings, Subject C repurposed the single decision-making event to positively influence multiple future decision-making situations. All three subjects shared that effective superintendents must be willing to set aside their ego and engage experts for the greater good of the organization. Further, each shared that many superintendents have lost their jobs over a lack of willingness to do so.

Identifying Experts. Superintendents who are effective decision-makers identify experts by their knowledge, insight, and experience and not by title or position. Once the scope of a decision is identified, the superintendent can then begin determining which expert's advice is appropriate to seek for a particular decision. Weick and Sutcliffe (2001), reiterate that an expert is less about title or position and more about knowledge base. The expert can come from a variety of roles within the school district or from outside the district. Superintendents in this study contended that leaders must know the problem well enough to know what type of expertise is required to solve it.

As an example, the superintendents of this study were presented with a scenario in which their board members believed another district had an outstanding program. When a comment is made to a superintendent about a stellar program, it is not necessarily a dilemma. However, in this scenario board members were inferring to the superintendent that their district's program was inferior to another district's. That comparison becomes a dilemma and the superintendents were asked how they would respond. Subject C, said he would reach out to the other district as the leaders there had evidently surpassed his district. In describing what that interaction would look like, he elaborated on what he

would want to know when contacting the other district. “We would really like to try to have that type of program. I am not asking for any trade secrets, but can you tell me some other things that you do from the get-go to create this type of program? to create the culture that you had that obviously supports and expects that level of program?” For this decision, the expertise needed was not to be found within the district or the district would already have the exceptional level of program. Instead, Superintendent C articulated that he needed to seek expertise from the superior district. It would be unproductive for the superintendent to look internally for information that simply did not exist.

As the research interviews evolved, it became apparent the specifics of a dilemma played a substantial role in determining the identification of the expert. For example when the subjects, in response to Vignette B involving a personnel issue, were asked about contacting another local superintendent for advice each declined that option. When Subject A was probed about why that contact wouldn't be made, the response was that “their world is different than mine.” Also, due to years of experience, Subject A would not contact another superintendent because he felt very comfortable with the appropriate protocols for addressing the dilemma. When asked if he would contact nearby superintendents on other issues, Subject A shared that he would contact superintendents in other large districts in the state rather than nearby superintendents of small school districts because “the neighboring districts don't have the same reality I do.” Subject A went on to explain, “It is trust. I have a small group of superintendents I truly trust and that I can call at any time of the day or night.”

When Subject B was asked about contacting another school superintendent he indicated that earlier in his career he was more likely to consult other superintendents and shared that he has talked through issues with other people. He indicated, however, "...that you have to be careful ... if you are not getting a sense of community expectations and you are not building that into your decision-making, you are going to end up making what may have been even a right decision but not the right decision for the circumstance in this community. I think you can gather that information but you also have to be careful, I think, as an administrator or superintendent of not assuming that will be replicated here and that same result will happen. Good or bad."

Ironically, when asked later in the research interview about a high profile decision made in his career, Subject C was asked from whom he sought counsel. For that situation, he did choose to contact two superintendents.

"Oh, gosh! This was about halfway through my superintendency about five or six years ago. I had a situation that involved the football team. Some football team members were involved in a hazing incident and we had to suspend a large number of starters on the team - probably about six or eight kids that were starters. We had to give them about a two week, actually this was a three week suspension. We were right in the middle of football season. So this had the potential to just literally wreck the football season. Just totally wreck it - not only for those six or eight kids, but also for the entire team because this is obviously going to weaken the team possibly keeps them from having the opportunity to make the playoffs. Of course, your football team in a district like ours is a very high profile organization. Any Friday night, we are typical of the Friday Night

Lights scenario. That is what draws the biggest crowd and involves the largest number patrons and, of course, has the school board's interest as well. So we made this decision to stick by our building principals in suspending these students for this hazing incident. The board and I both came under a lot of fire from the community for doing that. Unfortunately, out of the next three games that the team played – ironically, they managed to win two out of the three and the one they lost was the one they were supposed to lose. The two they won, we probably could have gone either way ... but even with the weakened team, which showed the character of the team and the coach, because he also supported our decision. Totally, that is the kind of guy he is. He supported the decision as well. At the end of the day - three weeks later - the community, school board, everyone felt a whole lot better about themselves because they knew they had done the right thing and then survived.”

When probed about who he contacted for counsel and expertise, Subject C responded, “Well you know I mentioned two individuals earlier. Well, I know they have had tremendous amount of experience and there is no teacher like experience. There is nothing greater. It is highly likely they have had dealt with that type of scenario and both of them had. I just didn't hesitate - I knew that was where I needed to go. I said, ‘You know, I know you guys have been around a lot longer than I have. Have you ever dealt with anything like this? This is what I am thinking and where I would like to go on this.’ You know, they agreed with me. They said, ‘We think you are making the right call based on our experience.’”

Through the exercise of examining the best person from whom to seek advice, the superintendents are essentially defining the term expert for the situation. As you can see from the previous examples in one situation contacting another superintendent was deemed inappropriate and, in another, it was a wise course of action. That differentiation reiterates the significance of context for the decision and does not unilaterally make a fellow superintendent an expert. In some situations, the superintendents of the study were not seeking technical knowledge or legal advice but instead were seeking experiential wisdom for a serious decision.

Subject A shared about a student's suicide. "I'll just say, you know it's been two school years since the 8th grader shot himself at school in front of everybody. So we're still dealing with repercussions. We've had staff members retire. They just can't be at work anymore. We still had students... they're now in high school, they're still getting counseling, it's a small group. Noises still... the students are no longer at the junior high, they're at the high school. But teachers, we have to be very cognizant of when we do drills at the school."

Subject A was very pensive and reflective as he shared of this situation. As the researcher, I made the decision not to probe further about the above comments, but instead proceeded with this question. "In the situation of the suicide, there were some protocols that you had to follow. As far as your counsel in dealing with the day-to-day and working with your staff and being a leader, who do you go to for counsel and wisdom?"

Subject A replied, "Well there's one person I always go to and that's Dr. XX, the superintendent in XX. He's been my friend and mentor for 30 years. He was my assistant principal when I was a fifth grade teacher. Trust him. He and I have a lot of the same leadership styles, very affective, focused. He's a great listener, great problem solver, is tough when he needs to be. Says no when he needs to, but very much focused on kids. So I go to Dr. XX a lot and I went to Dr. XX during the suicide."

Clear in the response from Subject A in this response was an understanding of the gravity of the responsibility of being a school superintendent. The decisions related to this situation still weighed heavily on the intellect and heart of Subject A. Therefore, when defining an expert for this situation, there was deep consideration on the part of Subject A about the personal and professional attributes that would define an expert. The subjects' determination to christen another as an expert appeared to be done through identifying the nuances of the situation and then matching the need to a particular individual.

Cadre of Experts. Superintendents who are effective decision-makers utilize a consistent cadre of experts, such as a cabinet, that they can access consistently to assist them in decision-making. As an attribute of administrative mindfulness, deferring to experts is utilized to anticipate problems in an organization. When asked about being able to hone anticipation skills, Subject B provided this response about how deferring to experts provides help in that arena. "I have probably a pretty big cabinet compared to what most people would think I should have that directly reports to me. I have expanded that actually and you would think that the more experience I had, the less of that I would

need or want. But, I have actually expanded my cabinet from when I first got here - there were five involved including the superintendent and four administrators.”

“I expanded it to seven, probably my second or third year and now I have a larger cabinet and the reason is, again, it is the anticipation that that they bring to the table. So I have my special ed director as part of cabinet, because when we make a decision in cabinet he can say well how is that going to impact the special ed kids? You know we made a decision that we are going to work with one of the agencies that are doing an after school program – boys club and girls club. We are going from a certain part of the district that is high in reduced lunch. We are going to actually bus the kids there at the end of school we are going to take them. Parents will pick them up, because those kids won’t make it there if we don’t. Well my special ed director was at the table and said, ‘Well what are you going to do about kids with disabilities? Is there going to be a special ed bus involved with that process? You know lifts?’ He anticipated that and I probably should have, but I didn’t. Well now, I did.”

“We made a better decision related to that that will avoid a conflict down the line or look like a reaction – ‘well, the only reason you are doing it because somebody complained.’ Well no, we are doing it because it is the right thing and we should have anticipated it, but we didn’t. That is usually what it is. Schools always look bad because it looks like we are being reactive, but most of the time it is because we missed a piece like any normal person does or organization does. Ours are just more obvious. We would have done the right thing anyway had we thought about it.”

In conjunction with the previous section related to the ego of superintendents, one would think that as a superintendent increased in experience and knowledge that the size of the cabinet would decrease. However, the description by Subject B indicates that wisdom and experience encouraged him to gather a larger cadre of experts in his cabinet to anticipate problems more effectively. An extension of the discernment required by an effective superintendent is when to utilize his own knowledge, the expertise of a cabinet or other internal advisory group, or reach outside the organization for expertise.

Subject B was asked about whom he sought counsel from during a high profile situation. While the question was asking about *who* should be chosen, Subject B redirected the discussion to *why* someone should be chosen. "It is not that much different than anything else. I usually reach out to the people that are closest to it (the situation) and have the most knowledge on it. I have a lot of confidence in my administrator staff. I will bring the right people in depending on what the incident is."

"I am also not opposed to and I seek the advice of our attorneys from the anticipation basis. Too many superintendents call the attorneys after they have made the decision and then it is all about fixing it. I don't let the attorney decide for me, but I do believe that when they say, 'Well, if you do that, this is what you can anticipate happening.' I have had an attorney tell me that they don't think I have enough to terminate a teacher; unfortunately, I thought that the things that the teacher had done were not acceptable enough and I was willing to."

Subject B continued, "Why would you make a decision without all of the pieces from the people that know that part of it best? You still have to make a decision, but

there are legal aspects to most of our decisions. There are legal implications. If there are legal implications, why wouldn't you know what those implications are?"

The superintendents responses to the vignettes and scenarios, displayed an understanding that there is a dynamic organizational structure in a school district in place with personnel interwoven frequently. Fully grasping deferring to expertise as an attribute of administrative mindfulness reflects a knowledge of the team members in the organization, their roles, and their expertise in that role. Additionally, it reflects a knowledge of the gaps in expertise that cannot be filled by district personnel and require looking outside the organization for answers. In this study, having a cadre of resident advisers in a school district is identified as a decision-making asset for effective superintendents.

Sensitivity to Operations

Defined by Weick and Sutcliffe (2001), being sensitive to operations means that a decision-maker detects problems, makes continuous improvements, and never loses sight of day-to-day operations. For a school superintendent faced with a dilemma regarding a particular topic, as a leader, he must remain vigilant. There are a variety of other functions in the school district that are usually occurring at the time a superintendent identifies a dilemma.

Define the Dilemma. A superintendent must understand the operations of the district in order to determine whether an issue brought to his attention is a dilemma that requires his decision-making attention. Before the questions were presented to the

subjects regarding their decision-making practices, the following was presented to each subject by the researcher:

“In today’s session, the questions you are provided will be open-ended. Before we begin, I would like to define a term that you will hear in several of the questions. For the purpose of this study, a dilemma is defined as ‘an obstacle or predicament that requires a leader to make a decision that will move the organization forward with as little distress to the system as possible (Hoy, 2008).’ In other words, this is a challenge that requires a decision from you that is least disruptive to your school district.”

This provided the superintendents a research-based definition of a dilemma which was used for the interviews in this study. However, in this section when it is referenced that the superintendent must *define* the dilemma, the superintendents are implored to have a deep enough level of understanding of a problem to know what it is and then what its role is in the school district.

Each superintendent in the study, in various responses, indicated that critical to the exercise of defining the dilemma for the superintendent is to realize that the person(s) or group(s) presenting the dilemma to the superintendent could potentially be defining it from their frame of reference or perception. Therefore, in responses throughout the study, the superintendents said it was critical to gather all the information possible regarding the dilemma to make sure it is defined as objectively as possible.

In response to the vignette which described inappropriate music being played by the district at a student event, Superintendents B and C focused their attention on role definition and processes that may have broken down which lead to the playing of this particular music. Their solution was not to solve the problem or become caught up in the

details of the music, but instead each superintendent chose to respond by probing into the roles and processes to make sure the situation did not occur again. They were dissecting the dilemma and simultaneously defining it – trying to see how it had occurred within the confines of the operations of the district and trying to find a method to address the operations so that the situation, or one like it, would not occur again. Based on their remarks in the findings, if a superintendent does not understand how the dilemma is connected to various areas of the organization, a solution could be provided that has the potential to be more disruptive than the initial problem.

One segment of interview questions provided three concise dilemmas. This section was created to explore the elements of an issue or a dilemma that capture a superintendent's cognitive attention and what elements would demand his decision-making attention. For each situation, the goal was not to solve the dilemma but instead to gain insight into the rationale behind a superintendent's distribution of cognitive attention.

Table 4.2 reflects each situation presented and what items were attractive to the superintendent when framing the decision.

| <p align="center">Situation #1:</p> <p align="center">Each district in the state must have a retention committee to determine if elementary students can advance to the next grade. The committee is to consist of six people - five educators and the parent. What captured your attention in the situation and why?</p> | | |
|---|--|---|
| Subject A | Subject B | Subject C |
| <p>State mandate - not optional.</p> <p>"Educators should be whoever needs to be at the table."</p> | <p>"The success of retention is related to the data and support that is the right intervention. Five educators and the parent of the child are the right combination ... educators that are going to bring the greatest amount of data to the discussion as opposed to a bias about retention.</p> | <p>"If you have five or six slots, you would like to have five or six different types of people - different responsibilities - different areas - so you get a well-rounded collection of folks that are looking at the situation.</p> |
| <p align="center">Situation #2:</p> <p align="center">A nearby district of the same general size as yours has hired a STEM coordinator for each school in their district - elementary through high school. What captured your attention about in the situation and why?</p> | | |
| <p>"Where did they get the money, because we are such a lean machine with staffing? All of our funds are going to keep our class sizes small." Did they get a grant?</p> <p>"Wow, was my first thought!"</p> | <p>"Somebody in that district, through a strategic analysis, decided that this would close some student gaps. My other reaction "is going to sound negative." "You don't always get the bang out of the resource person that you hope for because usually the problems have more to do with fidelity of implementation than they do with not knowing what the problem is."</p> | <p>"Where do they get the money to do that?" "The second reaction would be envy!"</p> <p>"We are not overburdening one or two individuals. You can spread the load or spread the burden out and probably they will do a better job."</p> |
| <p align="center">Situation #3:</p> <p align="center">In the newspaper that serves your region of the state, there is a scathing article about the amount of money spent on administration in school districts. There are twenty-seven local school districts and yours is #7. What captured your attention in the situation and why?</p> | | |
| <p>"This has happened and I am usually in the top 20. Whether I am at church or Wal-Mart or ballgames, someone is going to make a comment about overpaid superintendents." "I'm asked why I don't take that money and give it to teachers. I also think why is this newsworthy because it should be about local control and the board approved salaries."</p> | <p>"It is a quick reminder of the climate related to administration. It falls into a lack of understanding of leadership and leadership's impact on student achievement." Being #7 wouldn't bother me because we have a community that sees production so I'm not sure if they would question that very much."</p> | <p>"First of all, what is the need to do an article like this? These articles have been done over and over."</p> <p>"It does grab my curiosity as to how we stack up against other districts. I'm glad I am not at the top and I am glad I am not at the bottom."</p> |

Table 4.2 Cognitive Attention - Framing Decisions

As the superintendents identified items that caught their attention, they simultaneously expressed interest in details that they were not provided about the situation. As if accustomed to immediately begin seeking context and details of a dilemma due to their experience, it was interesting to note that the subjects began delving for more details without any prompting. The inquisitiveness of each subject was directed to different details than their fellow subjects; however, the immediate springboard into gathering more information about the dilemma was parallel among all the subjects of the study.

This attention to detail and a desire to understand the full scope of the situation reflects sensitivity to operations because that attribute hinges on the knowledge that administratively mindful leaders do not work off assumptions. Instead, effective leaders congregate information to a degree that unknown details are less likely be obstacles as a later time. Thus, they anticipate problems and issues rather than having to react to them at a later time. As noted in Table 4.2, when faced with a dilemma, the superintendents responded in many instances with questions. In other words, they instinctively did not begin to solve the problem, but instead intuitively sought a greater level of understanding before proceeding.

The subjects, as they responded to the situations in Table 4.2, shed light on another factor when defining a dilemma. At times the situation encountered is comprised of more than one dilemma that can be intertwined with others. For example, regarding the situation of hiring a STEM coordinator, Subject B discussed the fidelity of implementation. How to hire a STEM coordinator is one financial dilemma, but

implementing the program is another. He shared, “Probably, the biggest gap that I have that I fight every day is that we are really good at identifying what the problem is. We are also pretty good about creating the interventions for something like that. What we are challenged by is assuring the fidelity of implementation of the intervention because everybody is getting torn away by the unfortunate management things. If I am an administrator that (the STEM coordinator) sounds like a really good response, only we are still going to have to deal with the issues of fidelity of implementation and oversight – everybody understanding it. It might be the right thing, but it doesn’t take care of the problem.” Subject B elaborated, “That is why there are companies making billions of dollars on public schools, because we are grasping for an answer and it sounds good.”

Misidentification of the dilemma can cause concerns or issues for a school district. An example of misidentifying, or not defining a dilemma correctly, surfaced when the subjects were presented with a vignette related to a school board member requesting that a friend be hired by the school district. A conclusion drawn from the three superintendents’ responses was that this topic had likely been addressed many times over the years by these veteran superintendents and was not a challenging topic. Each, as indicated in Appendix G, had a clear response and was conscientious about not putting principals in the awkward spot of hiring someone simply because a board of education member requested it.

Subject A, when responding to this dilemma, shared that there may need to be additional conversations with the board member. He explains, “I really try to stay out of personnel hiring because that could - I’m sure you understand - get really sticky. I am

giving your person that foot in the door and then, as you all know, it is up to them to step up and bring their 'A Game' because that is what is required in this district. You know I just tell your friend that I wish them the best of luck and I hope you will let me know how this turns out."

What if there is, hypothetically, push back from a board member? Further reviewing the transcripts, all three superintendents were confident in their responses. Subject A replied, "I don't want board members calling principals and questioning their hiring decision." When a board member wants to know why the friend wasn't hired, the superintendent said, "Would you like me to call that principal and just find out so you can give your friend some feedback? Here is another option. Why don't you have your friend call the principal and say, 'Hey, can you coach me on what I need to do differently next time in my interview. You know I was really looking forward to teaching in your school. I was sad to know I didn't get the job and what can I do differently next time.'"

"Then I just put it back on the board member – 'Which option would you like and why?' Then I have to kind of work with the board member, 'I want you to think about which is going to be the more powerful learning for your friend.'"

Subject B, when probed further about the dialogue with staff members, shared this response. "I think sometimes when an administrator asks you to do something like this (interview someone) you don't want them to get into the mode of trying to please you. You want them to do a good job. You want them to be honest. You don't want them to try to ... well, 'I am going to anticipate what my boss has asked me to do here and I want to make sure he looks good.' That is not what I'm asking for. I am asking for you to be

brutally honest and give me the feedback that you would give me for any other candidate – not the feedback you would give me just because this person’s dad, mother or uncle is on the school board.”

Subject C continued, “If I say, ‘Hey, I think this guy would be a pretty darn good math teacher. You need to give him a look.’ I want to make really sure he is interpreting what I am saying. I am not saying hire this guy. That is not what I said. I said take a look at this guy. He looks like he could be a good candidate. I did not tell you to hire him. Please don’t interpret it that way.”

When asked by the researcher about positional authority, Subject C shared, “Having sat in their chair and I get a call from the superintendent, my initial reaction might be mentally that ‘well the superintendent really wants this guy. I better make sure I hire this guy.’ I don’t want that to happen and when it is a relative of a particular board member, I think the radar really has to go up to make sure that does *not* happen.”

At the onset of this situation, the dilemma could have been identified as whether or not to hire the person suggested by the board of education member. Yet, upon further examination, all three superintendents in the study ultimately identified the dilemma as defining boundaries for board members. The topic of hiring a friend was just a symptom of the dilemma of role definition of board members. This deeper exploration, and increased clarity of the dilemma, reflected a true sensitivity to operations of the school district.

Anticipating Problems. Superintendents who are effective decision-makers utilize their experiences, along with an understanding of the district’s operations, to

anticipate problems. At times, based on the comments of the subjects, anticipating problems requires exceptional attention to subtleties and nuances within the organization.

One example provided relates to the culture of the district and personnel discussions. Each superintendent acknowledged that, at one time or another in his career, a problem related to personnel existed. Sometimes that problem was perceived and sometimes real. Subject B contended that, "One of the problems is that administrators tend to want to be defensive about these things and defend their personnel. Well, you don't have to defend the personnel because sometimes it is the personnel. If it is, you have to recognize that and then you should be able to tell your board members what you are doing and dealing with that."

Subject B explained that conversations that seem benign at the time can in the future cause problems that disrupt the organization. Additionally, Subject B explained that having appropriate conversations with board members about personnel issues is a responsibility of the superintendent, but discernment is needed about those conversations to anticipate and avoid future problems.

Subject B shared, "They (board members) want to go right to the people and that is not always the people. It is the organization of what you have made as a priority. The people can only do with what resources you give them now. You have to be willing to also recognize when you have a weak link in your leadership. I would always talk to boards about areas that I know I have a concern in the context of what I am doing in working with that area. I won't say 'my content coordinator is not very good' until I am ready to take action, because they are going to want to know what you are going to do

about it. The other problem that you have as a superintendent is you have to be careful about if you are working with somebody and they are improving, boards don't remember that. They remember the bad stuff that you told them so once bad they are always bad. They are always weak. They just remember what you have said that didn't work so well. I even caution our assistant superintendent or personnel that if they are having personnel discussions with our board, which is fine with me, be careful about what position you put that person in because until we are ready to cut our losses and say we are moving on, we have to build confidence of the board members in those people.”

From Subject B's comments, his ability to know that certain comments to board members could create problems or issues is a definitive example of the administrative mindfulness attribute of sensitivity to operations. Knowing that a conversation on one day related to a single topic could affect another area of the district three days later - that on the surface initially seem unrelated - is a skill of leadership decision-making not easily described, taught, or mastered.

While effective superintendents personally work to anticipate problems, from the findings described in this section and others, effective superintendents also create structures – webs of leadership – throughout the school district to anticipate problems. Whether it is by congregating a cabinet to help anticipate needs or by hiring effective principals, the superintendent is consistently looking for ways to anticipate problems in the district so that leaders can be proactive rather than reactive.

Prospect Theory

Prospect theory is a theory of decision-making that evolved after a critique of expected utility theory. When a decision is faced, under prospect theory, the decision and consequences are disassembled during the phases of editing and framing. The decision-maker then identifies a point of reference for the possible outcomes of the decisions and then categorizes those as gains or losses with respect to the point of reference. During the evaluation process, the consequences are evaluated based on the reference point. As asserted by Kahneman and Tversky (1979), framing and editing of options might lead an individual to override a more rational decision.

Traditionally, prospect theory is set in the realm of behavioral economics. The findings of this study indicate that prospect theory, as a decision-making process, can be utilized in a similar fashion by school superintendents. A dilemma is faced and is disassembled to create a better level of understanding of the problem being faced. The dilemma is framed in the context of the operations of the school district and options are identified in response to that dilemma. The superintendent identifies a reference point and the options are then evaluated relative to that reference point. In this section of the findings, the phases of the decision-making process are explored in an attempt to ascertain which items might influence the decision-making behaviors of a school superintendent.

Framing the Decision

Framing is the phase of decision-making where the decision-maker constructs a representation of the acts, contingencies, and outcomes that are relevant to the decision.

(Kahneman & Tversky, 1979). For a school superintendent this could include exploring who is affected by the decision, what areas of the district related to the decision, what considerations should be made as the decision is approached, etc.

Context Matters. The context in which a decision is made influences the behaviors of superintendents who are effective decision-makers. Context can take on multiple meanings for a superintendent. For the purpose of this study, two contextual references will be utilized. First, there is the context created by the superintendent based on his distinctive decision-making paradigm. When the superintendent frames a decision he brings to a dilemma a personal schema or set of experiences and perceptions. That provides a unique cognitive context to the decision-making arena that cannot be ascribed or matched by another.

A second context, for a decision made by a superintendent, is the superintendent's district and community. Superintendents in this study consistently referred to the importance of knowing their community – its standards, values, norms, expectations, etc. Subject B explained, when discussing a high-profile situation, that a superintendent must be wise and know that the dilemma is not just influenced by the school district but by the greater context of the community. Subject B further contended, that strong educational leaders must know what is going on societally – locally and nationally – and realize that the greater context can affect the responses of patrons and students.

A superintendent, when considering context, needs to understand how a dilemma could affect not only the specific area of the district in which it is situated, but how the dilemma and decisions about it could have ripples in other areas the district. The subjects

explained that the superintendent, because of the scope of his responsibilities, can identify areas that would be potential affected by the dilemma that might go unnoticed by others.

An exceptional example of understanding the context of decision-making was identified in the findings of the study. One of the interview questions presented to each subject sought to determine if the subject had a particular approach or algorithm for making decisions or when faced with a dilemma. Subject C, when asked, produced a written document entitled “Problem-Solving Model.” It is a one-page list of questions (Appendix C) that provide a means of identifying a dilemma, its magnitude, and its role in the district’s operations. The discussion of the document provides a window into the cognitive activities of a superintendent that clarify how a leader must simultaneously think of a variety of district operations – staffing, finances, leadership, processes, etc. – when facing a single dilemma. In each section of Subject C’s decision-making tool, context influences the responses and next steps in the decision-making process.

Subject C explains, “Years ago when I first became a superintendent and began to think about this a lot ... because I realized very quickly on that even when I was a superintendent at XX for three or four years, there has got to be a process. This is basically how to address any problem or dilemma. I kept this around in my files forever because, occasionally when I have a really difficult situation, I will go back and refer to this. ... This is kind of conglomeration of thoughts from a lot of different people.”

“So the first thing I ask - and I try to keep it pretty short – ‘Is this problem or this dilemma - is it an emergency? Yes or no? Is it critical or is it non-critical, because this is

going to determine how I deal with it. If it is not an emergency, now I have time to determine who the stakeholders are. You should always identify who the stakeholders are in any problem or dilemma. Where do the stakeholders fit in the overall picture or the operation of the district? What is the problem or the dilemma? Is there are prescriptive fix? Is there something you just know automatically is going to work? You know Dr. so and so down the road had this problem. I know how to fix this. It will work. If not, you better brainstorm a solution sometimes that involves other staff and you get input from others providing it is not a really highly confidential issue.”

“If an immediate fix is not necessary, then you have some time to determine your options and analyze the problem. Will the solution that you are thinking about - will it affect the whole district or just one particular building? Does the solution affect the community and the school site or just one? One option is doing nothing - sometimes the problem will solve itself. You have to make that determination. You must know the past history. Has that been the case in this particular situation and or is some form of compromise an option? Win/win is good in almost all cases. Win/win - people like to win - we don't like to lose.”

“So then move on to the next line of thought. In this issue are the effects of the problem and this solution - are they long-term or is this short-term? Are you just providing a short-term solution or are you really addressing a long-term solution here that you will prevent this from happening for many years to come? So you need to consider, will it change the culture of the community or the school? That is a big question to ask. In other words, are you going to destroy an old tradition or are you going to step on an

old tradition or foster a new tradition? Will it generate political capital for the school district? I should have added will it generate political capital for you?"

"Then the next step in my problem-solving model, what are the cost benefits of the solution is there a cost in people? Figuratively speaking. What is the actual financial cost if there is one and does it require supplies or resources? Who is going to benefit? Who is alienated and why? That goes back to that stakeholders question up front. Who benefits, who is alienated, and why? Do the pluses outweigh the negatives? These are the costs of the solution."

"Lastly, there are additional considerations I have listed. If the decision or the solution of that affects school policy to a significant degree, then the board better darn sure have some input. They better - and maybe even need to vote on it. So, that would be a really heavy-duty decision. Secondly, the superintendent eventually needs to make a clear-cut decision after all options are weighed and considered ---- can only buy time for a short time. Third, the superintendent's leadership style - problem-solving and ability - whatever you want to call it at the same time all of this is happening. ... Your leadership style is being defined and evaluated with each decision in this process. The community is getting to know you and who you are and how you make decisions. The bottom line - is it good for students or is it bad for students - and many times that is the tiebreaker. This has never failed me. I have followed this religiously my entire career - since I have been here anyway. I have survived."

Subject C was asked what the problem-solving model has given him as a leader that he might not have had without it. "Confidence. I can sleep at night. Really."

Prospect theory contends that a decision-maker frames a decision based on personal experiences and perceptions. Fundamental to prospect theory is the notion that man is not a rational decision-maker. The intention of Subject C using this problem solving algorithm, is to hopefully reduce the irrational responses that he knows – from years of experience as a leader – are going to occur.

“This really is the way I look at this. This is a big filter. This process is a filter. I am filtering out the impurities so that I can get to the heart of the problem. Well, it slows you down. I mean it keep you from doing something irrational. It keeps you from losing your temper. It takes temper out of it completely. Even though I am sometimes very angry about something, this eliminates that as much as possible. [It becomes] a very logical decision. It is not a decision made in anger. It is not an emotional decision. It is a logical decision.”

Subject C was asked if he has ever been criticized for being too logical, too methodical. “No they like it. It gives them confidence, too. They want a road map. Without fail, they want a road map. They like it. They feel more confident when they go back and talk to their staff members.”

Subject C’s approach to ascertaining the affects of a dilemma on the district was chosen for this section of the findings related to context because he highlights the magnitude of considerations that rest on the shoulders of a superintendent when facing dilemmas. Additionally, Subject C has utilized this tool to mitigate the effects of his own personal contexts brought to the table of decision-making. A superintendent would certainly not be bound to use this tool or any other, but the superintendent *is* bound to be

responsible for the consequences of being attentive or inattentive to the plethora of variables at play related to the context of the dilemma in his own school district.

Information Gathering As Part of Framing. Superintendents, who are effective decision-makers, contend that gathering information when framing a decision is a strategic investment of time and resources. Each subject referenced multiple times in the study the significance of gathering all information possible when framing the decision, especially before even beginning to consider or evaluate options. While that was consistent among the subjects, their personality and approach to doing that information gathering was quite different. One was more systematic, one more conversational with staff, and one more reflective from observations and discussions. Evidence from the study exposed that each subject spent an inordinate amount of time making sure that he had a correct assessment of the situation, had framed it in a way that felt comfortable, and had identified core principles involved before proceeding.

Before evaluating options in response to a dilemma, Subject B used the vignette about a fine arts programs to elaborate on how important it is for a superintendent to gather as much information as possible when understanding the dilemma and framing the decision. In the hypothetical situation, the caliber of his district's fine arts program came into question as compared to a more high-achieving program in another district. The superintendent dug deeper than the initial topic to ascertain the root of the situation in light of the total operations of the school district. On the surface it appeared to be about a single topic, but Subject B contended that in reality it could reflect multiple areas. "Is our program where we want it to be based on the investment now. If our investment is not

very good, then what is the real issue? I would also be discussing with them (board members) or having the discussion of whether it is the leader or is it the investment in the programs. I would ask why my neighboring district has a really good fine arts program - if I happened to be a district that didn't have an elementary strings program because we haven't invested in this, but my neighboring district starts strings where you are supposed to fourth grade. I would say to these two board members, you know it is not as much about leadership as it is about our investment. I would have to look at where we really are."

This strategic investment of time and resources in investigating the context of the decision provides an accurate framing of the decision. Experience provided each subject with anticipatory knowledge of which areas of the organization might be affected by a particular dilemma. The information gathering process limits stumbling blocks so that the superintendents are less likely to frame the decision incorrectly and, subsequently, create a solution to poorly identified dilemma. Each was clear that the ownership for understanding the full context of a dilemma was a responsibility that came with the role of being a school superintendent. While assistance can be provided by others, the responsibility and role of accurately framing district dilemmas could not be abdicated by the superintendent or reassigned.

When a superintendent frames a decision, it could be tempting at the onset to see attributes of a previous situation and stop looking further into the details of the dilemma. A key finding from the evidence in this area was that the superintendents, when effectively framing a decision, treated each dilemma as unique. According to the

subjects, experience may provide insight into best practices for approaching the dilemma or a battery of experiences that provide wisdom. However, while the dilemma may have had attributes of previously experienced situations, each superintendent was emphatic that no two situations were exactly alike. The trap of thinking so, the subjects insisted, could lead to faulty framing of the decision that would result in poor decision-making.

Reference Points

A reference point, in prospect theory, is the point or state relative to which gains or losses are evaluated. Graphically, the reference point is neutral and items placed on either side of the reference point are termed as gains or losses, advantages or disadvantages (Kahneman & Tversky, 1979). Once a superintendent has adequately framed the decision and understands the context of the dilemma, he can then proceed with determining the reference points for his decision.

Values and Reference Points. A superintendent's core values are inextricably linked to the reference points he chooses when making decisions. Through the interviews of this study, superintendents shared various methods by which they identified reference points for their decision-making. Unlike reference points situated in behavioral economics, the reference points ascertained by the superintendents in this study were non-numeric nor were they quantifiable. An example of this is what Subject B calls his "Best Decision Rule" used as a reference point. While rather lengthy, Subject B's full description of his 'Best Decision Rule' is important to include in this section of the findings because it clarifies his paradigm for determining his decision-making reference points as a superintendent.

When asked if there was a general process or algorithm used when making decisions, Subject B provided this response. “Yes, in my mindset I do. This may sound silly, but nobody else has to live with the decision, right? So in the end, I have to be able to go home and say – wrong or right – ‘I made the best decision I could, based on the information that I had, that was in the best interest of the students I have served.’ It might have made a principal mad, it may have made a parent mad, it may have made some board member wish I wouldn’t have done this. There is a lot of ways of doing our stuff.”

“I tell principals, that is why your role is to advocate for students. If you are not advocating for the students, you will make all kinds of decisions that are adult-oriented. You know, I love when I listen to people talk about school climate and how important it is. If you really sit there and talk with them about school climate, it is really about school climate for the adults. It is about the teachers are happy and the principals all get along and the secretaries are all ... you know ... that is how they define school climate. My definition of school climate is, ‘Are the students happy in your building?’

As an interjection to Subject B’s description, this question ‘Are the students happy in your building?’ would be an example of a reference point for making decisions. If that were the reference point, then each option in response to the dilemma being faced would be evaluated against that reference point.

“So you are making student decisions that inevitably will disrupt adult lives, right? You are the principal and you determine that your playground is of the nature that you need five teachers on duty. School number three over there – because they need two

teachers on duty – I guarantee you those five teachers are talking to their colleagues and they are not very happy. So the climate for those teachers is not very good at the moment. It might not be good in your building because they are complaining to the other faculty. But, if you are an advocate for the students: ‘I need five teachers so that they are safe and I have people watching kids in these parts of the playground. Two are not going to cover it.’ Again, the climate at that moment is not very good - if you made a student decision in terms of supervision as opposed to an adult decision. That is what I think our jobs are. I made the best decision I could, based on the information that I had, that was in the best interest of the students I have served.”

Using the framework of Subject B for decision-making, he was asked what was challenging if he maintained that compass when decision-making. “Any time that I think a decision that I have made is going to hurt somebody’s feelings or make them feel less cared for or valued, it bothers me. A lot of the decisions that you make as a superintendent or as a principal – you know there is any number of stakeholders and they can’t all be happy with the decision.”

When asked how you balance people’s feelings with doing the right thing, Subject B shared, “Well, if you become calloused to people’s feelings, you are not going to be superintendent very long. The superintendency is a matter of relationships, too. To survive the superintendency you have to have a foundation of support because you are going to make decisions that are going to make some people unhappy all the time. You have to have developed - through your decision-making, through your actions, through the words you say - a foundation of belief that people believe you want to do the right

thing. If you can't build that belief and trust, sooner or later, you are going to make enough people mad that you are going to have to leave. I tell principals and teachers this, too. The difference between a principal that survives or a teacher that survives and one that doesn't is, in their hearts, the parents believe that you care for their kids and you want to do the right thing."

Interjecting again, one can see that if the contentment of adults were a reference point for Subject B, the trajectory of his decision would change. Options would be evaluated by a different standard.

Regarding advice to a new superintendent about criticism, Subject B shared, "You have to be careful as a new superintendent if you go by, 'well they didn't complain about it – there is not a problem.' Then, you know that is not right either." Using the situation described earlier in the interview that occurred in the light of great public attention, "We identified what we could have done better. We are moving forward on that. The truth is I didn't have any internal pressure to do anything. I didn't have one board member call me and say, 'Oh, you need to go do this.' I didn't have the community leaders coming and saying, 'Well, things are out of control. You better do something. What are you going to do?' I didn't have any of that. So you have to be careful of the 'I haven't heard anything --- it is not a problem' mentality. Because that catches you off guard, number one, and the other thing is you miss doing a lot of right things. I mean, if it's wrong it's wrong."

"Parents that have called me about a situation will say, 'Well, you know I can get 20 parents to call, too.' My answer to them is, 'You know what, I don't need 20 parents

to call me. You have called with a concern. If it is a legitimate concern, we are going to look at it and we are going to take some action on it. I don't need 20 parents to tell me it is either legitimate or it is not. It is not the number of people that give it more of a legitimacy or not. If one parent calls and you look into it and you determine you know what is right. Why do you need 20 other people to tell you?"

Subject B was asked how those who watch him do the job of being a superintendent would say he makes decisions. "I think they would say I do it in a number of ways. One, I make some decisions based on principles. I think about superintendents who go through processes to come to a decision and everybody is inclusive in buying in – stakeholders. I think there is a place for that. You have to decide where you need that process versus when you have to make a decision. For me, if there is a principle involved in it and I believe in them, I don't think it's ethical to bring your cabinet around the table and keep them there until they come to that belief. I think you say you know we are going to do this because I believe it is the right thing for our kids. We are going to do this. Now, all of our job for the next two hours is figuring out how to best get there. I mean, why spend five hours getting to a place you already know what you want to do. I don't like when people already have the decision made for whatever reason. Just tell me what it is and then we will figure out how to get there and do it right. I think, most of the time though, those are only the decisions that are based on principles of what you believe and how people should be treated – how kids should be treated – how family should be treated."

“Then, there are other decisions that I would get a lot of feedback. I defer to people – that is their area. XX is assistant superintendent of education and instruction. We have a whole school improvement process. I will give her feedback to that, but it is her deal and all of her curriculum team. A lot of decisions related to school improvement and interventions I am involved with because I like to have the discussion, but ... unfortunately, as soon as we do participate it is easy for that to be the end of the discussion so it is a real balance for me. It is a balance, because I want to have the collegial discussions and I really don't believe my opinions are worth any more than anybody else's at that table.”

Subject B's decision-making algorithm reflects attributes of a veteran decision-maker. Overarching his decision-making advice is a theme that context and timing matter. Subject B's decision-making mantra is that he must live with every decision he makes. Therefore, an intense examination of the decision-making variables is consistently deemed appropriate by Subject B. He acknowledges that there are multiple ways of problem solving and he is aware that his method may not satisfy the onlookers at every juncture. However, he returns in this section and multiple times throughout his interview to his ultimate barometer for decision-making: the students he serves. From what appears to be simple decisions such as the number of teachers on playground duty to a complex situation about the sexual assault of a student, Subject B returns to his challenge of asking himself, “Is this the best decision at the time with the information I have for the students I serve?”

The introspection Subject B provides about making those decisions in front of a watching world is not cold, calculated, or without regard for people's feelings. Instead, he acknowledges the humanity around him at every turn and still contends that the right decision at the right time may make some people unhappy but could still be a high quality decision of leadership integrity. The nuances of that process as Subject B explains them reflect years of decision-making practice combined with intense reflection on the part of the superintendent.

If attention is returned to the problem solving tool used by Superintendent C (Appendix C) which is a battery of questions written in a strategic format and it is compared to the narrative provided by Superintendent B, a quick assumption would be that the reference points are very dissimilar. However, while the approach and style is different, imbedded in both approaches is a reference point of what is best for the students being served. These different approaches are highlighted to emphasize that personal style is not indicative to the determination and identification of reference points.

Influences on Reference Points. While external factors can affect the context of decision-making, effective school superintendents rely on their core values and the values of the community when identifying reference points for decisions. Reference points can be influenced by a variety of items – from the personal beliefs, experiences and values of the decision-maker to community values and influences.

Through the findings, superintendents often evaluate their decision-making through the process of considering the input of others. In other cases, there are times when a superintendent enters a decision-making process with non-negotiables in place

that make quick work of evaluating options. In some instances presented in this study, the decision-making process occurred in the midst of great public attention. When that occurred, the superintendents stated that a large amount of public attention had an influence on the way that the reference points were determined when faced with a dilemma.

In the football situation described by Subject C, public attention was a factor at each juncture of the decision-making process. Subject C shared, “We are making a decision today that will affect tomorrow and that is what this what we were thinking. We have to let it be known. We have got to set the bar. We have got to set the standard that in the future that this is not acceptable. Don’t ever do this again and establish a culture that will not tolerate hazing. We have been successful. We haven’t had an incident like that since. We have not had hazing incidents since and it is part of the culture that is something that you don’t do. I mean there will be a consequence, number one, and, number two, the community won’t accept it. They will back the school. They are not going to be mad that they lose a game or two. They are going to back the school.”

Prospect theory contains a fundamental assumption that with each decision there is an element of risk. While not risk in the traditional sense of the word in a financial setting, Superintendent C had to consider several elements of risk when evaluating options regarding appropriate consequences. Would the students engage in that behavior again? Was there a risk that the punishment was too severe? Was it too lenient? Was the situation understood correctly? Because this was such a public decision, the reference points – and the associated risk with each – were determined in front of others and the

subsequent effectiveness of the decision-making process would be evaluated in the future based on the selection of those reference points.

An example of evaluating options occurred in the district led by Subject C when a hazing incident occurred in the district's football program. The evaluating of options did not occur alone by the superintendent. You can see in the following interview transcript that there was a dialogue of evaluating options – and the ramifications of each option – as the superintendent considered various approaches to the situation.

In this case of hazing, Subject C explains, “That is purely a gut call. It was something that I decided with the high school principal - together we decided what would be the appropriate level of punishment because we also had to take into consideration this was punishing the team. It was punishing the whole, not just these individuals.

Somewhere between there had to be a punishment that these individuals would take seriously and realized they had lost something and the team would recognize they did something wrong, but we still have a chance. We can still have a successful year even though they did this.”

“We are making a decision today that will affect tomorrow and that is what this what we were thinking. We have to let it be known. We have got to set the bar. We have got to set the standard that in the future that this is not acceptable. Don't ever do this again and establish a culture that will not tolerate hazing. We have been successful. We haven't had an incident like that since. We have not had hazing incidents since and it is part of the culture that is something that you don't do. I mean there will be a consequence, number one, and, number two, the community won't accept it. They will

back the school. They are not going to be mad that they lose a game or two. They are going to back the school.”

Subject C was cognizant, by his comments, throughout each stage of the decision-making process that each decision – timing, punishment, communication, etc. – that he was being scrutinized. With many years of experience, Subject C was also keenly aware that this was a decision that would leave a legacy of culture and values in the community so the evaluation of options needed intensive scrutiny. In fact, he was likely creating reference points for future superintendents and the community.

Subject B shared a dilemma that was likely the most challenging of his career. For Subject B, different external variables had the potential to influence the selection of the reference points in response to a dilemma. The situation was not only highly visible to the public but involved a topic of intense emotion in the community. The situation also occurred within a parallel timeframe of another highly emotional event at a nearby university. Subject B discussed the mixture of these variables in relation to his selection of reference points for decision-making when he shared of a decision related to the alleged sexual assault of a student that was likely the most difficult dilemma faced in his career. As Subject B went through the think-aloud process regarding his decision-making, evidence of his work to ascertain reference points can be seen throughout his comments. In exceptionally complex situations, multiple reference points can exist and this transcript from Subject B’s interview provides an examination of potential activities that assist a superintendent in defining reference points.

“Responding to this was probably the most challenging thing that I have done since I have been a superintendent because of the impact of social media and how quickly it spins out of control. In school issues there has always been the dilemma of not being able to talk about personnel and those kinds of things. You are always constricted. Ten years ago and fifteen years ago we had to deal with print media and there might be an article about ‘what the district didn’t give us.’ Social media puts a whole different world on decision-making. You know, the local university president is dealing with it this week. It is the same thing. It is the social media aspect that drove how quickly he had to make a decision. I am not sure he would have dealt with the situation the same way fifteen years ago although he would have been firm. He probably would have had a more deliberative process ... same thing with us, because social media drives that. There better be some type of reaction. We had a multitude of things going on. First and foremost, a student had gone through some trauma.”

“As a district, you do have to compartmentalize things that are occurring. There was a student protest piece. How are we going to deal with that? Superintendents might have done it a different way but our thought process was students have a right to display their concerns about whether it is decisions we make or students and their peers make. Our job, in this case, is to make sure that they do it in a safe environment. Then we will have our issues that we have to deal with related to the incident. I am sure that most communities don’t want to see other high school kids in front of the school for a full day, but on the other hand, they had a right to voice their feelings.”

When discussing communication related to the situation, Subject B shared, “I think, again, you have to bring the people in as soon as you can to let them understand – number one – the pieces and how you are going to respond. If it is at my level, what place and where do you want to see them? In this responsiveness, you have to give them the sense that this is the message that we want to send our school district.”

“My comment to principals has always been, ‘You can’t have 16,000 students and a community of 100,000 with 1,800 employees without something going badly at some point, right? So the bar should never be that we are not successful – or you are not successful as a principal – as long as nothing bad happens. You know a lot of principals think that way about central office ... they just can’t.”

“My bar is not ‘if it happens’ or ‘when it happens’ it is how we respond to it and how you respond to it as an administrator. You know, what is our response? What is our protocol of making sure it doesn’t happen again? You certainly want to be as proactive as we can but, even with that, things are going to happen. We did not have any control of this situation. It happened off campus and it came to our campus.”

“One of the differences between a superintendent and principal is we deal with legal issues and attorneys on an everyday basis. It doesn’t faze me anymore. I don’t like it. I don’t like when we are in situations where we have to do these things, but it is part of the reality of the work. It doesn’t happen that often to a principal, so we want them to understand that it is not the end of the world. It feels like it right now. A mentor gave me this advice about administration and I think this is really true. ‘You have to be careful not to overreact to where you are and what is going on because, even in the most public

situations, most people are just living their lives.’ The way this superintendent communicated to me was to take it as a storm. ‘You and the closest administrators or people or teachers who are involved with it are in the eye of the storm and so you feel every piece of it, but the further away you get from it the less people know about it or care about it.’ Even with that incident, there were people in the community who didn’t even know what I was talking about. They are not reacting like the people that are closest to it. Plus, the stuff that you are reading about it --- the people that want to be engaged and incite things. There is that group. You have to think of it as a storm. You have to talk to your district administrators and principals about what they are going to be hearing probably - what is true about that and what you can share with them. How are we going to go forward as a district in dealing with this one issue? So, they have a sense of it now.”

“I need all of the details, but they do not need to know [everything]. Again, it is that sense of there is the eye of the storm and there is all of this out here and I think you have to be careful not to do things that take the eye and make it bigger yourself.”

In reviewing the situation in Subject B’s community, the evidence from the interviews demonstrated the complexity of ascertaining reference points. Additionally, this body of evidence affirms that there are dilemmas that demand the construction of multiple reference points in the decision-making process. After the examination of the situation (framing), Subject B had to identify reference points that will drive the next steps of his decision-making behaviors. The reason for the inclusion of this in the section on reference points is the clarity with which Subject B articulates that the public is

watching him conduct these processes and the influence that may or may not have on identifying those reference points. Also, this example reiterates that the process within prospect theory of framing, identifying reference points, and evaluating options does not always occur in a sequential, 1-2-3 process. Those functions may be intertwined or cyclical in the decision-making activities included under prospect theory.

Evaluating Options

The phase of decision-making where the decision-maker assesses the value of each prospect and chooses accordingly (Kahneman & Tversky, 1979) is identified as evaluating options. In this study, in the majority of examples provided by the subjects, evaluating options most often occurs after a school superintendent defines a dilemma and then frames the decision he is facing. When the options are evaluated under prospect theory's frame, they are not evaluated in isolation. Instead, each option is evaluated relative to the reference point that has been identified by the decision-maker. When the options are evaluated the superintendent, incumbent upon him is the need to consider intended consequences – those that he knows are likely to occur – as well as unintended consequences that can be much more challenging to identify.

Unintended Consequences. Exploring potential unintended consequences requires extensive decision-making effort on the part of the superintendent. As previously mentioned in the findings, each dilemma encountered is unique - both in its attributes and its context. However, superintendents with a great deal of experience like the subjects of this study will have experiences from which to draw when faced with a dilemma. By drawing on the battery of experiences, each superintendent indicated that

they had honed their ability to anticipate the various consequences of a decision. Remaining mindful throughout the decision-making process, according to the subjects' interviews, is key to not relying on previous experience completely but using elements of those previous experiences to benefit their current decision-making endeavors.

Subject B addressed the topic of experience when exploring options and consequences of a decision. "Well, I can anticipate more. You have experiences. You know one of the problems of being the new principal is that first year you have to be able to anticipate what is coming up and what the ramifications to that are. That is one of the things that I ask the directors to do with new principals is help them anticipate what is going to happen in November before November comes. You know what is going to happen in an elementary school. We all know between November and December at elementary schools things get crazy. What are we doing to make them crazier? Why are we surprised at the end of the year when the kids start acting up when we have already taken the bulletin boards down and it's April 1st. When we start picking up textbooks, it tells kids it is over. What messages are we sending that impact kids' behaviors and what they think about school? But if you are new administrator, you might not think ... you are trying to work your way through it. I always think I was kind of fortunate because I have always worked in big districts and I have been put into positions - some of them because I ask to be - that always gave me the broader view of the district. I think too many times people are narrowing their preparation then they are put in a position of having to make decisions well on the broader piece."

Subject B, in the example above, draws on previous experiences to make decisions and guide the activities of others that he leads. While experience does not always repeat itself, the superintendents in this study shared multiple times about the value of experience and the benefit it provided when evaluating options as they made a decision. Through their own experience, and the benefit of collaborating with other experienced superintendents, there were some options that were predictable in their decision-making. Whether predictable with a known positive or negative outcome, that predictability benefitted the superintendent's decision-making. An example was a redistricting experience for Subject A. While this particular redistricting context was new to the superintendent, what was not new to Subject A was the reference point - the importance of relationship-building as a district leader. The knowledge of consequences and the ability to limit unintended consequences ultimately transcended the dilemma of redistricting.

The district where Subject A serves as superintendent was not known for redistricting previous to his tenure. "In fact, they had 80 PreK students - housed at the middle school. The affluent elementary where the students belonged didn't have room for them. They had tried for 20 years to redistrict and every time they tried, the affluent parents would get upset. So then the superintendent would stop the redistricting effort." During the interview for superintendent, Subject A was asked about experience with redistricting. "I described calling every student's family, talking through it with each parent, answering their questions with the intent being (1) make them feel good about the transition to a different building and (2) keep them from coming to a board meeting."

Subject A made approximately 530 phone calls that summer. No one came to the board meeting.

“We’ve now redistricted twice due to growth and both times I’ve called every family involved. In a letter to the editor last month in the paper ... talked about all the things the superintendent keeps doing and we never redistricted until he came to town and now we’ve done it twice and disrupted all of these families. Well, fine. We’ve got to do what’s right for kids. We’ve got to have classrooms – classes – schools balanced, size-wise. We’ve got empty classrooms. There was such discrepancy. We had schools in our district that had multiple empty classrooms and then we had this other school with a double portable and 80 PreK-ers located next door at a middle school.”

The superintendent was asked what things that he was positive he did right. Subject A recounted, “Contacted parents. It’s all about relationships. I would send a letter out saying ‘at the June board meeting the school board will be considering changing school boundaries and so next year, if the board approved, your child will be going to school so and so. Over the next four weeks, I will be calling everyone to talk to you about this decision and answer any questions you might have so be waiting for my call.’ So then they know I’m going to follow up and call them.”

“I think the key is the relationship piece and just ... I’ve got to have contact with people and just listen and answer questions and go ahead and chew me out. You’ve invested a lot of money because you spent money at the book fair; you spent money on the fundraisers to help buy the new playground equipment. You built a house in this neighborhood and now the school board is changing the boundaries.”

Through experience, Subject A had definitive known consequences of the redistricting process that he could rely on in his decision-making. The specific conversations and activities will always be different. For another less-experienced superintendent, the consequences of these options might be less known.

When exploring options, one of the duties of a superintendent is to identify potential consequences of each option in response to a dilemma. Identifying unintended consequences can be exceptionally challenging because it requires a superintendent's deep understanding of the operations of the district as well as the context of the dilemma. The findings of this study indicate that, what makes this even more challenging for a superintendent, is that the activities of the school district are dynamic and not linear. Therefore, the pursuit of unintended consequences must utilize a superintendent's background knowledge and an exploration of those dynamic interactions.

The subjects of the study contended that sometimes an error in identifying unintended consequences can teach us as much as a successful decision. In this case described by Subject A, one could anticipate that a decision to engage in information-sharing would benefit the operations of a school district. However, Subject A shared a decision of regret when good intentions and a goal of transparency ended up displaying unintended consequences. The decision was related to a district-wide budget reduction.

“We needed to cut \$1.5 million for this year. We surveyed all of our teachers and our support staff. We had a budget retreat with all of our administrators. We had the administrators pick who they wanted to be on a budget committee. We costed out every

suggestion that was given to us for budget cutting, took it to the budget committee, had them rank order them, and come up with a list of \$1.5 million.”

“I think one of our mistakes was, we were trying to be too transparent. So as one board member reminded me - and I always mess up this saying - so you probably know what it is. ‘People don’t want to know how you made the bread, they just want to eat it.’”

In this case, Superintendent A regretted allowing a large variety of people to define the dilemma. Further, information was shared with a variety of stakeholders that had the mass of information but did not have the ability to understand the complexity of the operations of the school district. Therefore, the group presented solutions that were insensitive to the operations of the school district.

Subject A shared, “We thought we did everything right and we thought we had been so collaborative and solicited input.” Interestingly, Subject A, explained that in previous years the transparency had *not* occurred. “So cutting the budget – we’ve already cut, in seven years we’ve had to cut it twice. In 2010, I’d been here two years we cut \$1.5 – no one raised a peep. 2014 we cut \$1.5 million and you thought the world was falling apart. Because we were so much more transparent and we were targeting things that they (the community) held near and dear. I think we overestimated the capacity of our patrons to handle short-term, long-term planning. It was too much. I’m wiser, seriously.”

Subject A was open and acknowledged that the scope and magnitude of unintended consequences was much greater than could have been imagined; therefore, the decision-making processes were unintentionally disruptive.

Each superintendent referred, at some juncture in the study, to a decision that resulted in consequences that – at the time – they simply could not anticipate. One could wonder if those situations mentioned, and other decisions of regret that were not discussed, led to the passionate theme throughout the study to gather as much information as possible from as many sources as possible. All three subjects reiterated multiple times that there was never regret over investing time in those discovery processes.

As mentioned previously, each subject was asked during the study if he utilized a particular decision-making algorithm. The response of Subject A was not a plan or approach, but simply the answer: “Unintended Consequences.” Further explanation by Subject A ensued.

“That’s one of my phrases. So you can have a process, you can be as collaborative as you want, but at the end of the day, what are the unintended consequences of that decision? To figure out that dilemma, it could be a big dilemma, could be a small dilemma, what are the unintended consequences? And too often as administrators whether it was when I was a team leader, whether I was assistant principal, principal, central office and now this job, too often we want to solve that problem and move on. And we don’t take enough time to say, okay now let’s think about this some more, if we do A, B and C, what are the unintended consequences of that? It’s huge; I don’t think we give enough time to that. So it just amazes me how people are so narrow minded they don’t think about the bigger picture but even with the bigger picture, what are the unintended consequences?”

“You have to depend on others and that’s why I depend on my group of superintendents. That’s why I depend on my cabinet. I have in seven years been able to build a cabinet that I think is the perfect cabinet and we trust each other and it has taken a long time, number one, to get the right people here. ... I depend on everyone else at this table to come on and so when we come to the table and I say... what are the unintended consequences? It helps me not ruin it with emotion. Because I’ve got six other people sitting here going ... well, what does that do for the cost of transportation? What does that do for our single parent teachers? What does that do... you know they... it is just... I get chills... Amy, just look at this, I get chills thinking about because the power of the group. If you have the trust and if you have set it up to be a safe and open collaboration where everyone is respected, and every voice is heard so you just... that power in depending on your group... I can’t even... I’m not doing it justice right now, it is so powerful and so ... “

When asked how Subject A came to this commitment to value the exploration of unintended consequences, the answer was simple. “Experience. Just 36 years of education and seeing how some of the things that have been mandated from the federal level, the state level, the school district level, and then the repercussions of that. I have just learned over the years so many decisions are made without thinking through all the ripples right? And so it’s just become part of my breathing as we’re working through a dilemma or we’re brainstorming something new. Well unintended consequences, what are the land mines? What do we need to think about?”

Subject A was then asked how he would teach an understanding of exploring unintended consequences to a new superintendent. Subject A was asked to pretend he was sitting across from that person having a conversation. The response is lengthy and interspersed with a variety of comments, but it is important to this study to include the verbatim transcript because the comments reflect the goal of this superintendent to gain the trust of members of the superintendent's team so that they will honestly – without any reservations – share the potential, unintended consequences of various options when the district is faced with a dilemma.

“Congratulations! Well, first of all I need to give you a piece of advice. In your first year as superintendent, don't make any major changes. You need to spend this first year working on relationships, building trust, getting to know your district - figuring out what's working, what's not working. Ask your administrators to come meet with you one on one this summer as you're getting settled and ask them 3 questions: 'What do we do well?' 'What do you wish we did differently?' and 'How can I support you in having a great year next year?' And then you just listen. And you listen all year long. And the only changes you should make should be the ones that impact safety of kids and staff. Because then, in year two, you're going to get itchy because you're probably a lot like me. So you're already going to have a list of things that you think, okay - we need to shake this up, either personnel-wise or curriculum-wise or budget-wise or facility-wise. You're going to start thinking about things that you're putting together - you're strategic plan, your personal plan, not your published plan. But you're going to be thinking about oh, I wish... okay we're going to have to start working on this piece ... and this piece ...

and you're going to start brainstorming with yourself. I see these things that need to be handled - that need to be changed up. As you're putting together your plan after your first year is over and you've been rehired - because you didn't make people mad by changing a lot of stuff your first year. You built those relationships so some people do trust you. Some of them are still waiting to see when you're going to screw up. So then you just start figuring out who you really trust? Who do you depend on? So it might be a cabinet like I have. Maybe you don't have a cabinet yet that you trust, but maybe you do have one central office administrator that you trust and you just say, 'Hey, I've got this idea. What do you think about if we flip the school starting times because one of the principals said to me, you know other districts around the nation are flipping school starting times so the teenagers go to school later than the elementary kids. What do you think if we did that?' Then you've been thinking about that and now you want to bounce it off someone else. So, just between the two of you, you start to think, 'How would that work and who's involved in that decision-making?' As you're working through your decision-making you might just want to think about the ripples - the unintended consequences. Okay, this sounds real logical that we're going to go pull all this research from University of Minnesota on flipping the school starting times and the American Association of Pediatrics has a lot of research on melatonin and how that hormone impacts the teenage brain and but... But, we need to think about. Okay we've got all this and we know it's right for kids but help me figure out what am I missing here? What pieces am I missing that maybe I'm not thinking about? And so then your buddy and partner in crime, I call it, that you trust is going to say well, Amy, I think you're full of

crap. The past two superintendents have tried it and you see they're no longer here. We shouldn't go down this path, and here's why. And then that person say's boom, baboom, baboom and gives you some things that you hadn't thought about and you know what, you just put that on the back burner and go, okay. That idea is just going to sit because now is not the time and you move on to something else. Just let it percolate. It's that whole patience - you've got to reign yourself in. And superintendents are known for getting after it because there's so much we want to do to move our district forward so we can be the best and you just have to slow yourself down."

Subject A's description of how to teach about unintended consequences highlights the complexity of consequences – both intended and unintended – in a school district. Further, Subject A's narrative highlights how dependent the superintendent is on the information provided by others in compiling a complete understanding of a dilemma, defining reference points, and then evaluating options. As the subjects described their data gathering processes to explore potential consequences, the obvious messiness and time-consuming nature of that process could likely be a deterrent. However, no subject in the study ever veered from the contention that time spent gathering information, when faced with a dilemma, was time very well spent.

Time Committed to Evaluating Options. When a superintendent is faced with a dilemma, spending too long evaluating options can lead to ineffective decision-making. As a reminder, prospect theory refers to a decision-making process. As with any process, time and energy can be spent on various phases of the process. Challenges can ensue when too little or too much time is spent on a particular phase, such as evaluating options.

Through an examination of the subjects' interview transcripts, it became evident that evaluating options in the decision-making process can be as elaborate or as simple as the decision-maker determines. One challenge expressed through the findings is ascertaining how long to deliberate and how intensively to evaluate options. Subject B, when asked about a decision of regret, did not provide a particular topic or decision but instead shared of his regret over deliberating too long over decisions after he knew the correct course of action. Upon examination of Subject B's responses, you will see that while he references evaluating options he is simultaneously inferring that he is seeking reference points for decisions.

"I guess decisions that I regret most are the delayed decisions. I can't remember making a decision – that I really went through the process – and I wish could take that one back. I have moved some people or invited people to lead the district over the years ... I have taken in some cases too long to do it. Because, once you do it you always think 'why didn't I do that before' because it is always so much better. I regret delayed decisions because personnel decisions are always really hard. They are usually good people. I mean we don't have any bad people working for us."

Subject B was asked, based on previous answers about his willingness to seek counsel and other mindful responses, why personnel decisions are such a dilemma. "A couple of things. I have to fill an obligation that once I give somebody those roles and responsibilities, then I have an obligation to try and help them to be successful. I will take a fairly significant amount of time determining what we are doing that is not allowing them to be successful or what we are not doing to help them. We are aware it is

our responsibility before we automatically assume that the principal is a non-successful principal. So that takes time.”

“You have to take some responsibility that you made the decision. You must have seen something. They must have proven themselves somewhere along the line, especially if you move somebody within your district. If you move them from one principalship to another and they were successful in one and they are not – you know that is a whole different animal. Why did you make the assumption that their skills could be duplicated here? What responsibility do you have to them? Now, what obligation do I have to you (the principal), first knowing that my obligation is to the school and the kids first and then to the personnel. That has always been my approach.”

“My obligation is to the student and the community, and then to the personnel second. You know a lot of people want to reverse that. I mean the district is not here so everybody has their job, right? In doing that, it is not that clear cut because you also have an obligation to personnel when you ask them to take an assignment. You have an obligation to make sure you are doing everything that you can so that they are successful. So, I think you have to analyze that first and sometimes that takes longer than you would like. Sometimes you allow it to take longer than you like because you want them to be successful and it is always hard to admit that you made a wrong assignment, too. It (developing people) is an easy excuse not to take action and you really got into the business to make sure that students had the best leadership and the best teachers. So, you know while you are being humanistic on one side, who is paying the price for your humanity?”

“It is so complex. You know, most of the time, you really know. Eventually, you know what needs to be done. You are just trying to figure out the timeline of how it is best to be done. You are just trying to figure out how to get there. Maybe there are some things that you can do to intervene, but this is such a people business that most of the time the reality is that problems principals have or teachers have – they have nothing to do with their skills or their knowledge or anything like that. It has to do with people and their ability to communicate – those kinds of things and those are the hardest things to fix.”

“You know we have always had teachers that nobody wants to be in their class. I had a couple of those over the years. She was debating whether she was going to come back or not. Finally, I said, ‘If I can’t put kids in your classroom, you are no value to me as a teacher. You have to have kids and so it is your job to make kids and parents want to be in your class. It is not my job.’ I think we have to redefine whose jobs they are. ‘I already gave you the principalship. I said this school is yours. It is your job to get the teachers and parents on board with what you believe is the right thing. If you can’t do that I have to find somebody else that can because I can’t go over there and it.’”

“I think you have to give fair time for it. When you put a new principal in and you are putting them in a building that has struggles, there is a year or so that you want people to leave. My board members always get really concerned when they hear of a turnover in buildings and it is really hard sometimes. It’s okay ... we wanted those people to go. Now, if you are in your fourth year and you have actually hired a bunch of people and they are not buying into your program, then we have a whole different

problem. There is a difference between your first year and your third year. That is why I say there is that delay thing because you have to come to the critical point of 'it is no longer the stuff around you' because you can't get it to go where you need to. That is the hard thing. These kids don't get to stay in fourth grade long enough for you to figure it out. They get a year and, every year we wait, somebody is going through that school. Unfortunately, in our business, you can't take all the time in the world to develop people and that is why I don't like this."

"We keep teachers on first and second year temporary contracts. I have basically gotten to the point where I say to principals if, by the second year, you have doubts then you need to open that position. We don't have the luxury of giving teachers six years to develop and get them on full contract. We have kids going through the system. So that is not a nice place to be."

Subject B's regret provided a unique element of this research as it related to the timing of decisions and not the decisions themselves. Subject B is a veteran, well-respected administrator who is reflective in nature. His style during the response to this question was somewhat personally Socratic in nature. As he reviewed the decision of regret he was almost interviewing himself. This led me to wonder if he had developed, over his career, the ability to reflect on the ramifications of exploring various options and the time dedicated to doing so.

Pace continued to be a topic related to challenges when evaluating options. Subject A also shared a story about the influence timing has on not only which options are chosen, but when they are chosen.

“And here’s another analogy... you think about it, it’s like a cruise ship. I remember when my mother-in-law turned 80, she took her three kids and the outlaws, we call ourselves... on an Alaskan cruise in July. Coolest cruise ever and I’m not a cold weather person, I’m a beach person. And when we got up to the glacier and we had the biggest cruise ship ever and the captain had to turn the cruise ship around with the ice floating around us and the cliffs were so close on one side you could reach out and touch... that’s how close. That ship turned so slowly you could not feel it turn. And that’s what I have to remember school districts are like, school districts are ... like that cruise ship that was having to turn around once we got to our highest point north and then we had to turn around and head back south, back down to Juno. You cannot turn a school district around really fast or you’re going to have everyone sea sick. So I just keep that in the back of my mind and I advise you to do that, just think of a cruise ship trying to turn... you can’t do it quickly.”

Pace is addressed as an intangible element of the decision-making process. The cruise ship analogy provided by Subject A contends that the timing or pace of the decision-making process could be more disruptive than the actual decision. Subject A relies on team members to guide the decision, the pace, and the communication that accompanies both.

Chapter 5: Discussion, Conclusions and Recommendations

Introduction

This study sought to explore the decision-making practices of school superintendents. Two constructs helped frame the study and provide theoretical underpinnings to deconstruct superintendent decision-making behaviors explored in this study. The constructs further assist in sense-making of the data and identifying patterns within the findings. Administrative mindfulness defines various cognitive mindsets a superintendent might maintain when facing a dilemma. Prospect theory provides a process by which a superintendent makes decisions in response to dilemmas. When faced with a problem or dilemma, the study explored which attributes of administrative mindfulness a superintendent exhibits when framing the decision, determining reference points, and evaluating options for the decision.

The attributes of administrative mindfulness create a cognitive standard for decision-making that benefits an organization. As an overlay to administrative mindfulness, prospect theory establishes a construct or process for decision-makers to examine their choices relative to an identified reference point in an arena of risk. For a superintendent, these two constructs are not dissimilar nor do they exist in isolation. Instead, they are simultaneous and create a lens for examining the effectiveness of superintendent decision-making.

After the findings were reduced from the data of the study, themes emerged related to administrative mindfulness and prospect theory. The discussion section of this chapter explores those findings, supporting some contentions from previous research and

challenging others. The next sections of this chapter provide implications for practice and implications for future research. The final section of the chapter provides conclusions from this study about the influence of administrative mindfulness and prospect theory on the decision-making of superintendents as well as general conclusions about decision-making of superintendents.

Discussion

The discussion section of this chapter is divided into three sections. The first section discusses the effects of administrative mindfulness on the phases of decision-making as identified in prospect theory. Next, reference points are discussed and significant attention is given to how a superintendent selects his reference points. Finally, the section discussing ego is strategically placed last as it substantially influences both the application of administrative mindfulness to the decision-making process and the selection of reference points by the superintendent.

When Mindset and Process Overlap

The decision-making behaviors of the superintendents in this study provided evidence confirming various phases of decision-making, as outlined in prospect theory, were utilized in each decision made by the superintendent. Additionally, the attributes of administrative mindfulness – particularly deferring to experts and being sensitive to operations – were identified as influential cognitive behaviors throughout the decision-making process. The significance of this evidence should inspire superintendents. By dissecting the phases of decision-making under prospect theory and overlapping the

attributes of administrative mindfulness around each phase, there is unlimited potential for positively influencing the effectiveness of each phase of decision-making.

A benefit to superintendents that surfaced from the evidence in the study is the notion that a decision can be divided into parts or phases rather than being viewed in its entirety. Trying to apply the five attributes of administrative mindfulness to the general notion of decision-making is daunting for even the most effective superintendents. However, as explained through the interviews of the subjects, disassembling the decision into phases utilizing the conceptual framework of prospect theory makes activities in decision-making manageable. Further, segregating administrative mindfulness by its attributes and applying each attribute to the appropriate phase and need in the decision-making process presents the superintendent with a manageable task.

To further understand the overlap of administrative mindfulness on the decision-making phases under prospect theory, here is an example. Consider only one attribute of administrative mindfulness – deferring to the expert – and the effect its absence has on each phase of decision-making under prospect theory. If a decision is framed and edited in ignorance - without any insight from experts regarding the situation - from the onset, the decision-making process is doomed. The superintendent would be solving the wrong problem. Next, if the reference points are identified based on faulty premises and understanding because those with insight regarding the situation are excluded, the compass for determining what actions to take is pointed in the wrong direction. Finally, if options are evaluated on faulty insight provided by those without a clear understanding

of the consequences of various options, any choice made will likely guarantee that a poor decision will follow which will likely be disruptive to the organization.

By contrast, consider the influence of deferring to the expert during each phase of decision-making. If a decision is framed and edited with great insight from those who best understand the dilemma, the superintendent has a clear definition of the problem and its context within the organization is well articulated. If the reference points are identified based on the expertise of those who know the values of the organization and have great wisdom about how to apply those values, the superintendent can then construct clear pivot points for moving forward. Finally, if options are evaluated by the superintendent based on a clear understanding of potential consequences – intended and unintended - provided by a high caliber cadre of advisors there is a great likelihood that the best option will surface and be chosen.

As you can see from this example, every phase of the decision-making process is influenced by the inclusion or exclusion of expert insight – deferring to the expert. Overlapping any or all of the attributes of administrative mindfulness to any or all of the phases of decision-making under prospect theory provides a multitude of opportunities for increased effectiveness. Because of the demand on cognitive attention required to utilize the attributes of administrative mindfulness, evidenced by the responses of the superintendents in this study, there will certainly be times when attributes of administrative mindfulness are not applied to the entire decision-making process. However, further evidenced by the study, any interjection of administrative mindfulness

into the various phases of the decision-making process would benefit the effectiveness of that particular phase as well as the entire decision-making process.

The definition used for a dilemma in this study was ‘an obstacle or predicament that requires a leader to make a decision that will move the organization forward with as little distress to the system as possible (Hoy, 2008).’ If the attributes of administrative mindfulness do not overlap the decision-making processes of superintendents, each stage of the decision-making process under prospect theory is riddled with the potential to move the organization backward or, at a minimum remain status quo. Additionally, distress to the system will be a byproduct when the attributes of administrative mindfulness are absent from prospect theory’s decision-making phases. However, interjection of the attributes of administrative mindfulness to each phase of decision-making has the potential to move the organization forward as well as minimize distress on the system.

Reference Points for Superintendents

A reference point in the decision-making process refers to the values of the superintendent at the time the decision is made and is used to evaluate the superintendent’s options when faced with a dilemma. “A reference point is simply the value on a dimension that separates gains from losses. For example, your current income may be the reference point if you consider another position (D. Kahneman, personal communication, April 30, 2015).” The challenge with the definition presented here and in other literature by Kahneman is that Kahneman’s studies of prospect theory have traditionally been situated in the context of behavioral economics. The examples of

reference points provided from the review of literature are choices with an associated risk where factors such as income level, a wager in a gambling venue, or an investment amount drive the selection of the reference point. Therefore the reference points mentioned by Kahneman are traditionally numeric or quantifiable in nature.

In this study, the reference points are more reflective of human phenomena and, therefore, are rarely numerical or quantifiable. Even though the reference points in this study are not numeric or quantifiable, it is the contention of this research that the decision-making criteria of superintendents are no less eligible for consideration as reference points. This stands in direct contrast to the position of Kahneman when he contends that, when referencing prospect theory, “considerations that an individual attends to in making a decision would not be labeled as a reference point (D. Kahneman, personal communication, April 30, 2015).”

Based on the findings of this study, in the arena of superintendent decision-making, reference points are rarely quantitative measures of money, time, etc. Instead, the reference points are created based on human phenomena - student safety, community trust, student engagement, etc. Therefore, the factors utilized by superintendents for ascertaining reference points are not quantitative but instead reference points in superintendent decision-making are identified based upon an exploration of converging values and attributes. Similar to when prospect theory is situated in behavioral economics, the reference points *do* provide a tool for evaluating various options and mitigating risk as superintendents make decisions.

A practical application of this contention occurred when Subject B shared that his processes for evaluating athletic coaches over the years has changed. Subject B said that, “When facing coaching decisions, you come to a place where you have to decide whether to cut the person loose and start over with a new coach or not in a school district. He said he used to let parents’ concerns over playing time, booster club comments, athletic championships, etc. affect his decisions. Now, in the last five years, he said he has simplified the decision to whether participation in the program is maintained or increasing and whether the students and parents are supporting the program. He has determined that the program is for the students not the adults. He does not make a hiring/firing decision ever based on a wins/losses percentage. Instead, the decision is based on the success of the program – are students engaged, are they happy while involved in the program, etc. The reference point selected by Subject B is not quantifiable, but it can still be used to make a decision about retaining or firing a coach through an analysis of the program’s attributes.

In Subject C’s responses regarding the hazing situation in the school district, again there were no quantifiable reference points. However, in a decision about how to respond, reference points – such as the emotional safety of student athletes – were certainly considered and identified by Subject C. From the juncture of determining various reference points, decisions could then be made in response to the hazing. Those decisions involved risk as outlined in prospect theory. If no action were taken, would the emotional safety of students decrease and the message be ‘boys will be boys?’ If discipline were too harsh, could it push hazing behaviors underground rather than

stopping them? If discipline were too lenient, would students not be deterred in the future from engaging in similar behaviors? The reference point existed when faced with the dilemma, but it was not quantifiable or numeric as assumed by Kahneman in his definition of reference points.

Kahneman (1991) states that individuals who are risk averse can actually adhere to the status quo and that goal to protect the status quo can actually become that individual's reference point. The body of evidence in this study confirmed that, in the realm of superintendent decision-making, there exists a potential for defending the status quo of a school district - being risk averse - and utilizing the protection of status quo as a superintendent's reference point.

The superintendents in this study displayed clear knowledge of their reference points and they were aware that decisions might be disruptive even if they moved the organization forward to accomplished goals that benefited students. The language used by the superintendents in this study reflected analysis that a decision could be a purported as a gain or loss from their reference point even when the reference point was non-numeric. For example, if deep community trust was a reference point, retaining an incompetent teacher contained an inherent risk of losing an increment of that trust. However, retaining the teacher did not necessarily guarantee an incremental increase of that trust. Therefore, related to prospect theory, there was a level of decision-making risk that had to be analyzed by the superintendent as he evaluated various options and potential outcomes simultaneously knowing that without a numeric or quantifiable

reference point there was little likelihood that the outcome would be immediately measurable.

Based on the findings, it appears that determining the reference point for a decision can be the phase of the decision-making process where activity is most likely to be stalled. It might be tempting to those observing the decision-making process to simply assume that a superintendent could easily assign a reference point based what is ethically right. From that determination forward, one could assume that the decision-making efforts should then be a fairly expeditious process. However, the veteran superintendents who participated in this study share that many times there are multiple decisions interwoven in a dilemma. Being faced with multiple decisions, it is also incumbent on the superintendent to determine multiple reference points.

In the responses displayed by the subjects, their language insisted that exploring the options took a great deal of time and cognitive energy. We often hear how leaders discuss the time spent weighing options, considering choices, etc. as if they are choosing between door number one, two or three. However, the contention from the findings in this study indicate that what is actually most time-consuming and demanding is the process of ascertaining reference points and the evolution of choosing options is simply an artifact or response to that demanding exercise of selecting reference points. The superintendent, when identifying reference points, is actually clarifying his values related to the decision. For example, if the options in response to a dilemma are to fire a teacher or not, the discussion is likely to end up being about the merits or demerits of termination. However, if the discussion is moved back by the superintendent to the

selection of reference points, the discussion would likely be about students – is this teacher negatively affecting student learning? Therefore, further discussion would be held surrounding teacher employment relative to student learning and engagement and the tension would be around the selection of the reference point. A challenge is associated with a superintendent discussing reference points. A dramatic increase in transparency and vulnerability about decision-making ensues when the discussion surrounds reference points. In the snow day example of the findings, Subject C was stubborn about making his own decisions instead of listening to a more experienced superintendent in a larger district. His initial decision did not have student and staff safety as a reference point, but instead his pride and independence was the true reference point. His willingness to reflect and learn from previous decisions is likely a contributor to his effectiveness today.

When identifying reference points, there was an acknowledgement during the study that some factors are outside the superintendent's span of control. Subject B shared, "I was thinking that you have to remember that every situation is different. There is one price about decision-making in this business. Sometimes the smallest thing that you think that is inconsequential - you make a decision on it and it blows up on you surprisingly. Sometimes, the biggest thing that goes on in your district won't even get a reaction. It is sometimes really surprising what does get a reaction and then what doesn't." That comment reflects the interconnectivity of decisions and activity within the district also is transparent reminder about the superintendent's limited ability to anticipate

the various responses within the organization, to his decisions, and the decisions of others. No decision is ever made in isolation.

In the study, the discussion of determining reference points most often returned to the superintendents' contention that there is no way to emphasize enough the significance of gathering information and relying on the expert advice of others. Clarity obtained from the information gathered and insight garnered from others can create a laser-like focus on the appropriate reference point. Once that reference point is delineated, evaluating options based on the reference point becomes a much easier and rapid process.

According to Subject C, "Okay, you need to get as much information as possible from every source -- every possible source so that you know exactly what went on or what allegedly went on. You need to hear every argument and every side. You need to determine whether you are dealing with something here that is going to have legal consequences, whether there are going to be personnel consequences, is someone going to lose their job over this. You better have those T's crossed and those I's dotted because it could go down that road. It could go that far or, ultimately, it could cost you *your* job. So you better make sure you've done your due diligence in the research of what happened here."

"Now you have all of the information you need, you are going to have to make a decision. You know it's, as my grandfather used to say, 'fish or cut bait time.' It is time to do that. It is one of the hardest things you do as a superintendent -- that you take that step or that leap of faith and you have to have the confidence that you are making the right decision and go through with it."

While not in the vernacular of Kahneman and Tversky, this superintendent is saying you have to – at some juncture - land on your reference point. Through the findings, each superintendent shared in his own words, that every leader has to know when its time to quit gathering information, stop framing the situation, identify your reference points, and make a decision.

Ego's Influence on Superintendent Decision-Making

The single most redundant characteristic identified by all three subjects that potentially hinders decision-making by superintendents is ego. Each subject referenced that ego keeps individuals – not just in educational leadership – from obtaining counsel, seeking advice, thoroughly gathering and vetting information, seeing problems realistically, etc. There are five attributes of administrative mindfulness: preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise (Weick & Sutcliffe, 2006). Each of the five requires the decision-maker to seek greater understanding or to apply understanding of the organization to the dilemma being faced. Seeking and utilizing that understanding has, as a rudimentary quality, humility or a lack of ego that acknowledges a need outside of your own abilities or resources.

As articulated by the subjects in this study, ego can hinder the superintendent from assimilating understanding obtained from others into his decision-making. When that egotistical behavior is exhibited, the quality of that superintendent's decision-making is substantially diminished. While none of the superintendents directly spoke about humility; instead, each spoke of a willingness to obtain information from others –

regardless of title or rank, but simply based on the level of knowledge the person had about the dilemma facing the superintendent. A general affect of humility – or managed ego - was observed by the researcher during the subjects' interviews when credit was given to others who provided expertise, when a willingness to obtain information was displayed, and by sharing decisions of regret and directly relating the regret to their own misguided personal decision-making behaviors.

On a more personal level, characteristics like emotion, passion, temper, etc. were discussed by subjects of the study as items that could impede mindfulness and negatively influence the decision-making process. Each subject addressed that they have – over the years - built in processes to address their weaknesses to avoid undermining their decision-making effectiveness. One subject articulated that it is important to shun ego for the sake of creating processes that hold you accountable as a leader. Subject C specifically addressed that his problem-solving model included elements that dissipated his personal weaknesses to lead to more effective decisions. Subject C shared that the decision he clearly regretted most had bypassed elements of his own problem-solving model. Subjects A, B and C each identified specific processes – cabinet discussions, dialogues with respected internal peers, conversations with mentor superintendents, etc. – that they used to mitigate their biases, frustrations, emotions, or when they knew they were not in an appropriate decision-making frame of mind.

Ironically, one of the greatest antidotes to mindlessness is an individual's desire to be mindful (Langer, 1989). The observation that each superintendent subject in this study acknowledges ego and is consistently seeking to be more mindful and to frame

decisions more effectively is their leadership advantage to assist them in avoiding mindless decision.

Ego and Information Gathering. Data gathering from any source beneficial to the decision-making process was mentioned as an essential behavior by each superintendent. This was specifically connected to their adamant response that being willing to gather all pertinent information from every potential source before making a decision is crucial. In their discussions about ego, reference was made that if ego keeps you from gathering all the information about the dilemma then the decision-making process is likely ill-fated from the beginning.

From the evidence obtained in the study the superintendents had created a formal and informal structure for gathering information and each reflected the management of their ego. Subject B stated that, as he gained experience and wisdom, he knew he needed *more* people rather than *less* in his cabinet. The superintendent's cabinet is an example of a formal structure for gathering information. While not the focus of this study, from the evidence obtained in the interviews, of more importance than having a cabinet is the culture of the cabinet as a resource for the superintendent in his decision-making. Subject A referred to the cabinet as the place where he safely explored unintended consequences of decisions.

The informal structures for gathering information appear, from the interviews I the study, to be more considerate of the topic and context of the decision. All three subjects stated that a superintendent had to know who had the most knowledge about the subject and then humility, or management of ego, would indicate to the superintendent

that reaching out to that person was beneficial to the decision-making process. These informal structures might include a call to the Chamber of Commerce president, a conversation with a parent in the district, a drop-in visit and conversation with a principal, etc.

Ego and Reference Points. In the decision-making process, once a decision is framed, the superintendent must determine a reference point. That reference point is a reflection of the deliberative determination of values related to the decision. A simple example was articulated by Subject B when he discussed student safety on the playground. Once student safety was determined as his reference point, then the options to be considered by Subject B were the various numbers of teachers needed to create that student safety. If one teacher was adequate or twelve were needed, those decisions would be easy – although possibly not popular – because student safety was the reference point.

The playground example is much simpler than many complex decisions faced by superintendents. However, it is a decision that could easily be clouded by ego. What if Superintendent B's reference point was his popularity with the teachers? His options then would be number of teachers – but his reference point would have created a different question. What's the smallest number of teachers that we can get by with on the playground?

Ego is a role player in a multitude of ways when establishing reference points. Mature and effective superintendents have often established reference points for many traditional school decisions. For that reason, they may be less ruffled by some decisions than a novice superintendent. However, even when a mature superintendent has a

practical plan for making decisions and strong points of reference, ego can impede that process. Subject C highly values the role of a principal in the district and has a routine for selecting those principals that mitigates variables and focuses on the high expectations for the role. With that stated, Subject C's decision of regret was related to the very decision-making algorithm that he had used so many times to avoid the possibility of making a mindless decision that could negatively affect the school district. In his discussion of the questions that comprise the algorithm, he shared that the tool in the hands of a decision-maker who was not reflective, could be a grocery list of items checked off and the end result could potentially be a less than effective decision.

That is exactly what occurred in a decision Subject C regretted – a personnel decision where he did not take steps to evaluate options. “Superintendents get a little bit cocky. I think sometimes they think, ‘You know I have been a ‘sup’ for a long time. I am always going to make the right decision. When it comes to selecting personnel for a specific area, for a specific position, I mean I am a great judge of character. I am a great judge of talent. I just have it going on here. I am always going to make the right call in personnel decision.’ Not true. Occasionally you will miss.”

Subject C went on to explain that his mis-hire causes him to deeply reflect on his decision-making. “That really causes deep regret because I think most of us in education - we don't want to make a decision that would ever hurt kids in every shape or fashion. If you are not careful and you get the wrong person in the wrong position, they can cause some damage and you know that is something you just you dread happening.”

When he examined his hiring routine, he dissected the process to ascertain where the mistake was made – even by using the algorithm intended to lead to success - so it wouldn't occur again. With the decision-making algorithm used correctly, the consequences were known and intended. When the algorithm was used incorrectly, the consequences become unknown and unintended. Subject C's further explanation exposed further ripples from unintended consequences. When a decision results in an unanticipated consequence which is disruptive to the district, it can also result in the superintendent responding in a way that would have been unnecessary had the consequences been anticipated.

“You have a principal that you don't want to stay in that position after the year so how do you go about that part of it. How do you discuss that with your leadership team because your decision can't be private any longer? I think at that point I have to step in to some decisions that are being made and - I hate to use this word - but I have to micro-manage a little bit or at least ask part of my team or one of my team members to step into that role and take some of those decisions out of that person's hands because I don't trust them to make the right decision. I have lost confidence in this person's ability. I am going to do something to stem the tide. I am not going to let it go on.”

This example of ego impeding the construction of solid reference points likely occurs more often than is reported. A less mature leader could blame others, but Subject C who is deemed very successful by his peers was quite hard on himself as he reflected on this particular situation. Subject C managed his ego related to this particular situation and redeemed his error to benefit the construction of future reference points.

Another element of ego that influences the selection of reference points was addressed when the subjects discussed using the standard of 'Is it best for the students?' when making decisions. Through anecdotal comments, each subject discussed the need to be considerate of the adults; however, their primary responsibility was to the students. There were two reference points evident, but the superintendent chose for one to supersede the other.

Implications for Practice

By examining responses of the subjects in the phases of decision-making, using prospect theory as a conceptual framework, windows of opportunity to enhance decision-making have been identified which will benefit the decision-making behaviors of superintendents and other educational leaders. The attributes of administrative mindfulness, applied to each phase, have the potential to enhance each phase of the decision-making process, limit disruptions to the organization, and positively influence outcomes for a school district.

The findings of this study could be used to create mindful questions for superintendents when engaged in the decision-making process. As an example, the findings indicate that setting aside ego and gathering information from any source, regardless of rank or title, will assist a superintendent in more appropriately framing a decision. An implication for practice would be for the superintendent, when framing a decision, to ask himself questions like these samples: Is there any person or group who has information about this situation? Is there any bias to that information that could

cause us to frame this situation incorrectly? What is the context of this decision – what else is going on at this time and what other variables are at play?

As a benefit to his decision-making practice, this research provides a method by which a superintendent can dissect phases of a dilemma and not feel so overwhelmed with major decisions. When the entire situation is reviewed, it can appear that there are limited opportunities to make effective decisions. The subjects of this study, because of their experience, provided practical insight into windows of opportunity to make more effective decisions. The conceptual framework of prospect theory provided phases of a process to organize the insights of those superintendents. For example, a superintendent may get completely bogged down in evaluating options – should I do this or that? This research benefits that process by redirecting a superintendent's cognitive attention to the determination of reference points. By doing that, the questions change from 'What should I do?' to 'What matters?' That cognitive shift, as outlined by the subjects, creates reference points for a superintendent that make, subsequently, evaluating the options much more manageable.

The exceptional attention in this research to the ego of the superintendent provides a critical lens for practitioners reading this study to examine their own decision-making behaviors. A novice superintendent could benefit substantially by reviewing this study and then reflecting on his own decision-making behavior in an effort to establish effective decision-making behaviors before ineffective decision-making habits take root. Ego, from an examination of the findings, is one element of a superintendent's decision-making practice that can be influenced by others but is ultimately managed by the

superintendent alone. While the findings of this study could provide substantial implications for practice, much like this research indicated – the superintendent must be willing to defer to the expert and integrate these findings into practice.

This research could benefit the professional practices of school superintendents and the processes related to hiring, then professionally developing school superintendents. Boards of education and state organizations that train boards of education could utilize the findings of this study to benefit the hiring practices of superintendents. Questions, such as those utilized in the study, could be included in the interview and selection process of school superintendents. By doing so, a board of education could potentially ascertain and evaluate the decision-making processes of the superintendent candidates previous to hiring an individual as its district's leader.

Based on this research, one could be led to believe that high quality superintendent preparation programs would include opportunities to practice and develop decision-making skills. At a minimum, superintendent preparation programs – and principal preparation programs – should give attention to the inclusion of training in effective decision-making practices in their program objectives.

The findings of this study have strong implications for the decision-making practices of school superintendents. Superintendents, because they practice as the lone person in that role in a school district, can often work in isolation. Additionally, as individuals are promoted in their careers, they can be expected to know more and more and may have fewer potential opportunities for targeted professional development. The leaders who participated in this study are well respected by their peers in the state in

which they practice and nationally. Therefore, their willingness to be vulnerable in their responses should model for others that activities that provide opportunities to reflect and improve on personal decision-making practices are an integral component in the gestation of a superintendent's career.

Implications for Future Research

Several potential studies emerged from the conclusion of this one. Replicating this study with novice superintendents would provide a researcher a means to compare and contrast the decision-making practices of novice and veteran superintendents. This study could also be replicated in a variety of geographical settings, demographic settings, school district sizes, etc. to explore the consistency of these findings in different settings. The researcher intentionally used the male references for all three superintendents who served as subjects of this study to avoid gender being a distraction to the findings. While this study consisted of two male superintendents and one female superintendent, further studies could be conducted to explore any patterns of decision-making that could possibly be attributed to gender.

To further extend this research in a meaningful way, there are several potential studies that could ensue. Research could be conducted to examine whether superintendents have general reference points for making decisions that override day-to-day decision-making behaviors. For example, if a superintendent has as his general reference point 'What will people think of me as a leader?' then when he encounters a decision about playground supervision or hiring practices, the entire decision-making process would shift because of the identification of reference point.

Another option for research could be specific explorations of various phases of the decision-making process and the implications of each. Those phases – editing and framing, identifying reference points, and evaluating options – could be studied further applying the cognitive attention of administrative mindfulness or could be studied using other constructs to shed light on the behaviors of superintendents.

This research could be extended into an organizational level and examine the construction and use of a superintendent's cabinet or other advisory team as a tool for deferring to experts on a regular basis within the district. Additionally, at an organizational level, it would be intriguing to examine the decision-making behaviors of a superintendent as he creates the organizational chart of a school district to ascertain his reference points for that construction process.

Other possible extensions of this research could occur related to reference points. In this study, while never directly addressed, was an obvious awareness on the part of the superintendents that they were hired by a board of education and served as public servants. Therefore, there was inherent risk in any decision of by its very nature of being public and decision-making being the essence of their job function. Future studies could explore the reference point of job security and risks associated with various behaviors relative to decision-making.

The superintendents in this study were very open in their discussions – sharing successes and failures - in their decision-making careers. A more elaborate study of the role of regret in superintendent decision-making could potentially reveal obstacles and

hindrances to effective decision-making that would benefit the practice of educational leadership

Conclusions

The findings from this study support and extend the findings in the larger body of research related to decision-making. Unique to this study is the interconnectivity of the constructs of administrative mindfulness and prospect theory to benefit the practice of superintendent decision-making. The behaviors of the subjects in this study were explored to ascertain the role administrative mindfulness played in each phase of a superintendent's decision-making behaviors.

A unique contribution of this study to the body of educational leadership research was to drill down to the personal level of decision-making by individual superintendents. The richness of this data provides: (1) insight into the potential reasons for the subjects of this study having such stellar careers as superintendents; (2) data which provide opportunities for other leaders to see themselves facing similar dilemmas and evaluate how they would respond; and (3) acknowledgment that decision-making is a key skill for school superintendents utilized daily in their role. Presented in this study was a very authentic battery of responses by individuals who chose to benefit the profession of educational leadership through disclosing their personal decision-making experiences. From the data obtained in this study, conclusions can be drawn that benefit current practice and future research.

A superintendent's decision-making can be positively enhanced by the interjection of a greater measure of administrative mindfulness during each phase of the

decision-making process. This claim acknowledges that the decision-making process is segmented into various parts. Each phase, when administrative mindfulness attributes are applied, benefits from that addition. Subsequently, cognitive attention and leadership energies of a superintendent that are expended on examining each phase of decision-making and utilizing attributes of administrative mindfulness reflect a wise investment in decision-making. Additionally, because the decision-making process is divided into phases, under prospect theory, it gives the superintendent a tighter feedback loop during the decision-making process. With consistently more effective decision-making, there is less disruption to the organization and more forward movement.

Consistent in the findings were two primary themes related to administrative mindfulness. First, the superintendents contend that the attribute of deferring to the expert serves as a substantial help or hindrance to effective decision-making. Superintendents who bypass an expert's input will usually find that the decision is ineffective and can often be substantially disruptive to the organization. Decisions of regret by the superintendents in this study reflected a juncture in the decision-making process where expert advice was available, but was not heeded. Superintendents who are effective decision-makers have a dependable cadre of advisors they rely on regularly, such as a cabinet, and a sense of humility to rely on extraneous experts when needed for specific decisions. Wise superintendents treat that expertise as an unexpendable asset, personally and to the district.

Second, the administrative mindfulness attribute of being sensitive to the operations of the district was integral to effective decision-making regardless of the topic.

To explain this further, a superintendent must understand at the deepest level the structures and interplay of those structures in the district he serves to know the full ramifications of any decision made. Additionally, the superintendent must know the behaviors and attributes of employees within those structures. Circling back to deferring to the expert as a strength of wise decision-makers, should a superintendent not have a strong sensitivity to the operations of the district, he must defer to experts to obtain that understanding in order to make decisions that move the district forward and are not substantially disruptive.

Superintendents who are effective decision-makers understand that decision-making is a process. Understanding the context of the decision, gathering information about the decision, and being inquisitive enough as a leader to seek to understand the nuances of the decision are all attributes of superintendents who are effective in their decision-making. From data gained in this study, the development of decision-making skills of an individual superintendent is also a process. Those skills are consistently evolving, never remain stagnant – either regress or progress, and are constantly in use.

Reference points serve a substantial role in superintendent decision-making. From the responses of the subjects of the study, the reference points of these veteran superintendents are more clearly focused and well-articulated now than early in their careers. Each indicated that decisions of regret and simply a greater variety of decision-making experiences caused them to forge a set of reference points that affect their decision-making behaviors. The reference points of the superintendents are not quantifiable, but instead are value-laden. The reference points reflect a convergence of

personal and professional values, but at the end of the decision-making process the superintendent selects which values supersede others.

As a public servant working in a media rich environment, decisions are examined by a variety of stakeholders. Risk is inherent in every dilemma, as defined in this study, faced by a superintendent. The veteran administrators in this study acknowledged risk, but have mitigated it by more fully defining their reference points for decision-making. Additionally, because each superintendent has served in their district for approximately a decade, the reference points for decision-making are aligned with the values of the community while not, generally, compromising the values of the superintendent.

Risk aversion as an element of prospect theory can stymie the decisions of a superintendent or, potentially, spur the leader to protect the status quo. Being reluctant to simplify information he received would nudge a leader toward accepting a cliché and avoiding the risk of learning what further digging might expose. One might rarely see avoiding information and risk aversion as mirrored behaviors, but the outcome could be the same – less effective decisions by an organizational leader. Each superintendent, at some juncture in the study, inferred that being reluctant to gather information or learn of challenges within the organization was in essence the same as seeking to protect the status quo and, therefore, choosing to limit the growth of the school district.

Under the framework of prospect theory, risk aversion may cause an individual decision-maker to not see ways to return from a decision and, therefore, to avoid that decision. Experienced superintendents, such as those in the study, seem to have developed an innate sense of how far to stretch their decision-making confidence. They

appear to be generally conservative in their decision-making but, depending on the reference point identified and their level of conviction about that reference point, that risk-seeking behavior can increase.

In decisions of greater risk, the definition of reference points appears to demand a greater cognitive demand than in those decisions of lesser risk. For example, dilemmas faced in an arena of heightened public attention, require the superintendent to spend time not only exploring the information related to the problem but also substantial time defining the reference points for making a quality decision. Considerations must also, in today's environment, be made for the influence of media and social media on the decision-making of a superintendent.

Finally, the role of ego is highlighted as a variable that influenced a wide variety of the superintendent's decision-making behaviors. Ultimately, ego can control each phase of decision-making, the final decision, and the type of cognitive attention the decision is given by the superintendent. As all three superintendents reflected on their decisions of regret, they were critical of themselves for not seeing elements of the decision-making process at the time the decisions were being made. They attributed some facet of ego as the hindrance when an ineffective decision was made. However, each was insistent that learning from those mistakes was as valuable – or in some ways, more valuable – than if they had not made the decision they regretted. Each was also candid in conveying that some decisions of regret can be career ending. Their decisions shared in this study were not.

All three subjects conveyed the value of reflecting on decisions – even if that process is painful and viewed as a temporary setback. In a variety of responses, they shared about leaders who do not grow in their decision-making abilities. Those leaders are described as either unwilling or unable to reflect on both effective and ineffective decisions. The subjects also shared that the willingness to reflect on their professional practices, such as decision-making, has to come from their own initiative and passion to be effective.

Decision-making is a complex, value-laden professional function of a school superintendent when faced with a dilemma. From the responses of these subjects, the ability to address those dilemmas effectively is an essential skill for a school superintendent. Decision-making for school superintendents is a skill for which no other skill can substitute.

This research has accomplished its three intended purposes: (1) add to the body of scholarly research related to the decision-making of superintendents; (2) provide insight into the decision-making behaviors of effective superintendents; and, (3) provide intellectual tools for superintendents to hone their practice and benefit the school districts they serve.

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Appendix A

Research Protocol

With prior approval of the subjects, the interviews were recorded to ensure accurate transcription. Two recordings, MP3 files, were made of each interview. The recording devices were placed between the researcher and the subject and no recording challenges were encountered. Handwritten notes were taken at various times by the researcher. The notes were taken for the purpose of identifying key comments, notating possible direct quotations, formulating additional questions during the interview process, and facilitating analysis. Subjects were reminded of the purpose of the study, research procedures, expected benefits, their right to withdraw from the study at any time, and protection of confidentiality. Subjects were asked before the interview began, at a midpoint, and at the conclusion if they had any questions about the research study or research procedures.

In the individual interviews, a series of interview questions were asked of each subject. The interview questions presented to each subject in the same format were constructed to answer the primary and secondary research questions. However, it was imperative that the subjects had the opportunity to “story tell” as they recounted decision-making experiences in order for the cognitive processes utilized by the subjects to be revealed. Therefore, follow-up questions for each subject were unique based on their responses to the initial questions.

The interview questions were divided into two sections. The first section focused on the framing and editing of the subject’s decision-making processes. The first section

consisted of three parts: vignettes to which the superintendent subject responded in a “ ” process, a set of questions focused on ascertaining which elements of a dilemma gain a superintendent’s attention, and the final questions relate to scenarios that have the potential to evoke issues when facing a dilemma.

The second section of questions consisted of open-ended questions that provide an opportunity for the subjects to articulate their personal decision-making strategies, approaches or algorithms. The sections of questions were structured in this order in an effort to build rapport with the subject during the first section of questions and to provide the solid groundwork for authenticity of answers to the second section of questions.

The subjects had an opportunity to schedule two separate interview sessions dedicated to each set of questions. Each subject opted to conduct the interview in one longer session. The two sets of questions were presented to the subjects with a short break in between.

After the interview process, an independent third party transcribed the digital recordings of the interview. Each transcribed interview was presented to the corresponding subject for review. Each subject had the opportunity (in accordance with the informed consent) to retract any answer of their choosing.

Appendix B

Sample of Transcription

Note: This example reflects the style of all transcriptions. They are literal and punctuation, capitalization, and grammar has not been corrected.

“I” indicates investigator (researcher) and “P” indicates primary subject (superintendent)

- I: So how would you respond to the parent on the phone if they call with this information what would your response be to the parent?
- P: Well my response is typical for any parent that calls me because first I acknowledge them and then I apologize. So first I go wow thanks so much for making me aware of this and I am so sorry we have this situation now I am not admitting we have a situation. I am not placing blame on anybody because I don't even know that this really happened but I am sorry that we had this situation and you are having to call me right?
- I: Absolutely.
- P: But I have noticed over the years Amy that when you acknowledge someone and you apologize sometimes people call you and all they want is someone to do is say dog gannet I am so sorry and somehow sometimes egos get in the way and I have had administrators tell me when I go you know what would you just call the Fichtners and just say I am so sorry that you know we have this predicament with your son and you know let's figure out what we can do to work through it well I am not apologizing I didn't do anything wrong and I am just going oh my gosh and so truly I had no ego in this job you can't have an ego you have to be confident but you can't have an ego because there is always someone that knows more than you or wants to I call it coach you up on why you need to do your job better right? So I always just immediately say wow thank you for making me aware of this situation and I am just so sorry now let's just talk through this again and tell me what time did this happen because I am in the room right next to where our broadcaster plays the music and I am there from 6:00 on and the game doesn't start until 7:00 so what time was it when you heard these vulgar lyrics can you kind of can you think back and you know I will go into oh I caught ---- mode and so I am just reeling her in I am working her and schmoozing her and then I also and this you know 36 years in education now this works I have done it ever since the first year I taught. I have a steno pad you can see it is right by my phone and I whether it is in person or it is on the phone I say now you got to bear with me because I don't remember everything that happens because I handle so many

things and so I am going to take notes as we talk or as we meet and so if you don't mind just think back for me approximately what time was it when this took place and so you know then you can instantly tell you can hear it in their voice or face to face you can see it in their face their shoulders kind of relaxed they are not so tense and bunched up right and so you know get this person to reflect.

- I: If you and we don't have to go through all of the technical steps of how you would investigate but if you finished with this investigation for conversation purposes for this you find that it doesn't happen or it does happen um what are some attributes that you have in your conversations with your staff as you are investigating not necessarily what steps you would take but because when you were just talking about the parent you said that you assumed you didn't assume automatically that it did happen. You didn't jump to a conclusion.
- P: I don't know if it happened.

Appendix C

PROBLEM SOLVING MODEL **Provided by Superintendent Subject C**

- 1) Is the problem an emergency? YES or NO (Determine immediacy—critical vs. non-critical)
- 2) If not an emergency, determine who the 'Stakeholders' are in the problem/issue.
- 3) Where do the Stakeholders fit in the overall picture/operation of the school district?
 - a) Is there a prescriptive fix to the problem (past experience)?
 - b) If not, brainstorm solutions (Consider involving other staff for input if not a confidential issue)
- 4) If immediate fix is not necessary, determine options and analyze the problem.
 - a) Will the solution affect the whole district or just one site?
 - b) Does the solution affect the community and the school site or just one?
 - c) Doing nothing is a viable option in some cases (past history must be known)
 - d) Some form of compromise is often an option (Win-Win is good in most cases)
- 5) What are the effects of the problem and its solution Long-term vs. Short-Term?
 - a) Will it change the culture of the school or community?
 - b) Will it destroy an old tradition or foster a new tradition?
 - c) Will it generate 'political capital' for the school district?
- 6) What are the costs/benefits of the solution?
 - a) Cost in people (figuratively speaking)?
 - b) Actual \$\$\$ cost if any in supplies/resources?
 - c) Who benefits, who is alienated—and why?
 - d) Do the pluses outweigh the negatives?

Additional Considerations:

- 1) If the decision/solution affects school policies to a significant degree, then the Board of Education should have input in the solution, e.g., vote.
- 2) The Superintendent eventually needs to make a clear-cut decision after all options are weighed and considered ('fence-straddling can buy time for only a short time!')
- 3) The Superintendent's Leadership Style/Problem Solving Ability is being defined and evaluated (with each occurrence/issue) in the process.
- 4) Bottom-line, is it good for students or bad for students?? (Simple, but many times a tie-breaker!)

Appendix D

| Vignette A: A parent has called the superintendent's office, spoken with you, and relayed a concern about the music that was played before the football game on Friday night. The parent said the lyrics were offensive and was appalled that you would let the music be played. The music contained racial slurs and vulgar language. | | | |
|--|---|--|--|
| Attribute of Administrative Mindfulness | Subject A | Subject B | Subject C |
| Preoccupied with failure – constantly scan the organization for problems large and small, mostly small; | "I would wonder why I didn't notice it because I'm at the game." Subject A reflects immediately on how this incident could have occurred on his watch. Many times, the superintendent knows of the issue before the call. | Often before called with a concern or complaint, the superintendent would know about it from someone inside the team. The culture is that the superintendent would want to know about issues. | Not observed |
| Reluctant to accept simplifications – seek to understand the subtleties of situations; | Asserts that blame is never placed initially as the incident may not have actually happened. Apologizing to the parent for the situation is not admitting the situation occurred, but sets the groundwork for understanding more about the situation. | "I am going to have to look into this and I will get back with you." | It is very important to get all the information as there are "lots of pieces missing in this puzzle." |
| Sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations | "I always just immediately say, wow! Thank you for making me aware of the situation." "In this job you can't have an ego. You have to be confident, but you can't have an ego because there is always someone who knows more than you and wants to coach you up." | This particular situation had happened twice in the school year. "We don't have people out there ... playing vulgar music on purpose ... there is a process that has broken down." Superintendent asked principals of all secondary sites to share their "new plan of how you are going to manage music at your activities." | "I would contact the people that I was going to put her in contact with, I mean I would contact them first and let them know." Let the person consider their role, whether they approved it, and whether they can defend it. |
| Committed to resilience – be strong and flexible to cope with any negative outcomes that emerge | To the parent: "...thanks so much for making me aware of this and I am so sorry we have this situation." Would ask the parent for specific details and take notes to assist with investigation of the situation. | If this did in fact occur, "I would get back with this parent and I would say, you know what, that was wrong and it shouldn't have happened and we had a process that broke down and here is the new procedure so we can avert this from happening in the future." | "Understand that there are certain issues that may need a little extra attention; be aware of potential negative consequences; and understand the concerns of the person making the complaint." |
| Deferring to expertise – choose the best person for the work, regardless of title or rank | An expert DJ has been hired and he is asked and is able to choose music without these lyrics. I would ask him, "Did this really happen?" If so, "How did it happen?" | "I would contact the coordinator of that particular activity and ask if he was aware of the situation." | "My initial response would be to ask had the person spoken to the person closest to the issue – the band director, athletic director or principal." |

Appendix E

| Vignette B: | | | |
|---|---|--|---|
| <p>On a Friday evening, a teacher employed by the district is cited for driving under the influence. The Chief of Police notifies you of the situation late at night. You have not dealt with a situation like this previously. You know that a superintendent in a nearby district had a similar situation about two years ago; however, that superintendent has made some questionable decisions recently and is engaged in challenging discussions with the school board of that district.</p> | | | |
| Attribute of Administrative Mindfulness | Subject A | Subject B | Subject C |
| Preoccupied with failure – constantly scan the organization for problems large and small, mostly small; | Contact the teacher's principal to make that person aware. | Contact the principal to make him aware; then send a very generic email to the board to make them aware | Not Observed |
| Reluctant to accept simplifications – seek to understand the subtleties of situations; | Try to get as much information as possible. | Not Observed | Get specific information and details so that incorrect assumptions are not made. "What has this person allegedly done and how do we know?" |
| Sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations | Not Observed | Practice of automatically suspending personnel with pay in situations like this; any incident that could jeopardize their relationship with students or with parents | Would notify board president with general information, but be cognizant that there could be a board hearing and not provide too much information that would negatively affect that process. |
| Committed to resilience – be strong and flexible to cope with any negative outcomes that emerge | Not Observed | Not Observed | Not Observed |
| Deferring to expertise – choose the best person for the work, regardless of title or rank | Contact the Human Resources director who will "give me some good advice." | First contact would be assistant superintendent of personnel to make him aware; contact the district's attorney | Contact the school district's attorney for legal advice |

Appendix F

| Vignette C: | | | |
|---|---|--|---|
| A nearby district is highlighted in the paper for their exceptional fine arts program. In your district, you have a leader who is struggling in this area. Two board members mention to you that they are concerned that the district is not keeping pace in fine arts with the neighboring district. | | | |
| Attribute of Administrative Mindfulness | Subject A | Subject B | Subject C |
| Preoccupied with failure – constantly scan the organization for problems large and small, mostly small; | “I need to pay attention to the two board members because it is not even one member out of five – it is two.” | “Well, the first that occurs to me, are the two board members right?” | “I would like to know more about the culture of the district that has the exceptional fine arts program. What has helped to lay the foundation there to help create that situation?” |
| Reluctant to accept simplifications – seek to understand the subtleties of situations; | “I am going to need to spend some time with the board members and figure out exactly what are there concerns.” | “If I didn’t feel they were accurate, I would listen and respect their perception. I either have to change their perception with data | “They didn’t just do this overnight and it is highly unlikely that one individual is totally one hundred percent responsible. There would have to be other people involved here to reach this level of excellence.” |
| Sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations | “We each have our own perspective of what is exceptional so I would need more information out of the paper about what made it so exceptional.” “We may need to reallocated some funds if push comes to shove.” | “I don’t think it does anybody any good to throw a content coordinator or a leader under the bus so that you look pretty good in front of your board until you are ready to take some action.” | “So, if you really want to make a commitment to try to emulate that program, we need to know where to start. What are we getting into and what resources are we going to need?” |
| Committed to resilience – be strong and flexible to cope with any negative outcomes that emerge | Not observed | “This is a leadership question. I would first evaluate ... do I have the same issues. If I do, I would be able to talk to these board members and say I recognize what you are saying and here are the things we are doing that are in place to deal with that concern.” | Not observed |
| Deferring to expertise – choose the best person for the work, regardless of title or rank | “Have we talked to whoever is in charge of their fine arts program about what makes it so wonderful?” “Have we visited this district to see what makes it exceptional?” | Not observed | “I would probably call my counterpart in that district and say, ‘Look you have an exceptional program and hats off to you. Kudos to your district. Can you share some things with me that you do?’” |

Appendix G

| Vignette D: | | | |
|---|--|---|---|
| You have been asked by a board member to interview a friend of the board member's family for a teaching vacancy. The board member says the person is an outstanding candidate. A team of principals and central office administrators interviews the person. You are not included in the interview team. The team feels strongly the person is not a good fit for teaching in the district. | | | |
| Attribute of Administrative Mindfulness | Subject A | Subject B | Subject C |
| Preoccupied with failure – constantly scan the organization for problems large and small, mostly small; | Not observed | Not observed | Not observed |
| Reluctant to accept simplifications – seek to understand the subtleties of situations; | Not observed | Not observed | “I think you are a dedicated school board member. You would never ask me to do that. The only thing I will guarantee you is that the family member will get an interview and it is probably not in either one of our best interest for me to be part of that interview team.” |
| Sensitive to operations – detect problems, make continuous improvements, never lose sight of day-to-day operations | “I don't spend a lot of time on this. I just say, I will be happy to forward your friend's name to our principals and let him that know that this person is interested in a biology position or 7 th grade math or whatever.” | “I will facilitate getting them an interview but I won't ever require anybody to hire somebody.” | “I am very up front with the board member and I tell them, you know I am not going to guarantee anything. I don't think you would expect me to do that.” |
| Committed to resilience – be strong and flexible to cope with any negative outcomes that emerge | “I am more than happy to send names on and ask the principals to take a look, but that is really all I can do for you.” | “I would say, you have to do that because it is not good for you and it is not good for the principal if I say hire somebody because if it doesn't work out neither one of you are going to be happy people.” | “They (the interview team) should not fear consequences of what comes out of that interview process. This one is on me. You know I have asked you to do it, and I am comfortable with whatever you make and I will support your decision.” |
| Deferring to expertise – choose the best person for the work, regardless of title or rank | “Have we talked to whoever is in charge of their fine arts program about what makes it so wonderful?” “Have we visited this district to see what makes it exceptional?” | “When my principals are posting vacancies, I might put out an email and say here is somebody that you might want to talk to.”” | “That (the interview team) should be a team of other administrators that actually conduct the interview and you know I am going to tell them to treat this person just like they would any other person.” |



**Institutional Review Board for the Protection of Human Subjects
Approval of Initial Submission – Expedited Review – AP01**

Date: February 09, 2015

IRB#: 5189

Principal Investigator: Amy Jeanne Fichtner

Approval Date: 02/09/2015

Expiration Date: 01/31/2016

Study Title: Choices: An exploratory study of the decision making behaviors of school superintendents

Expedited Category: 6 & 7

Collection/Use of PHI: No

On behalf of the Institutional Review Board (IRB), I have reviewed and granted expedited approval of the above-referenced research study. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,



Aimee Franklin, Ph.D.
Chair, Institutional Review Board

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