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# Elementary Principals Decision-Making Process During Crisis Situations In One Northern New Jersey District

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ELEMENTARY PRINCIPALS DECISION-MAKING PROCESS  
DURING CRISIS SITUATIONS IN ONE NORTHERN NEW JERSEY DISTRICT

BY

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Submitted in Partial Fulfillment  
of the Requirements for the Degree  
Doctorate in K-12 School Administration  
Seton Hall University

2011

## ABSTRACT

The purpose of this qualitative study was to investigate how school administrators respond during a crisis. Relevant research pertaining to crisis decision-making will be presented, focusing on the three steps of crisis decision theory (a) assessing the severity of the negative event (b) determining response options, and (c) evaluating response options (Sweeny, 2008) during crisis situations. This is the first time crisis decision theory will be used to explore how school leaders respond to a crisis. Critical Incident Technique (CIT) (Flanagan, 1954) was used as the investigative framework with the improved credibility checks established by Butterfield et al. (2005). Following the guidelines set by the CIT method, a one-to-one interview with school administrators was recorded and transcribed as they recalled a crisis event and how they responded. Ten elementary school principals from a northern New Jersey district participated in the study. Through content analysis, a coding technique was used for patterns of behavior that either reflected the three steps of crisis decision theory or not. Administrators tend to evaluate their options and choose the best option related to the resources available to them. Both direct and indirect consequences are evaluated to determine if their response will affect other areas in their life and how their decision will impact others. Administrators do not leave crisis situations empty-handed, new learning occurs at both the personal and district levels. Overall, crisis decision theory is a strong indicator of the rational thinking process administrators experience as they respond to crisis situations.

## ACKNOWLEDGEMENTS

I wish to thank Dr. Gutmore, my mentor, for his support, clear insights, and encouragement throughout my research. Thank you also to my committee members, Dr. Walker, Dr. Nicosia and Dr. Parker, for your diligence and support through this process. Dr. Nicosia your feedback helped me to focus on the most important elements of this paper. Dr. Parker, I appreciate the time you took in listening to my interview tapes and ensuring I was staying within the parameters of the interview guide.

It is also with a full heart that I show a deep appreciation to all the members of Cohort Thirteen. I doubt that there has ever been a group of strangers who came together as a supporting family as quickly as we did. Together we made it through the trials and tribulations of this doctorate program. Knowing that it is through the collective that we were all so successful speaks to each of you. Michael and Maria, I will never forget the many hours spent in the library together as we prepared for our exams and papers. Go Team M! Thank you.

This research would not have been possible without the support and cooperation from the elementary principals who were willing to give me their time and share their experiences. I thoroughly enjoyed each interview and I appreciated the sharing of their expertise.

## DEDICATION

Growing up at the Mault dinner table the conversation would inevitably end each night by discussing the importance of education. My father, Gerald Xavier Mault, was a self-taught man who loved to read, loved history, and understood that education was the key to his children's future success. This was further emphasized when after being widowed, he married Helen, who modeled for me the joys of being an educator. Together they planted a seed that created a strong rooted desire for me to continue with my education and become a teacher. As the years progressed and new opportunities arose to go back to school and become an administrator they were fully supportive of my efforts both emotionally and financially. It is through their continued generosity that I was able to enter and complete this doctorate program. My gratitude to them both knows no bounds, and it is my goal to continue their message of the importance of education to my own children and to the children I encounter on a daily basis. In that way, their legacy will continue.

I would also like to dedicate this dissertation to my loving husband, David and to my two beautiful daughters, Marykate and Tricia. You have been amazing through this entire process through your encouragement, love, and willingness to let me spend hours away from home at the library or at the kitchen table. And to all my extended family, the Mault family, Berman family, the Torley families, the Loftus family, the Tasetano family, and the Perrone/Svec family, I am surrounded by people whom I admire and love...a blessed life indeed.

Zhen, Shan, Ren!

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## Chapter I

### THE PROBLEM AND PROCEDURES

#### **Introduction**

Crisis happens. It affects corporations and families, houses of worship, and government agencies (Barton, 1993). Crises happen in schools. Regardless of how a school administrator strives to ensure a healthy and safe school environment, the “ills” found in society eventually appear within every school. Whether the crisis is financial (budgetary cuts), H1N1 virus, a missing student, fire within a classroom, bursting pipes, or other unexpected events, principals are required to make decisions when crises hit. For Chalmette High School principal, Wayne Warner and former assistant Cookie Mundt, their high school located in Louisiana’s St. Bernard Parish, 15 miles east of New Orleans, became refuge for over 1,500 men, women and children during the aftermath of Hurricane Katrina (Elliot & Taylor, 2006). Constant decisions had to be made over the 5 days to keep families warm, watered and fed. Organizations influence and are influenced by the environments in which they exist (Johnson & Fauske, 2000). Therefore, it is essential that when a crisis does occur, a school administrator must respond by making quick, accurate decisions related to the intensity of the crisis in order to bring back a level of safety and a level of equilibrium to the school environment. Pearson and Clair (1998) state that crisis management efforts are effective when operations are sustained or resumed, organizational and external stakeholder losses are minimized, and learning occurs so that lessons are transferred to future incidents.

## **Background and Rational**

An organizational crisis, such as a school emergency, is “a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly” (Pearson & Clair, 1998, p. 60). School emergencies can happen at any time before, during or after school. Whether they take place on the school grounds or off school grounds the school administrator must still deal with the event. Klinger (2008) cites (Castro-Blanco, 2000), “Most crisis involving children and adolescents either occur at school, are associated with school, or are first detected at school (p.273).” It must also be determined how many students or staff members are involved. School administrators must determine what type of impact is taking place within the school and what the level of severity is associated with the event. The longer it takes a school administrator to make a decision during a crisis the more serious the situation can become.

The most severe crises and the proper response to those crises can be found in the school crisis management plans. However, there are countless crises or negative events that do not fall under any specific category within the crisis management protocol. In the winter of 2010, the New Jersey Governor, Chris Christie, made enormous cuts to district budgets drastically reducing or eliminating state aid. For most school districts this meant a reduction of funding in millions of dollars. Districts throughout the state were not expecting this financial crisis. Planners cannot predict nor prepare for all possible events that will affect their schools; “Each incident is unique, and even the most comprehensive plans cannot anticipate all the possible scenarios and effects of crisis in schools” (Knox & Roberts, 2005, p. 93). Most organizations do not possess the resources to develop

multiple plans to cover all possible crisis situations (Krauss, 1998). Then it is up to the school administrator to determine the correct response that does not have a prescribed procedure. The caution that must be taken is that administrators must be cognizant of their decisions over time and the impact to the organization. As administrators make decisions over time the end result affects the organization's behavior.

### **Statement of the Problem**

The purpose of this study is to examine and explore how a group of principals make decisions in a time of crisis. A conceptual framework was developed to address three research questions: (a) What are the decision processes that occur when school administrators respond to a crisis? (b) What are the factors that predict response choices? (c) How do school administrators select a response when the consequences of that response are uncertain? Crisis decision theory, a variant of coping and decision theory, provides a useful lens for making sense of these processes.

### **Significance of the Study**

This is an exploratory empirical study, which will determine how school administrators respond during a crisis. Relevant research pertaining to crisis decision making will be presented, focusing on the three steps of crisis decision theory: (a) assessing the severity of the negative event, (b) determining response options, and (c) evaluating response options (Sweeny, 2008) during crisis situations. Crisis decision theory predicts responses to events of all levels of severity (Sweeny, 2008). Sweeny states "some crisis have more severe consequences than others, but crisis decisions theory recognizes that even relatively inconsequential negative events may require considerable attention at the time they occur (p. 61)." Sweeny also mentions that this theory can be

used in different domains. This is the first time it will be used to explore how school leaders respond to a crisis.

A crisis has the potential to be a negative event or a positive opportunity for change and growth that has the potential to strengthen an organization (Pearson & Clair, 1998). When a crisis occurs decisions have to be made quickly. Whether the administrator takes the time to assess the crisis, determine options, listen to all available information, or make a quick decision can determine all.

The methodology used in this study encompasses Critical Incident Technique (CIT) with improved credibility checks established by Butterfield, Borgen, Amundson, and Maglio (2005) using their Enhanced Critical Incident Technique (ECIT) research methodology. The nine ECIT credibility checks will be used to increase the trustworthiness of the results of this CIT study. CIT is being used as a framework for this study because it has been shown by Woolsey (1986) and Butterfield et al. (2005) to “encompass factual happenings, qualities or attributes, not just critical incidents...its capacity to explore differences or turning points...its utility as both a foundational/exploratory tool in the early stages of research, and its role in building theories or models” (Butterfield et al., 2009, p. 266). Following the guidelines set by the CIT method, a one-to-one interview with school administrators will be recorded and transcribed as they recall a crisis event and how they responded. Through content analysis, a coding technique will be used for patterns of behavior that will either reflect the three steps of crisis decision theory or not. The use of CIT has successfully been applied in analyzing education and teaching [Alastuey, Justice, Weeks, & Hardy, 2005; Angelides, 2001; Rous, 2004; St. Germain & Quinn, 2005; Yariv & Coleman, 2005].

## Conceptual Framework

CIT has been used as an action-oriented assessment method since 1954. John Flanagan developed the method to analyze aviation incidents that were either successful or a failure and to determine the specific behaviors that led to positive or negative results (Hettlage & Steinlin, 2006). The CIT method began as a robust qualitative method and continues to be recognized as an effective exploratory and investigative tool (Butterfield et al., 2005; Chell, 1998; Woolsey, 1986). Butterfield et al. (2005) stated, “the researcher is the key instrument of data collection; data are collected as words through interviewing, participant observation, and/or qualitative open-ended questions; data analysis is done inductively; and the focus is on participants’ perspectives (p. 482).” This method has been used in many disciplines including counseling, nursing, psychology, education, job analysis, marketing social work, and organizational learning (Butterfield et al., 2009).

CIT is a notable qualitative research method that has the capacity to be used as a formative method of research in the education field. It has the capacity to promote or detract from the effective performance of educators as they execute administrative tasks or as they experience interactions within the school setting. Educators have discrete knowledge within their profession. CIT is able to explore their practice through eliciting self-reflection via interview in an effort to determine the strategies used within their daily school experience. Data collection is primarily completed through interviews, either in person (individually or in groups). Interviews can also be conducted by telephone or video conferencing. Through determining the frame of reference of administrators being interviewed, categories can be established and defined by the researcher (Butterfield et al., 2009). In this study CIT will be used to identify school administrators’ responses in

decision-making during a crisis. This study advances existing knowledge by determining if school administrators respond to crisis correlated to stages of crisis decision theory and to build on previous studies that used CIT in the area of decision-making by school leaders.

### **Limitations**

In 1986, Fink used medical terms to describe the four stages of crisis management: first the prodromal (warning or pre-crisis) crisis stage, then entering into the acute crisis stage, chronic crisis stage, and finally the crisis resolution stage. This study will be limited to focusing on how elementary principals respond to crisis and make decisions during times of crisis. This response stage takes place during the acute crisis stage. Within the acute crisis stage the person or persons in charge must respond.

Another limitation in the study is associated with participation in the interview process as a voluntary act. Those interviewed will be from one district and all those interviewed will be school leaders at the elementary school level. There is an inherent limitation to self-reporting.

Additionally, in using aspects of the ECIT the researcher has chosen not to use the wish list component of the method. The wish list allows the interviewees to describe people, supports, information, and programs that were not available during the timeframe of the experience being described but wished they had been accessible. The researcher chose to focus on only those components that existed during the time of the crisis the administrator shared.

Although it is clearly understood by this researcher the importance of planning for crises within schools, this study will not include the process or procedures involved in the creation of school crisis management plans. Additionally, the research is limited to how administrators address crisis situations independently and not as a member of a crisis management team.

### **Delimitations**

The selection of one northern New Jersey district with a District Factor Group of CD delimits the study. In addition, this study is also delimited as only principals responsible for K-5 elementary schools are surveyed.

### **Definition of Terms**

For the purpose of this study, the major terms will be defined as follows:

**Crisis.** Throughout this study the word crisis will be used. Scholars have struggled to find an acceptable definition of the term crisis. Hermann (1963) defines a crisis to be (a) a major threat to system survival with (b) little time to respond. Crisis is frequently used interchangeably with the notion of threat or adversity. Crisis implies a perception that an individual or set of individuals faces a potentially negative outcome unless some type of corrective action is taken (Dutton, 1986). A crisis is an unstable or crucial time or state of affairs in which a decisive change is impending (Merriam-Webster, 2010). During a crisis, decision-making tends to be more exclusive, focused in one leader or small group, than inclusive (Jenkins, 2009). Sayegh, Anthony, and Perrewe, (2004) definition of crisis is most relevant, "A crisis is a major, unfamiliar, and unusual situation for the manager that requires a rapid decision. It is an unexpected event in that the manager has not had sufficient time to prepare for it. Finally, it is a situation that has the



potential to result in major consequences for the organization and/or its members (p. 183).”

**Perception.** Perception will be defined in this research as beliefs about causes, immediate or intuitive recognition of a problem, and discernment of what the truth is within a situation. In psychology, perception is the mental processes by which intellectual, sensory, and emotional data are organized logically or meaningfully (McGraw-Hill Concise Dictionary of Modern Medicine, 2002).

**Tacit Knowledge.** Tacit knowledge is the accumulation of practical knowledge gained from experience and reflected upon and plays an important role in the development of schemas (Wassink, Slegers, & Imants, 2003). A United States Army Research Institute Technical Report (1994) describes tacit knowledge as having three characteristics which include procedural in structure, relevant to the attainment of goals, and acquired with little help from others. It allows individuals to adapt, select, and shape their environments. Related to decision-making, they also state it is action-oriented; taking the form of “knowing how” rather than “knowing that.” If a decision must be made and rests completely on the school leader to make, tacit knowledge may make the difference between what works and what fails (St. Germain & Quinn, 2005). Since tacit knowledge is acquired through the reflection of past experiences, administrators who are well versed in making decisions on a daily basis have the opportunity to tap into that knowledge to guide them as they face new events or even crisis situations.

### **Organization of the Study**

Chapter I presents the problem to be studied: (a) What are the decision processes that occur when school administrators respond to a crisis? (b) What are the factors that

predict response choices? (c) How do school administrators select a response when the consequences of that response are uncertain? Crisis decision theory, a variant of coping and decision theory, provides a useful lens for making sense of these processes. Chapter II contains a Literature Review that focuses on current research on crisis decision-making and crisis management models. Chapter III contains a full description of the CIT method with enhanced ECIT credibility checks used in this study to evaluate the responses of ten elementary principals. Chapter IV includes a presentation and analysis of the data collected. Chapter V summarizes the study; offer conclusions and recommendations for policy, practice, and future study.

## Chapter II

### REVIEW OF LITERATURE

#### **Introduction**

This chapter summarizes the current research on crisis decision-making. It is separated into several sections, decision-making in times of crisis, Critical Incident Technique (CIT), strengths and advantages of the CIT method, drawbacks and limitations to CIT, CIT in education, and principals and decision-making. Additionally, the nine ECIT credibility checks will be described. There are three thematic areas to be discussed and reviewed within this section: decision-making in times of crisis, education research using critical incident technique, and decision-making by principals.

#### **Decision-Making in Times of Crisis**

In 1982, Johnson & Johnson dealt with a complex multinational corporation crisis when it was discovered that one of its well-known and trusted products, Tylenol, had been injected with cyanide. Many researchers agree that this crisis marks the initial response of scholars and theorists in management studies to evaluate and establish a deeper understanding of the crisis management process [Barton, 1993; Larson & Fowler, 2009; Pearson & Mitroff, 1993].

Early research on crisis management focused on a crisis situation as being an event of great magnitude. Since then, a countless number of devastating events have followed, such as the shootings at Columbine High School, the collapse of the World Trade Center Towers, the flooding and destruction caused by Hurricane Katrina, and most recently the coal mine explosion in West Virginia. The need to understand all

aspects of crisis management has never been greater (Larson & Fowler, 2009). The ways in which researchers have engaged in the process of studying crisis management has been diverse because the nature of organizational crisis crosses disciplines.

Pearson and Clair (1998) using psychological, social-political, and technological-structural research perspectives established a model for both success and failure components as outcomes of the crisis management process. The acknowledgement of both “good and bad” emerging from crisis releases the need for leaders quick reactions to deny or falsify the reality that a crisis has taken place within their organization. Looking specifically at the decision making process they concluded that a failure outcome in decision making happens when the leaders are slow in responding to a decision because of internal conflicts or extra organizational constraints. Success is achieved when decision-making is grounded in facts and not fantasy driven (Pearson & Clair, 1998). Within all aspects of managing a crisis there will be successful and failure components. It is up to leaders within organizations to embrace that reality, so they can look openly at the crisis and learn from the experience.

### **Conceptual Model of Decision-Making Under Crisis**

During times of normal conditions, management literature on decision theory has been based on rational, cognitive, and behavioral aspects. Developing theories on making decisions during high stress emotion-packed events is lacking. Sayegh et al. (2004), created a conceptual model of decision-making under crisis to incorporate the roles of emotion and tacit knowledge in intuitive decision-making of leaders under crisis conditions (see Figure 1).

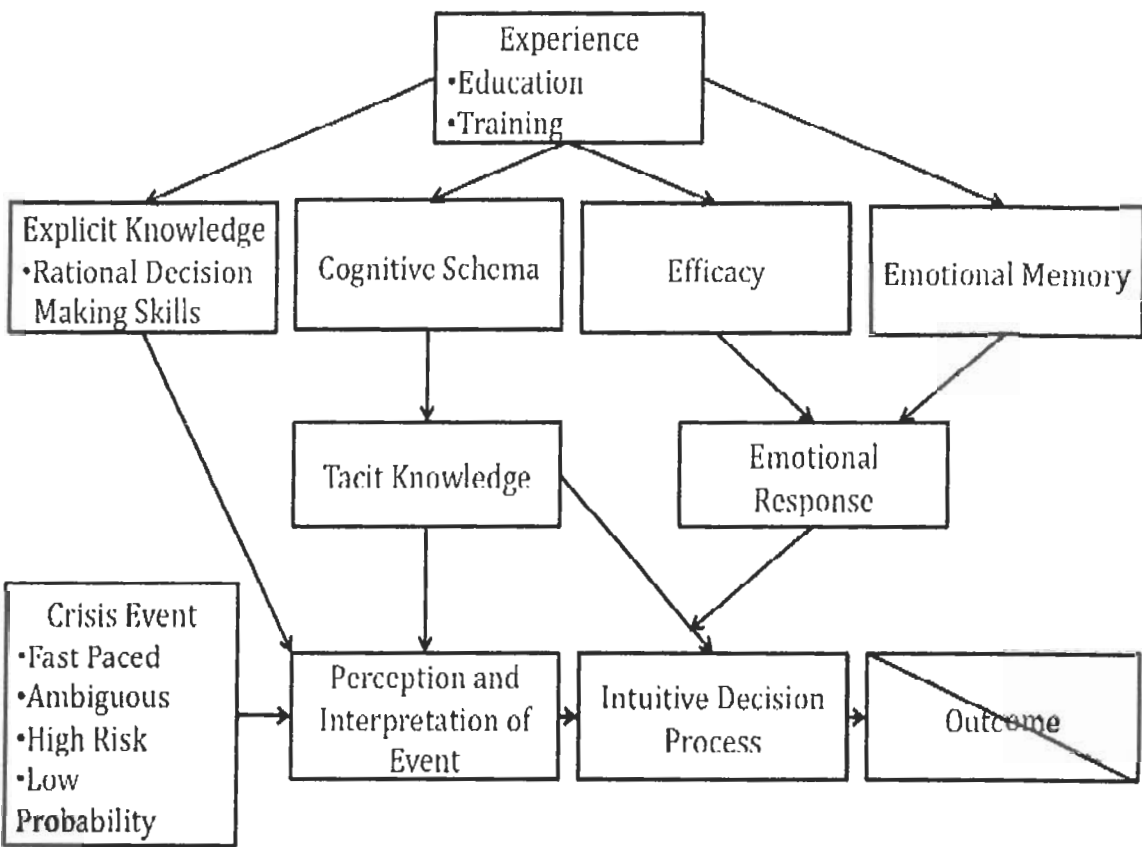


Figure 1. Managerial decision-making under crisis.

This humanistic model embodies individual traits, cognitive mechanisms, and the important roles of tacit knowledge and emotions. Specifically, they argue for a connection between efficacy and emotional memory as key components towards the creation of an emotional response in decision-making. Along with explicit knowledge and tacit knowledge, gained from past experience and reflection, a leader is more able to perceive and interpret the crisis event accurately and is then capable of making a decision towards the final outcome.

Researchers at the Center for Public Leadership at Harvard University's John F. Kennedy School of Government have developed a tool to predict the efficacy of leaders. Their research shows that leaders must be able to assess information and make decisions quickly for the successful resolution of a crisis. Response options are based on using criteria to evaluate the best course of action and making recommendations or taking action as a result (Sweeny, 2008). Efficacy relies upon the motivation to lead when faced with a crisis, the willingness to take on the role as leader, and perform decision-making using intelligence, divergent thinking and learning goal orientation (i.e. open-mindedness, flexibility) (Hadley, Pittinsky, Sommer, Zhu, 2007) (see Figure 2).

With a strong sense of self-efficacy a school leader may be more effective in responding to a crisis because they possess overall confidence and a positive emotional response (Goddard, Hoy, & Hoy, 2004; Sayegh et al., 2004). Self-reporting is a limitation to the C-LEAD scale recognized by the researchers. However, the scale can be used for leadership training since it has the potential to identify in advance the capabilities of leaders so that interventions to improve efficacy can be made (Hadley et al., 2007).

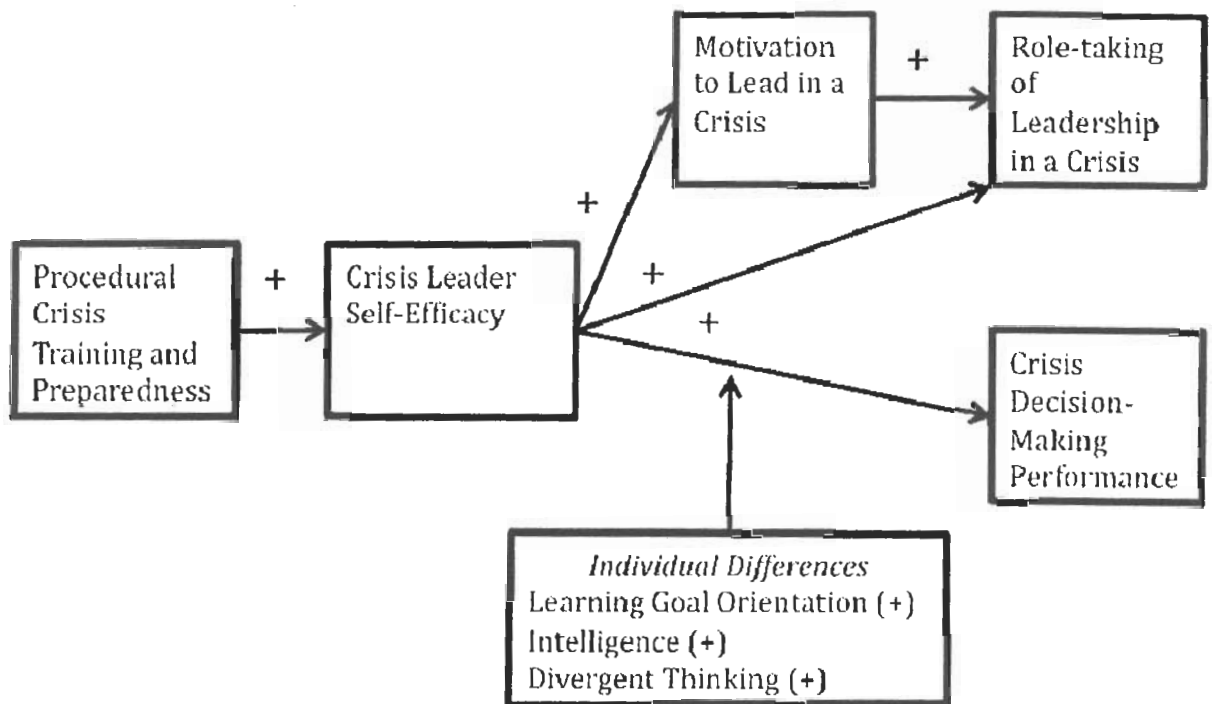


Figure 2. Theoretical model of relationships.

### **Crisis Decision Making**

In describing the decision process during the times of crisis, Sweeny (2008) asserts a three-stage process which includes (a) assessing the severity of the negative event, (b) determining response options, and (c) evaluating response options (see Figure 3).

In Stage One, the school leader must assess the severity of the crisis using several types of information including causes, comparative facts, and possible consequences. Leaders determine their response options cognizant of possible negative consequences, their own perception of the crisis, how the crisis will affect themselves or others, and the damage their response may possibly make to their reputation. Gathering information is necessary to determine the potential harm and to determine if anything of value is at risk. The higher the level of threat, the greater investment of time and energy when determining response options is required. When leaders perceive a situation to be highly important they will engage in more effortful, time-consuming, and complex decision-making strategies. When a leader determines the situation is not a threat the response chosen will be the one they think of first or the one with the least effort to perform (Sweeny, 2008).

Information about the cause may be tenuous, inaccurate, or confusing. A determination of whether the crisis was caused by the school leader or an external agent plays a part in how the school leader addresses the crisis. Sweeny (2008) stipulates that if the leader perceives the crisis to be caused by them there is a greater sense of responsibility for the crisis, which intensifies perceptions of the severity of negative



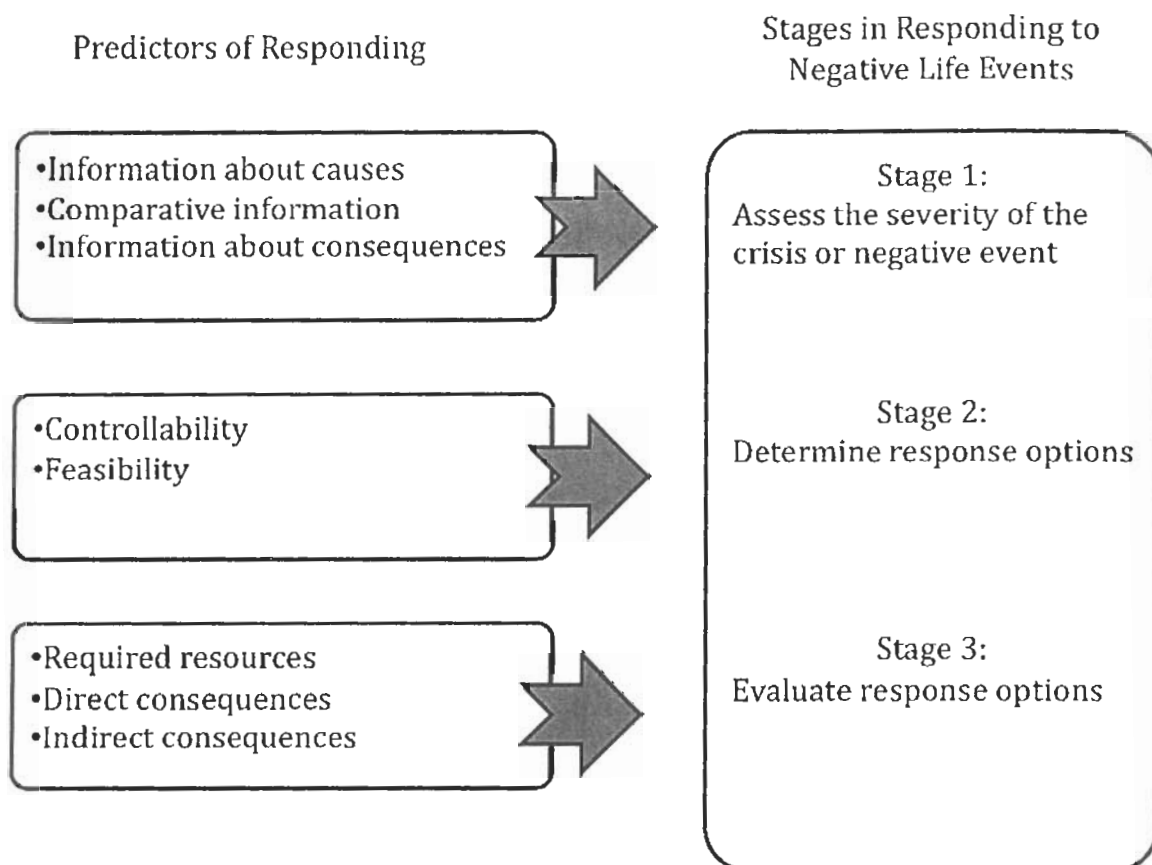


Figure 3. Crisis decision theory.

consequences. In order to move forward through the other stages, a judgment must be made to determine the level of severity (Sweeny, 2008).

Comparative information can manifest in different ways to assess the severity of a crisis. Whether the current situation is compared to relevant schemas, previous crisis outcomes, or other leader's situations information can be gained through the process. Sweeny states, "that the perceived severity of an event (i.e., crisis), along with the specific appraisals that contribute to perceptions of severity, plays an important role in predicting the types of responses people choose" (Sweeny, 2008, p. 63). Evaluating possible consequences assists by differentiating what the end result might be and how others or the school leader may be affected by the response to the crisis.

In Stage Two, school leaders must determine available response options, which may be limited by their ability to control outcomes and the feasibility of which response is chosen. School leaders may choose *active* response options if they perceive negative outcomes as being avoidable, or *passive* response options if negative outcomes are unavoidable. School leaders may also believe they have control over the crisis when in fact they may not. The amount of resources such as time, money, social support, or the ability to take the required actions additionally limits response options (Sweeny, 2008).

Evaluating response options, in stage three, initiates the process of choosing the best response. This is the step when pros and cons of each generated option are taken under consideration. Sweeny (2008) states,

People consider the resources required to engage in a response and the direct and indirect consequences of each response option to determine the best response. Direct consequences include the efficacy of a response

for improving the problem at hand, the magnitude of the potential improvement, and the reversibility of the response's effects. Indirect consequences of a response include, from most important to least important, potential emotional consequences, self-presentational consequences, consequences for other areas of life, and consequences of others (p. 70).

Sweeny recognizes a limitation to this theory based on its cognitive and rational aspects since research has shown irrational or emotional responses may also take place during crisis decision-making (Sayegh et al., 2004). Tacit knowledge is represented as an important aspect of decision-making throughout the literature [Sayegh et al., 2004; United States Army Research Institute, 1994; Wassink et al., 2003] and yet it is not clearly defined within this theory. This researcher would also stipulate that the theory is heavily swayed towards personal responses to crisis even though Sweeny (2008) states the theory has broader application.

Crisis Decision Theory and the conceptual model of Managerial Decision-Making under Crisis, have some similar traits (see Table 1). Both models recognize the need to assess or interpret a crisis and determine how to respond, and each recognize and incorporate rational and emotional aspects.

Table 1

*Comparing Crisis Decision Theory and Managerial Decision-Making under Crisis*

Characteristics Crisis Decision Theory	Characteristics Managerial Decision-Making under Crisis
Assess the severity of the crisis or negative event	Perception and Interpretation of Event
Determine Response Options	Intuitive Decision Process
Evaluate Response Options	Outcome (success/failure)

To further analyze the similarities between the two models it is important to note that when a crisis takes place an administrator must first assess the severity of the crisis. This is true for both models. In *Managerial Decision-Making under Crisis* the person responsible for dealing with the crisis will first perceive and then interpret the event. This model incorporates both explicit knowledge and tacit knowledge into how the crisis is interpreted. What prior experience an administrator possesses is tapped into during the interpretation of the event.

In the Crisis Decision Theory model perception of the event is also a key element. Sweeny (2008) states, "For assessing the severity, the important cause is the one the individual perceives. People assess negative events according to their perception of the situation (p. 63)." Whether their assessment of the cause is accurate or not, their actions will follow their perception of what caused the crisis to take place. This model requires the administrator to determine the information about the cause, make comparative decisions based on previous schemas, imagined alternative outcomes and comparing colleagues' similar experiences. Additionally, administrators will take into consideration the severity of the crisis and the possible negative consequences that might take place.

Once an administrator acknowledges the crisis it then calls for a response. The *Managerial Decision-Making* model describes this part of the process as Intuitive Decision Process incorporating both tacit knowledge and an emotional response. Here the administrator will access prior experiences and practical knowledge to formulate a response. Emotions also play an important role. Current research has shown that the traditional model of decision-making described as rational thought devoid of emotion is false. Emotions bond us to our social environment and are conducive to making better

ethical decisions (Sayegh et al., 2004). The intuitive nature of this stage is based upon the administrator's prior knowledge and emotional response to the crisis event.

The Crisis Decision Theory model identifies the response stage through the question, "What can I do about this problem?" Basically, an action plan must be created. This model states that the plan takes into consideration the perception of control the administrator has related to negative outcomes and the ability of the administrator to determine what resources are available in responding and if the response is feasible. This is an important distinction between the two models. Whereas, the Managerial Decision-Making model incorporates the influence of emotions into decision making during times of crisis, the Crisis Decision Theory model tends to focus more on the cognitive and rational thought processes used in determining response options.

The last component for the Managerial Decision-Making model is the final outcome. Here the administrator assesses whether the response to the crisis led to a successful or failing conclusion. The model contends that the essential element of the crisis is the way in which the administrator copes with the crisis. "We contend that the manager who copes well through a crisis will have more success than failure, but will be able to more quickly recover from failures, grow from the lessons, and ultimately maintain the survival and viability of the organization and its people (Sayegh et al., 2004, p. 187). Past experience can directly influence the decisions to be made in the future.

In the Crisis Decision Theory model the third stage asks the administrator to evaluate the pros and cons of each response option. In a sense the administrator must predict the outcomes of several different factors before deciding upon a course of action. Additionally, this model also takes into consideration the past experience of the

administrator because it provides information on how they responded to previous crises that could impact how they respond to the current crisis. The theory does not encompass the evaluation or the outcome of the final response.

### **Critical Incident Technique**

Critical Incident Technique (CIT) is a qualitative research method that relies on procedures to collect, analyze content, and classify observations of human behavior. In 1954, John C. Flanagan, established a procedure to determine if United States Army Air Force pilot candidates would be able to learn to fly. Flanagan (1954) states, “The critical incident technique consists of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles (p. 1).” Flanagan’s research team observed the events, or “critical incidents,” but as time passed they were able to conduct interviews with the subjects in order to analyze events (Gremier, 2004). Since that time critical incident technique has been used in many disciplines. For the purposes of this paper this researcher will be discussing the strengths and weaknesses of the technique and how CIT has been used in better understanding aspects of education.

### **Strengths and Advantages of the CIT Method**

The CIT method provides a rich source of data. It allows respondents the space and flexibility to reflect upon their experiences most relevant in the phenomenon being investigated (Gremier, 2004). There are two aspects of the critical incident analysis. The first is choosing and defining critical incidents that are crucial situational demands in a given job. The second is a reflective examination of the incident. Thus it looks at what a school leader actually thinks and it doesn’t force them into any given framework. Using

their own terms and language, respondents recall specific events related to the aspect being studied (i.e., decision-making during a crisis).

Hettlage and Steinlin (2006) offer the following list of advantages in using this qualitative research method:

1. The Critical Incident Technique is resource-oriented. It relies on the potential abilities and former experience of the interview partners and makes potentials/ideas tangible and creates awareness about resources/potentials/ideas. CIT effectively empowers the interview partner through this.
2. Interview partners feel their views and their criteria are being taken seriously as they can come up with solutions relevant to them in their context.
3. As stories are told out of the perspective of a third (invented) person the interview partner can recognize himself in this “alter ego” and support his “alter ego” with his ideas without being too exposed. The interview partner can therefore respond more openly to the story, as it is not about “him” or “her”.
4. Critical incidents are based within a context that is usually familiar to the interview partner. This contextuality gives the tool more meaning and makes the interview partners consider themselves to be part of the story.
5. Interview partners are challenged to be conceptually creative. Often CIT can be an eye-opener for them as they have to explain things or come up with solutions, which for them seemed to be trivial or have never been formulated. Tacit knowledge is activated with this method. This technique is helpful in emphasizing the features that will make a system particularly vulnerable.

6. CIT encourages the interview partners to get mentally involved in a certain situation, procedure or chain. This living through a realistic situation leads to the fact that a story is not only heard but experienced by the interview partners.
7. The critical incident technique provides rich information: The Critical Incident Technique generates honest profound answers in many cases. Through the story told in the Critical Incident Technique a high degree of affectedness can be attained. Therefore the possibility to hide behind “general” answers can be limited.
8. In contrast to surveys, Critical Incidents provide us with answers which are longer and more detailed because the Critical Incident Technique reflects a natural setting, the focus is on participant’s perspectives (p.6).

#### **Drawbacks and Limitations of the CIT Method**

Some scholars criticize the reliability and validity because respondent stories can be misunderstood or misinterpreted. Also, category labels and coding rules established by the researchers can be ambiguous. Since the research is focused on the events recalled by participants there is also a possibility of gaps in memory or recall bias. This method relies on the accurate details described by respondents and not their interpretation of what took place (Gremier, 2004).

Adding to the list of limitations, Hettlage and Steinlin (2006) stipulate the following concerns:

1. As for all qualitative methods, also in the Critical Incident Analysis no hard-quantified data is produced. Outsiders can always insist on the “weakness” of the data or on the results not being representative as they only reflect “special cases.”



2. CIT-skills alone will not be helpful in analyzing a certain field of interest as a person with in-depths knowledge of a certain field has more ability to create, conduct and analyze the Critical Incidents. The more an interviewer is an expert in a certain field the better the Critical Incidents story he/she can come up with and the easier for him/her to place the answers in the right context.
3. Critical Incidents can be time consuming and laborious as a “good story” and clear “central questions” are prerequisites for a successful use of the method. The technique’s aim is to produce dense material. To make most out of this rich material a concise analysis structure is highly needed.
4. The better the Critical Incident, the nearer it is to every day life aspects, the more interview partners can identify with the story told to them and the more useful/authentic the answers they come up with (p. 7).

#### **Enhanced Critical Incident Technique Credibility Checks**

Butterfield et al. (2005) state that current researchers strive to establish the credibility of results consistent with Flanagan’s original method since the progression of CIT has evolved over the passing of time. Within the literature a concern has arisen regarding credibility checks. There appears to be a lack of standardization to establish credibility in CIT studies. Therefore, Butterfield et al. (2005) established nine credibility checks with an additional two enhancements to the original CIT method called the Enhanced Critical Incident or ECIT. The nine credibility checks are located within Flanagan’s CIT fifth step of interpreting the data and reporting the results. The enhanced credibility checks are: audio taping interviews, interview fidelity, independent extraction of critical incidents, exhaustiveness, participation rates, placing incidents into categories

by an independent judge, cross-checking by participants, expert opinions, theoretical agreement, and reporting the results. Each of these nine credibility checks will be described in greater detail in Chapter III.

The two enhancements described by Butterfield et al. (2009) include creating a wish list of people, supports, information, programs, that participants' wish they had access to during their experience. The second enhancement allows for the researcher to include contextual questions to provide background information for the CIT data. This study used contextual questions related to the crisis decision theory but did not ask administrators about a wish list regarding the crisis event.

### **CIT in Education**

Although CIT has not been used to determine principal's decision-making process during a time of crisis, it has been used to look at other aspects of education and towards the improvement of schools. Angelides (2001) completed a case study using CIT to understand school culture. Teachers were interviewed in order to derive the norms and culture within a school by looking at "surprises" taking place within the scope of a school day. Angelides stressed that CIT does not need to focus specifically on highly tense situations. Every day experiences are valid representations of school culture and therefore worthy of being analyzed.

Sixty respondents from a teacher education program were interviewed using the CIT method to determine the reasons why they wanted to become teachers. Using a breakdown of categories created by a CIT trained panel; teaching children, time off, and working with children were the three highest ranked reasons why graduating students chose teaching as a career (Alastuey et. al., 2005). This study used a panel of experts to

categorize responses. The reliability of the panel arrived from their proficiency, experience, and awareness of technical jargon. The researcher trained the panel using the guidelines outlined by the CIT categorization process (Alastuey et. al., 2005). A weakness of this study stems from an omission of prior research used to substantiate the guidelines chosen.

The CIT method has also been used to look at principal behavior. Yariv and Coleman (2005) used this powerful qualitative technique to investigate the ways in which elementary school principals in Israel work with challenging teachers. Setting up the interview questions the researchers asked principals to give a comprehensive account identifying one teacher they perceived as being challenging. They were then asked to recall what measures they took to solve the problem. Probing questions were asked to clarify the principals' answers. The results were placed into two categories; tolerating measures and confronting measures. These two main categories were then broken down into subcategories. The end result showed that in half the cases challenging teachers remained within the school. A portion of teachers went on leave. Unfortunately, none of the teachers went through professional change. Yariv and Coleman state that they had a small sample and unsubstantiated interviews. Much of the literature regarding CIT procedures requires the researcher to show the respondents the transcriptions of the interview to validate its accuracy and to make needed adjustments. CIT is a powerful quantitative research tool that has the capability of being an effective research model when investigating educational issues.

### Principal Decision-Making

Tacit knowledge is a key component to principal decision-making. Polanyi (as cited in St. Germain & Quinn, 2005) was the first to distinguish tacit knowledge from Gestalt. He argued, “Tacit knowledge is not the activity of *spontaneous perception*, but the outcome of the “active shaping of experience performed in the pursuit of knowledge (p. 75).” Furthermore, Polanyi saw tacit knowledge as being incorporated within the body, a way of knowing something in a deep way, as if to dwell in things (St. Germain & Quinn, 2005). Since tacit knowledge is inherently personal, working with others to share insights and ideas may limit the amount of errors associated with decision-making during times of crisis by bringing forth a collaboration of knowledge. However, if a decision must be made and rests completely on the school leader to make, tacit knowledge may make the difference between what works and what fails (St. Germain & Quinn, 2005).

Investigating tacit knowledge in principal decision-making, St. Germain and Quinn (2005) studied the difference between expert principals compared to novice principals as they went about their daily tasks as school leaders problem-solving and making decisions. The results of their study show that expert principals engage in more if-then thinking than did novice principals. Expert principals embraced new problems to solve, while novice principals preferred to avoid them. Their research concluded that tacit knowledge is untaught, but integral to successful decision making in situations in which time is limited (i.e. crisis situations) (St. Germain & Quinn, 2005).

Wassink et al. (2003), citing Hart (1993), would stipulate that principals with a specific vision interpret and integrate a response to a problem or crisis. Knowing the social processes within the school also assists the school leader to address critical issues

as they happen. Through tacit knowledge principals are better able to address the complexities of the school environment (Wassink et al., 2003).

Tacit knowledge is not the same as perception. When a crisis occurs and a decision needs to be made, a leader must be cognizant of how their perception of the event may be skewed by their belief system, personal fears, or lack of experience (Sayegh et al., 2004). For accuracy it is essential to look at the facts surrounding the crisis. A concern found within the literature stipulates that initial interpretations regarding event perceptions made by leaders are rarely questioned (Sayegh et al., 2004). This can lead to loss of time, money, and, in extreme cases, life. If a wrong interpretation is made, all of their decisions will be based on a false image of what is actually taking place.

It is possible for school principals to avoid a wrong response by developing the cognitive capacity to frame a decision. Bolman and Deal (2008) break down the process of decision-making into four frames or mental models. By passing a situation through each of the frames all hidden qualities are revealed whether they be structural, human resource, political, or symbolic in nature.

A structural framework in terms of routines and standard practices are necessary functions of an organization such as a school. A crisis may arise if routines create an environment of complacency. Where the administrator becomes lulled into non-action and set habits blind the administrator from seeing subtle changes occurring within the school. Bolman and Deal (2008) describe this dilemma as being unresponsive by adhering too rigidly to policies and procedures or irresponsible by abdicating the responsibility to someone else. No action is taken place to avoid conflicts or concerns

that loom upon the horizon. Hoy, Gage, and Tarter (2006) describe this thought process as being mindless.

Mindfulness, on the other hand, is the ability to continuously reflect upon experiences with a lens of looking for subtle context clues and to identify slight changes within the context of events. By filtering experiences through this process administrators can heighten their awareness to possible crises upon the horizon. Mindfulness requires flexibility, vigilance, openness, and the ability to break set (Hoy et al., 2006). Mindful school leaders continuously scan for problems looking for areas of concern. They strive to adopt multiple perspectives to understand clues hidden within their organization. They are resilient after mistakes are made and defer to expertise no matter who has the right answer.

### **Summary**

This study recognizes that school leaders in times of crisis must respond. If the crisis is not represented within a crisis management plan a school leader must construct an avenue to follow. The severity of the crisis must first be assessed in order to respond appropriately. A school leader must gather information and formulate options during the creation of a meaningful response to the crisis. A school leader may use a rational approach judging the pros and cons of the many options set before them. A determination will need to be made if the option chosen will be supported with enough time to execute, money to cover expenses, social support from those involved, and the internal strength to follow through with the process.

If the school leader has a strong sense of self-efficacy his/her ability to respond will be based on the internal level of confidence held within his/her belief system. A

school leader may tap into the tacit knowledge accumulated within their life's experience. The ability of the school leader in selecting an appropriate response to a school crisis may have far-reaching results. The design, instruments, subjects and other methodological issues will be discussed in the following section.

## Chapter III

### METHODOLOGY

#### **Introduction**

The purpose of this study is to examine and explore how a group of elementary principals from a northern New Jersey public school district (district factor group CD) make decisions in a time of crisis. This is an exploratory empirical study focusing on the three steps of crisis decision theory. Critical Incident Technique (CIT), a qualitative research methodology was employed to gain insight into their experiences.

Previous research has shown that school leaders may respond to a crisis by accessing their school crisis plan although research has shown that working with just one crisis plan may be too rigid a model and that a more open-ended plan would lead more to flexibility and creative responses. This flexibility would originate from the school leader's ability to formulate a various amount of responses to the crisis and then evaluate which response would be the best solution.

This study specifically examines a theoretical explanation of how school leaders respond to a crisis using the crisis decision theory model. The proposed theory hypothesized that school leaders are able to effectively assess the severity of a crisis, determine a variety of response options and evaluate those options before executing a response. This study will examine if there are specific factors that predict response choices and if school principals select a response even when the consequences of that response are uncertain. Chapter III contains information on the population, site selection, data collection, research procedure, interview questions, and summary.



### **Population**

The subjects in this study were elementary principals in a northern school district in New Jersey. The subjects were selected because they all work within the same suburban district although their student population is diverse dependent upon which side of town their school is located. Different genders and years of experience are reflected within this sample. The elementary administrators have a range of experience as elementary school principals spanning 6 to 23 years. There are six female and four male elementary principals. Some of the principals were hired into the district with prior administrative experience while others were hired from within the district from teaching or supervisor positions. All willingly volunteered to participate within the study.

### **Site Selection**

The site selection was chosen because the district has a diverse population and is average in size compared to other New Jersey districts. The district is located approximately 30 minutes from New York City. It has a student population of approximately, 11,000 students speaking at least 65 different languages at home. In 2000, the district was designated with a district factor group (DFG) of (CD). There are eight possible designations using the following letters (A, B, CD, DE, FG, GH, I, J), A representing the lowest socio-economic districts and J representing the most affluent. DFG's were established in the state of New Jersey in 1975 (New Jersey Department of Education, 2004). The New Jersey Department of Education defines the purpose of district factor groups as the following, "the purpose of comparing students' performance on statewide assessments across demographically similar school districts. The categories are updated every ten years when the Census Bureau releases the latest Decennial Census

data (p. 1).” The 2010 census results have not yet been released which may or may not change the districts designation.

### **Research Procedure**

CIT was used as the framework research methodology for this study. ECIT credibility checks were also used to improve the trustworthiness of the results. CIT is a method which uses a set of procedures to collect, content analyze, and classify observations of human behavior (Gremier, 2004). There are five major steps described by Flanagan (as cited by Butterfield et al., 2009):

- (1) Ascertaining the general aims of the activity being studied
- (2) Making plans and setting specifications
- (3) Collecting data
- (4) Analyzing the data
- (5) Interpreting the data and reporting the results (p. 267)

In order to determine the aim of the activity two questions must be addressed: (a) what is the objective of the activity, and (b) what is the person expected to accomplish who engages in the activity? There are two ways in which to determine the aim of the activity by asking supervisors or experts related to the activity or those individuals who actually complete the work (Butterfield et al., 2005). For the purposes of this study the objective of the activity is for the elementary school principal to retrieve a memory regarding a crisis that they personally handled and responded to. The principal was asked to describe the steps they took to determine their response to solve the crisis. During this part of the interview the principal was responsible for determining the level of severity with [1] representing a crisis being the least severe and [5] representing the most severe.

Setting plans and specification is the second step. Here again Flanagan (1954) stipulates four specifications to be decided upon: (a) defining the types of situations to be observed; (b) determining the situation's relevance to the general aim; (c) understanding the extent of the effect the incident has on the general aim; and (d) deciding who will be making the observations. The elementary school principals were responsible for defining the crisis they wished to discuss, to determine the severity of the crisis, and to describe the possible responses that occurred to them. The researcher was responsible for documenting the elementary school principal's commentary through audio taping and transcription.

In step three there are different ways in which the collection of data can take place. Either an expert can observe a person complete a task or having a person recall an event from memory (Butterfield et al., 2005). Flanagan (1954), realizing it would not be possible to observe events taking place, offered four ways to recall data in the form of critical incidents: (a) individual interviews, (b) group interviews, (c) questionnaires, and (d) record forms, recording details of incidents either in narrative form or by placing a check mark beside an activity on a pre-existing list. Flanagan (as cited by Butterfield et al., 2005) did not set a rule as to how many incidents are sufficient.

In this study, individualized interviews between the researcher and the elementary school principal took place. The school principal was asked to recall a crisis that took place within the school and describe their thought process of how they responded to the crisis. When the event was fully described the researcher then asked contextual questions to elicit greater detail regarding the thought process surrounding the principal's response.

The interviews were recorded for accuracy and then transcribed. The transcriptions were then given back to each principal to inspect for accuracy and truthfulness.

Analyzing the data is the fourth step. This is the most important and difficult step since the collecting of critical incidents need to be classified. Using Butterfield et al.'s (2009) method of organizing the data manually was most effective. The interview transcripts were divided and placed into a three-ring binder with tab dividers separating each interview. The interview questions were constructed using the stages of crisis decision theory format. There were several possible responses that emerged for each question that was asked during the interview process. These different responses were then coded for each question. For example: Question 4, Section 2: In choosing your response did you feel you had enough time to make your decision? Possible responses: time to make decision, no time to make decision, time not applicable.

Each possible response for each interview question was coded with a separate number. Using the aforementioned example, the responses were coded in the following manner: 0601 time to make decision, 0602 no time to make decision, 0603 time not applicable. Once the coding transcript was completed it was used to code all interview responses. The researcher created a color scheme, blue was used to highlight the text within the transcript that answered the question. Red was used to highlight the specific code determined by the researcher that best fit the administrator's response.

Starting with the first interview, the researcher highlighted with the appropriately colored pen any text that described the first stage of the crisis decisions theory, assessing the severity of the crisis. Examples described information about causes, comparative information, and information about consequences. This process continued, as the

researcher underlined text related to controllability and feasibility of responses found within the second stage that is to determine response options. Finally, the researcher looked for evidence of the third stage evaluating response options by highlighting evidence of required resources, direct and indirect consequences. A table was created to keep track of the data by placing the examples within each stage or category.

Interpreting the data and reporting the results is the final step. Butterfield et al. (2009) established nine credibility checks which were used within this research; audio taping interviews, interview fidelity, independent extraction of critical incidents (CIs), exhaustiveness, participation rate, placing incidents into categories by an independent judge, cross-checking by participants, expert opinions, theoretical agreement, and reporting results.

### **Audio Taping Interview**

Each of the 10 interviews were audio taped and transcribed. Tape recording an interview allows for a higher degree of accuracy. The raw data of interviews are the words spoken by the subjects being interviewed. This data is essential for qualitative research. From the words captured through audio taping and then transcribed, the researcher is able to look for patterns allowing for analysis to take place (Patton, 2002).

### **Interview Fidelity**

Following Butterfield et al. (2009) recommendations the researcher followed the CIT research method, the participants were not asked leading questions nor did the researcher prompt them; the interview guide was followed exactly as listed. A member of the researcher's team agreed to listen to every fourth taped interview to ensure that the

interview guide was followed. Meaning that the words the researcher read to each interviewee was the exact wording of the questions listed in the interview guide.

## **Interview Guide**

### **Participant Information.**

1. How many years have you been an administrator?
2. Have you had any training on crisis management prior to becoming an administrator? After receiving your administrative position?

### **Description of Crisis.**

1. Many crises take place within schools. Using a scale of 1-5, five being the most severe, one being the least severe, think back to a crisis that you had to respond to, what number would you give it?
2. How would you describe what took place? Please take your time in describing the event.

### **Questions to Determine Severity of Crisis.**

- 1.1. What steps did you take to seek out information related to what happened?
- 1.2. Was the event caused by your own behavior? How so? If not, did an external agent cause the event? If so, what?
- 1.3. Did anyone influence you to determine the severity of the event? If so, how? Or did you recognize the severity immediately? Please explain.
- 1.4. Did you consult a colleague regarding the event to get their feedback? Did you consider that person to be your equal, less or more experienced than yourself? Did

you choose this person because of their knowledge base or because of your personal relationship? Please explain.

- 1.5. When you first became aware of the crisis did you perceive it to be immediately severe or did you perceive it to be neutral but it became severe over time? Please explain.
- 1.6. In thinking about the level of severity, which seems to be most true for this event, the event had the potential to affect many people, the event had the potential to affect few people deeply, or the event would touch a few lives with little impact. Please explain.
- 1.7. Did the crisis have the potential to damage your reputation? Were there any negative social consequences connected to this event? Please explain.
- 1.8. On a scale of 1-5, one representing immediate consequences, five representing far-distant consequences, where would you place the potential consequence for this crisis (1-5)? Did the timing of what consequences could occur effect your decision of what to do next? Please explain.
- 1.9. What were specific consequences you were concerned about in formulating your response to the crisis? Please explain.
- 1.10. Did you reference your past experience in dealing with crisis situations to help you respond to the current one? Please explain.

#### **Questions to Determine Response Options.**

- 2.1. Describe the process you used in formulating a response to the crisis? How did you determine the options that were available to you? Please explain.

- 2.2. Did you feel that in making your decision negative outcomes were inevitable or avoidable? Did you feel that you could control the outcome? Please explain.
- 2.3. At any point of the crisis did you feel overwhelmed by the event? Please explain.
- 2.4. In choosing your response did you feel you had enough time to make your decision? Funding? Support from superiors? Support from staff? Ability required to take the necessary actions? Please explain.
- 2.5. Was your response feasible? Please explain.
- 2.6. Did you feel in control of the outcome of your decision? Please explain.

**Questions to Evaluate Response Options.**

- 3.1. In response to the crisis did you have only one option or many? Please explain.
- 3.2. How did you evaluate your options? Please explain.
- 3.3. Would you be more likely to choose a response to a crisis that uses fewer resources or more? Please explain.
- 3.4. Regarding the following resources; money, time, energy, and strength, which would you be willing to spend first, second, third, fourth in responding to a crisis?
- 3.5. In evaluating your response to the crisis did at any point did you think about how it would affect your professional standing or job status?
- 3.6. In responding to the crisis were you aware of your emotions? What feelings did you have?
- 3.7. What were the pros and cons you reviewed before responding to the crisis, or did you feel the process happened more automatically? Please explain.



- 3.8. On a scale of 1-5, one representing little, and five representing a great deal, how much impact of how others would feel regarding your response did you take into consideration?
- 3.9. In evaluating your response to the crisis did you think about how your decision would affect other areas of your life?
- 3.10. On a scale of 1-5, one representing little, and five representing a great deal, how much impact your decision would affect others did you take into consideration?
- 3.11. Upon reflection, in the end did the crisis situation lead to new learning for you or the district? Was there both successful elements and areas where failure can be seen or felt? Please explain.
- 3.12. Did you at any time perceive of a problem in the crisis area before the crisis took place?
- 3.13. Is there anything else you would like to add?

#### **Independent Extraction of CI's**

Twenty five percent of the transcribed interviews were given to an independent individual to extract, review, and identify what they thought were the CI items. This number was established through Anderson and Nilsson's (1964, as cited in Butterfield et al., 2005) process when examining the reliability and validity of the CIT. The researcher chose a degreed educator as the independent person for this process. Once the independent person completed the extraction of the CI items a comparison was made to determine the percentage of agreement. There was a 95% agreement on all items. When items did not match the researcher discussed with the independent reader any discrepancy to resolve the difference.

### **Exhaustiveness**

A table was constructed to sort the data for each interview question in the survey. As each transcript was read and a new response appeared, the response was added to the table. This continued until all possible responses were exhausted. These responses were then coded per section.

### **Participation Rates**

In order to calculate participation rates, as per Butterfield et al. (2009) this researcher included the participant number with every CI item that was copied into the table described above. Butterfield et al., states, “By doing so, it is possible to simply count up the number of different participant numbers under each category and divide that number by the total number of participants to determine the participation rate (p. 275).”

### **Placing Incidents into Categories by an Independent Judge**

An independent person was asked to take 25 percent of the interviews and code the CI items and to place them within the categories created by the researcher. More specifically, the following procedure was undertaken. The researcher randomly chose 25% of the interviews and sent them to an independent judge, along with the category headings, operational definitions, and coding transcript, as recommended by Butterfield et al. (2009). The independent judge, an educator with a masters degree, was sent instructions to read the question responses and place each CI response into the category where the judge thought it belonged. The researcher then compared the judge’s placement of CI items into categories with the researcher’s own placement. Anderson and Nilsson (1964, as cited in Butterfield et al., 2009) suggested a match rate guideline of

80% or better for this credibility check. There was a 96% agreement between the researcher and independent judge.

### **Crosschecking by Participants**

Following Butterfield et al. (2009) procedure, a second interview was conducted with each participant through a phone call. Each participant was given a copy of his or her completed transcript to read. The purpose of the second interview is an additional credibility check which includes three parts: (a) getting input on the CI items extracted from the participant's first interview, (b) obtaining feedback regarding the categories into which they have been placed, and (c) following up on questions arising from analyzing the participant's data from the first interview.

First the participants were given a completed transcript of their interview with all possible CI items listed. The section of text used to determine how their response correlated with the crisis decision theory was highlighted in blue. The CI chosen to correspond with their response was shown in red text. Each participant was asked to review the transcript for accuracy and to determine if they wished to change any of their responses. Secondly, each participant was asked to review the code listed after each response to determine if they agreed with the selected code. The participants had the final say about the wording of their transcripts and the coding associated with their responses.

The participants and the researcher discussed any potential changes suggested by each participant. Although the participant's wishes were honored and the changes made, when the researcher disagreed with the participant's wishes a mutually agreeable solution was reached.

The second interview also gave the researcher the opportunity to discuss certain items that could have fallen into a specific category but did not have enough information. The second interview offered an opportunity to ask the participant more information about the item and code the item into the appropriate category. The participant would be told within the conversation which category the item would be placed.

### **Expert Opinions**

The eighth credibility check according to Butterfield et al. (2009) requires the submission of the categories to two or more experts in the field. This took place once the category scheme was finalized and the participant crosscheck was completed. The two experts that were chosen for this research were two certified educators. Expert One is a certified administrator responsible for training pre-certified administrators and certified administrators crisis management techniques at a state-level training facility. Expert Two is the administrator responsible for crisis management within the district being studied.

The following questions, agreed upon by both Butterfield et al. (2005) and Flanagan (1954), were asked of the experts as they reviewed the categories.

1. Do you find the categories to be useful?
  - a. Expert 1: I found the categories useful. They helped focus and clarify the information being asked by the researcher. When I felt a question might be confusing, I went back and reread the category. This then provided a focus for my answer.
  - b. Expert Two: Yes, I found the categories to be useful.
2. Are you surprised by any of the categories?

- a. Expert One: No, the categories flow in an appropriate sequence and correctly address responding to a crisis situation. Since there are four phases of crisis management (mitigation, prevention, response and recovery), I felt the categories were fitting the survey.
  - b. Expert Two: I was concerned by several questions within certain categories:
    - i. In Step One – Question #2 and #7 regarding reputation
    - ii. In Step Two – Concerns with funding/money
    - iii. In Step Three – Use of fewer or more resources
3. Do you think there is anything missing based on your experience?
- a. Expert One: One key aspect of crisis management is post analysis of a crisis by those involved. It's the equivalent of an autopsy of the event. Often it is missed, ignored or bypassed. Since you are researching the thought process of an administrator in a crisis situation, there might be some value in determining if administrators engage in a post-event analysis and if that changed the individual decision maker's thought process for future crisis situations.
  - b. Expert Two: Did not state if there were any categories missing.

### **Theoretical Agreement**

This is the most important credibility check for this research since the categories created for the structure of CI items were based upon the crisis decision-making theory. The assumption of the study is that there are three stages elementary principals experience as they make decisions and respond to a crisis. The CI items either supported

the theory or they did not. The items that did not support the theory were reviewed within the literature to discover if they represent other theories related to crisis decision-making.

### **Summary**

The purpose of this study is to examine and explore how a group of elementary principals from a northern New Jersey public school district (district factor group CD) make decisions in a time of crisis. This is an exploratory empirical study focusing on the three steps of crisis decision theory. CIT, a qualitative research methodology was employed to gain insight into their experiences. ECIT credibility checks were used to increase trustworthiness of the results of this CIT study.

Chapter IV provides the findings, analysis, and summary of the data.

## Chapter IV

### PRESENTATION AND ANALYSIS OF FINDINGS

#### **Introduction**

The purpose of this study is to examine and explore how a group of elementary principals from a northern New Jersey public school district (district factor group CD) make decisions in a time of crisis. This is an exploratory empirical study focusing on the three steps of crisis decision theory. CIT, a qualitative research methodology was employed to gain insight into their experiences. This chapter presents and analyzes these findings.

#### **Nature of the Study**

The research subject population selected for this study was comprised of ten suburban elementary principals from a northern New Jersey public school district (DFG CD). Of the 10 requests made to the principals all responded that they were willing to participate. The 10 schools that these elementary principals serve represent a diverse population of students. The interview questions asked were related to the following research questions:

1. What are the decision processes that occur when school administrators respond to a crisis?
2. What are the factors that predict response choices?
3. How do school administrators select a response when the consequences of that response are uncertain?

The research subjects were asked a series of interview questions. The interviews ranged in duration from 12 to 46 minutes as each administrator was asked 34 questions

grouped under three categories based on crisis decision theory and related to all three research questions. Additionally, there were a set of seven questions asked that pertained to initial information of their training in crisis management and other basic information pertaining to years of experience. They were also asked to choose a crisis they wished to discuss and determine the level of severity using a scale of 1 through 5, with 5 representing the most severe crisis experience they have dealt with and 1 representing the least severe. Principals then gave a clear and concise description of the crisis they had chosen to share. The second set of 12 questions asked the principals how they were able to determine the severity of the crisis. The third set of nine questions asked the research subjects how they were able to determine their response options. And the last set of 13 questions asked the principals how they were able to evaluate their response options to the crisis.

### **Background Information**

The principals were interviewed in various locations including their school environment, their homes, the researcher's home, and an outside professional development site. One interview was completed through email since the research subject was not in the local vicinity during the time frame when interviews were taking place.

The first set of five questions was asked to determine the years of experience and whether or not the principals had had crisis management training either before assuming the role as school administrator or after receiving the position. Information is also provided about the elementary principals' gender. Additionally, the research subjects gave the level of severity associated to the crisis they were about to share and a description of the event.



Table 2

*Participant Data*

Participants	Gender	Years of Experience	Crisis management training prior to becoming an administrator	Crisis management training after becoming an administrator	Level of severity of crisis
R01	Female	7	No	No	3
R02	Male	7	Yes	Yes	3
R03	Male	17	No	Yes	4
R04	Female	8	No	Yes	5
R05	Male	13	Yes	Yes	4
R06	Female	11	No	Yes	5
R07	Male	23	No	Yes	5
R08	Female	6	Yes	No	5
R09	Female	15	No	Yes	4
R10	Female	6	Yes	Yes	4

**Gender and Years of Experience**

Within this study there is an over representation of females to males. However, the median years of experience for the male participants is 15 compared to 9 years for the female participants. The averaged experience for the entire group being studied is 11 years of experience. This is significant in that no one in the study is non-tenured or new to the profession, although R01, R03, R04, and R06 chose to share a crisis that took place within the first or second year of being an administrator. This should be taken into consideration in terms of how they responded to the crisis and the decisions made.

**Crisis Management Background**

Six out of 10 elementary principals had received some type of crisis management training prior to becoming a school administrator either as a teacher or within a position

before becoming an educator, for example one principal had worked previously for the secret service. Eight out of 10 elementary principals have received some form of crisis management training after becoming a principal either from their district or from participating in professional development outside of the district. Only R01 commented that she did not receive crisis management training before or after becoming an administrator.

### **Severity of Crisis**

Crisis decision theory states that the type of event people face influences how people assess the severity of the crisis. Using a scale of 1-5, with 5 representing the most severe level of crisis and 1 representing the least level of crisis, the elementary principals were asked to think back to a crisis they had to respond to and level that crisis using the scale. Two principals gave their crisis a level of 3, four principals gave their crisis a level of 4, and four elementary principals gave their crisis a level of 5. This is significant in that eight administrators shared a crisis on the highest end of the scale in terms of their conclusions. Within the study it will be shown what parameters administrators think about in order to determine the level of severity and how they respond accordingly.

### **Types of Crisis**

All 10 elementary principals were asked to describe the crisis they responded to and what took place. A short description of each crisis follows.

R01 set the following crisis at a level 3. A parent called the principal's office concerned about the safety and welfare of her child who had been swimming the day before as part of the physical education program. While he was changing in the bathroom

older children came into the dressing room and took pictures of her son using their cell phone while he was getting dressed.

R02 set the following crisis at a level 3. A special education student belonging to the principal's building had mistakenly walked onto the wrong special education bus in the morning and was dropped off at the wrong school. The child walked several miles, on his own, without adult supervision but was eventually able to locate his own school.

R03 set the following crisis at a level 4. During a cold winters' night the pipes within the building froze and subsequently burst allowing water to flow through four floors of the school before being noticed in the morning by the custodian.

R04 set the following crisis at a level 5. At the end of a school day as dismissal was about to take place, a parent in an SUV who was parking to wait for her child's release backed into the car behind it. The driver then put the car in drive and careened through the kindergarten brick wall right into the kindergarten classroom.

R05 set the following crisis at a level 4. The school counselor became very ill at school and the principal drove her to the hospital. What was thought to be a bronchiole attack or possibly pneumonia turned out to be stage four lung cancer.

R06 set the following crisis at a level 5. Information came to this principal's attention on September 11, 2001 that two airplanes had flown into the twin towers of the World Trade Center.

R07 set the following crisis at a level 5. During recess a student ran up to the lunch aide because he had found a bullet on the playground. After the principal was informed of the situation an investigation uncovered a full clip of bullets near the playground area.

R08 set the following crisis at level 5. A first grader on anti-psychotic medication pummeled and kicked his teacher. When the principal entered the classroom the teacher was bent over in pain while another teacher was trying to pull the child out from under a table. The classroom of first graders watched from their seats.

R09 set the following crisis at a level 4. The Friday before the first day of school, teachers had just completed preparing their classrooms for the opening of school. That weekend Hurricane Floyd swept through the area creating massive flooding. This principal's school is located at the bottom of a hill. The floodwaters came through the vents and underneath the doors filling each room with several inches of water.

R10 set the following crisis at a level 4. While transforming the gym into a lunchroom the principal watched as a custodian pushed a lunch table across the gym floor not realizing that an elderly lunch aide was walking across the room. The lunch table hit the lunch aide so hard her entire body was lifted from the ground and carried upon the folded table. As the lunch table stopped she collapsed to the ground.

### **Analysis of Discussions**

#### **Decision Processes**

The first set of 10 questions asked the respondents a variety of questions to determine how they assessed the crisis and how they established for themselves the severity of crisis within their school. These questions pertain to research question number one.

**Research Question One.** What are the decision processes that occur when school administrators respond to a crisis?

According to the crisis decision theory when faced with a crisis it is necessary to first assess the severity of the event. In order to assess the severity three components must be evaluated: information about the cause of the event, comparative information and information about consequences. Table 3, Table 4, and Table 5 list the responses from the interview questions related to these areas.

### Causes

According to interview question Q1.1, all 10 elementary principals went through a process to determine the cause of the crisis. The results from Table 3 indicate that administrators were able to determine the level of severity and who or what caused the event. All but one administrator responded that the cause of the crisis came from an external event and was not caused by their actions.

Table 3

#### *Information About Causes*

Critical Decision Theory	Participant Responses to Interview Questions
Assess potential harm or severity of the event	Q1.5: 8/10 responded they considered the crisis to be immediately severe.
	Q1.3: 8/10 determined severity of event by themselves
	Q1.6: 8/10 felt the crisis could affect many people deeply
	Q1.2: 9/10 stated the crisis was caused by an external event and not because of their actions

R01 stated, "Oh, I recognized it immediately. When the mother originally called me to tell me what occurred (high school students taking pictures of her son changing from swim class) I got a sinking feeling in my stomach. Because with the technology

now a days, with the technology that those pictures could have easily gone onto the Internet.” This principal shared that in determining the level of severity she established it at a lower number because the pictures from the camera were eliminated before they could be transferred to a computer. She stated that the severity would have been at the highest level if the pictures were down loaded onto a website.

R02 stated, “I recognized the severity immediately. The bus driver accepted the kid on the bus not knowing who he was.” In giving his description of the crisis this administrator shared that speaking with the young boy he could tell that the student was in good physical and emotional state. The boy was not upset, he was not hurt or injured, and no one even knew at the time that he was missing. Because of these factors the principal determined a mid-range level of severity. If however, the boy had been in worse shape the principal felt the level of severity would have increased.

R03 shared, “I recognized the severity immediately. Once I knew there was water throughout the school I knew children couldn’t move. Once I saw children outside which (water) set off the fire alarms I knew something had to be resolved.”

R04 responded, “Oh, I knew right away that this was a terrible thing (SUV crashing into a kindergarten classroom) that could have resulted in children being injured or killed and adults as well.”

R05 acknowledged, “I believe I recognized the severity immediately (counselor being diagnosed with stage four lung cancer) being the fact that the teacher/counselor had been in the building consecutively since 1971 and had taught practically every grade level. She was beloved in the district and was literally my right hand gal.”

R07 was able to recognize the severity immediately and said, “When just the bullet was there I knew it was a live round the chances of somebody getting hurt with that. You know children can do anything. I guess if they hit it on the cement hard enough it may shoot. I don’t know how that would work actually, but, uh, it was serious enough that I wanted to call the police right away to let them know and then when the clip came, I was like, ‘Oh, shit’ (laughter). It raised, it elevated itself to a different level.”

R08 shared, “Because the child had a history and he did have an IEP and I did know that the child was on medication and throughout the year he had become exceedingly more volatile, I knew, I kinda knew we were getting ready to climax here with this student.”

R10 explained, “Oh, I recognized the severity immediately. Um, I discussed it with the two custodians after we had a meeting. Went over, you know, we not only had to change the setting up lunch but other safety hazards that we have in the school that, that had been on my mind.”

A determination was made regarding how the crisis would affect others. The principals had the option of several responses to this question. Which seems most true for this event, the event had the potential to affect many people, the event had the potential to affect few people deeply, or the event would touch a few lives with little impact. According to Crisis Decision Theory, events that affect many people or a few people deeply would be perceived to be more severe. Since such a large number of principals felt that the event would affect people deeply it aligns positively with the level of severity they originally scaled their crisis.

R01 stated, “I would say the first one, the event had the potential to affect many people, yeah, I definitely think so.”

R02 responded, “Few people deeply.”

R03 said, “Your first statement. (Interviewer repeated first example: The event had the potential to affect many people.) Yes.”

R04 shared, “The first one that the event would affect many people because every child, every family in the school would have been affected by injuries or certainly by death of anything that happened on school grounds, any incident like this would have deeply affected the entire school community and beyond the reaches of this particular school community.”

R05 acknowledged, “I would say the event had the effect to affect everyone. Death is a very final thing and people’s perceptions of each other changed dramatically when one learns that the other is about to die, so, um, whether some of the kids in the school had frequent contact with this counselor or minimal contact, I still think it had a very severe impact on the entire student body.”

R06 was very clear in her response to this question when she said, “This event affected many people and the potential to affect many more. Mothers and fathers (sometimes both) of students were called into action if they were affiliated with the National Guard or a branch of the military service. Staff members and students had relatives who worked in the Trade Center and some could not be contacted. Security of the students and thinking ahead to possible future targets while fearing schools could be included in these attacks put this in a severe level of crisis.”



R07 responded, “Well, if somebody got hurt it would have been many people deeply.”

R08 stated, “Many people.”

R09 said, “Had we been in the building the event would have affect many people. Um, eventually when it was over it impacted significantly financially both to many people and to the city as well the school board of education had to reimburse for many things.”

R10 responded, “I think it had a possible impact to affect a few people a lot.”

### **Comparison Information**

Crisis decision theory states that comparisons are made to evaluate a crisis in order to differentiate the event from a similar situation and to place it in a recognizable context (Sweeny, 2008). One aspect of comparison is done through social comparisons, comparing situations with others to gain information. Sweeny (2008) citing Festinger (1954) and Wood (1989) states, “People use social comparisons to gain information about a negative event when experiencing uncertainty (p. 65).” When people lack the ability to perform an objective evaluation of their abilities or an event, comparing themselves to others provides one way to make a possible evaluation of a situation. More than 50 years of research conclude that through the process of social comparisons credible information is gained (Festinger, 1954 and Wood, 1989, as cited in Sweeny, 2008). Through critical incident technique it was possible to gain insight into this human behavior by having the administrators recall if they sought out help during their crisis event, did they compare their situation to how their colleagues handled similar situations. Overwhelmingly, Table 4 indicates that not only did the administrators seek out support

from others, but that administrators looked towards a colleague's knowledge base more so than their personal relationship.

Table 4

*Comparative Information*

Critical Decision Theory	Participant Responses to Interview Questions
Compare information about a negative event to other's experiences when experiencing uncertainty	Q1.4: 8/10 consulted a colleague in regards to the crisis.
	Q1.4: 6/10 chose a colleague with more experience than themselves
	Q1.4: 7/10 chose the colleague based on their knowledge base compared to their personal relationship
Compare current crisis to known schemas to gain information about the severity of the event	Q1:10: 5/10 referenced past experience in dealing with the current crisis.

R03 responded, "The custodial staff was consulted and the maintenance and the superintendent obviously was consulted to be made aware of initially and if there were any specific situation. His first question to me, the superintendent, was well, where are the students? He was happy that I had did what I had done in segregating the younger children, especially from the older children and putting them into spots that they were safe and supervised."

R04 shared the following, "My superintendent came immediately, and my assistant superintendent came immediately, as well as other people from central office, from grounds and facilities to assess the damage and to help me take or know what steps to take following the incident. And yes, they all had more experience then I did. I was a second year principal and I don't know if any of them had ever actually been through a situation identical to this one, but I do know that they all had more experience then I did

in this kind of situation and I was very, very relieved and they were very, very helpful in the steps that followed and in the days that followed.”

R05 stated, “Yes, I contacted probably no fewer than three or four other elementary principals asked if this situation ever happened to them. It had only occurred with one other principal that I spoke to and that was many, many years ago and his memory was somewhat cloudy as to what actually transpired.” This administrator had retired from the secret service where each day led to some form of crisis event that he had to respond with utmost clarity. Yet, when this particular crisis took place he too reached out to gain insight on how best to respond to the needs of his staff and students with the death of a beloved staff member. It may be concluded that the type of crisis will lead even the most highly qualified crisis decision makers to seek support through social comparisons when the event is uncertain.

R06 said, “I called upon staff members who did not need to be in the classroom with the students for their assistance in dealing with the staff, parents, and events of the school day. The counselor, nurse, and resource teacher were my go-to people. Two due to their experience and maturity of age and one because she worked the pull-out program and was available for coverage.”

R08 shared, “Yes, we contacted immediately, um, once we were able to subdue the student and remove him from the classroom, we contacted the child study team director and the case manager and we explained to them what had happened and we also asked for feedback but I also made it known to them that this was it. You know something had to be done.”

R09 said, "I worked closely with the superintendent and with the director of maintenance and grounds."

R10 responded, "No, I, I, I talk to my custodians as my equal. I mean they're, they help me run the building, so."

Surprisingly only half of the respondents shared that they used their prior experience to deal with the described crisis.

R01 said, "No."

R02 said simply, "Yes."

R03 stated, "I had minimal experience in a crisis at that point; it was more just either learned knowledge or common sense." In the same way, elementary principal R04 stated, "Nothing like that had ever happened to me before so I would have to say no it wasn't from past experience with crisis that I handled this one. But I'll use this one for my next one."

R05 said, "Yes, I did. As I say I did have some crisis management training from previous job that I had with the federal government and when tragedy strikes I used that to my benefit as well as what I was taught here."

R06 shared, "This was my second year as an administrator. My reference points to remain calm and think things through were from my years in the classroom and personal experiences."

R07 stated, "No, because nothing like that had ever come before."

R08 shared, "Absolutely."

R09 responded, "I never had a past situation that involved a flood."

R10 said, “Yes, I did. Um, well, just based on, based on other experiences I’ve had in the past. I’ve been involved in other, a lot less severe, I mean, I’ve worked with athletes. I’ve dealt with many people who have gotten injured, um, at all different levels and so I, you know, I think based on my training, my experiences, I know what an injury looks like and I know the level of severity that will need certain types of attention.”

### **Consequences**

Crisis decision theory states that people use information about potential consequences to assess severity in making their decision. Table 5 indicates that overall principals were not concerned about larger social issues in dealing with the content of their crisis, however, there was concern related to the potential damage to their reputation within their schools.

Table 5

#### *Information About Consequences*

Critical Decision Theory	Participant Responses to Interview Questions
Consequence related to larger social issues (Some examples: bullying, drugs, alcohol, violence, harassment, etc.)	Q1.7: 8/10 responded the crisis did not have negative social consequences connected to the event
Consequence related to personal public image (How one is seen within the larger school community.)	Q1.7: 6/10 responded that the crisis had the potential to damage reputation
Consequence related to timing of the event	Q1.8: 5/10 felt the crisis had immediate consequences
	Q1.8: 4/10 felt the crisis had both immediate and far-distant consequences
	Q1.8: 6/10 timing of possible consequences did effect what decision of what to do next

Crisis decision theory also states that a crisis leading to immediate consequences may be assessed differently than events leading to far-distant consequences. The results of this study show that principals are more likely to take into account both immediate and far-distant consequences and weigh them both as being important.

R01 thought about immediate and far-distant consequences, "I would say both because it (the pictures of the boy) could have been linked to the Internet and when things are linked to the Internet it never, it's in cyberspace forever. Those children could have been adults and now all of a sudden those pictures could appear."

R02 stated, "Well, the consequences that I was thinking about at the time were, um, really directed toward the people who were responsible for driving him, bringing him to the wrong school, and my goal was to make sure that this situation didn't happen again. That some new system had to be put into place so that we wouldn't be picking up kids on buses who shouldn't be on that bus."

R04 shared, "Well, there definitely were immediate consequences and depending upon how the situation was handled right from the start, well, even disregarding how it was handled, however it was handled the consequences would have been far-reaching because if it had been handled poorly, if the administrator had completely gone hysterical or lost control of the situation or allowed other people to become hysterical those consequences would have been negative and far-reaching. Whereas, if the administrator, with the help of those around her, handled the situation with poise, with a degree of intelligence and calmness those consequences also far-reaching would be more positive."

R05 felt the crisis had both aspects of truth stating, "I knew it was immediately, sort of a double edged question in that I knew it was... obviously, when someone tells

you, you've got 6 months to live you know that its severe, but I knew that it would have more of an influence over a period of time as it affected the school and the children in the school. Ah, and that proved to be the case.”

R06 shared, “At the time I placed the consequences on a scale of 5 for immediate danger to the school and its occupants and the impact on families in the community. An immediate consequence considered was the mental state of staff to ensure they were stable and competent to handle the students through the day and keep things as ‘normal’ as possible for them.”

R07 responded, “Because it had the potential to be immediate and tremendously affective if somebody got hurt.”

R08, R09, and R10 responded with immediate consequences.

Table 5 also indicates the timing of what consequences could occur affected their decision of what to do next. For example, R01 stated, “I think the biggest fear that I had was that they really had pictures of some of the children undressing and that I really was concerned that they were going to get downloaded and put on the computer or on the Internet.” R04 stated, “Can you imagine if later on it had come out that it took ten minutes to call 911?”

R06 shared, “Immediate action was taken to secure the building and use our color code system on the walkie-talkies for any suspicious or dangerous activity in or around the building.”

R07 responded, “Did the timing, I don't think it had any time. In other words, as soon as I saw the bullet I went inside to notify the police and before I even got out to the playground I met them (student and lunch aide) coming in with the clip, so it was kind of

immediate.” The immediacy of possible repercussions was thought about in decision-making for many administrators.

According to interview question Q1.9, all 10 elementary principals had specific consequences they were concerned about in formulating their response to the crisis.

R01 said, “I think the biggest fear that I had was that they really had pictures of some of the children undressing and that I really was concerned that they were going to get downloaded and put on the computer or on the Internet.”

R02 responded, “Well, the consequences that I was thinking about at the time were, um, really directed toward the people that were responsible for driving him, bringing him to the wrong school, and my goal was to make sure that this situation didn’t happen again. That some new system had to be put into place so that we wouldn’t be picking up kids on buses who shouldn’t be on that bus.”

R03 shared, “What I was most concerned about was a rush to judgment on what happened and based on what I knew and what I saw for myself, why any judgment would be made on it.”

R04 answered, “My immediate and specific concern was the health and well being of the students and then of my teachers.”

R05 shared, “Well, we are always concerned about the children’s mental well being in a case like this, ah, their ability to hold it together. Every child is different, every child views death a different way.”

R06 said, “My concerns were student and staff well being, as well as the safety of all in the building and community.”



R07 responded, “First I wasn’t as upset. Okay, a bullet, you know. Okay, we’ve got it and now we are okay. But then when I looked around I didn’t see anything. Um, but of course then the child found the other thing (bullet clip) and that kind of, that, elevated it.”

R08 shared, “Someone could have gotten seriously hurt, physically hurt and the children, there were other children in the classroom, his peers who were afraid. They were cowering because this child had lost control.”

R09 said, “How much damage was done to the building, when I would be able to open the building again so that school could begin, how the actual interior damage to the building would be handled, and how we would be able to start school without materials that we needed for students.”

R10 answered, “My reaction to the crisis to immediately call 911 was based on my opinion of seeing, kind of formulating what could have possibly happen to her, you know she wasn’t knocked unconscious, but she could have had a concussion. She could have broken her hips, she could have broken her legs so based on my opinion of what could have been a consequence, I immediately resulted in calling 911.”

### **Predicting Response Choices**

The second set of six questions asked research subjects how they were able to determine response options to the crisis. These questions pertain to research question number two.

#### **Research Question 2.** What are the factors that predict response choices?

Research subjects were asked how they were able to determine their response options. Crisis decision theory states that it is necessary to determine all the available

responses based on factors that might limit possible options by looking at the controllability of outcomes, and the feasibility of responses. Table Six and Table Seven list the responses from the interview questions related to these areas.

### **Controllability of Outcomes**

Sweeny (2008), citing Ajzen (2002), Becker (1974), Heijmans et al., (2004), Leventhal and Nerenz (1985), and Sweeny and Shepperd (2007) stated, “The perception of control over negative outcomes determines the availability of response options (p. 67).” As seen in Table 6 a majority of administrators felt the outcome of the crisis was controllable.

Table 6

<i>Outcomes</i>	
Critical Decision Theory	Participant Responses to Interview Questions
Perception of controllable outcomes (What administrators felt they felt, understood, and could control during the crisis.)	Q2.6: 8/10 felt the outcome was controllable
	Q2.2: 5/10 determined that negative outcomes were inevitable
	Q2.2: 4/10 felt negative outcomes were avoidable
	Q2.2: 1 responded that negative outcomes were both inevitable and avoidable
	Q2.3: 6/10 felt overwhelmed by the event

R01 and R10 said, “No.”

R02 stated, “ Yeah, I felt like I could, uh, rectify the situation and make it better because I knew we needed to take different steps and that we had to do that immediately.”

R03, R07, and R09 said, “Yes.”

R04 shared, "I felt I had some degree of control of the outcome depending upon how I handled the situation. Although I didn't have any control over a car that went through the building, in the hours and days that followed what I realized that there were steps that I could take to try to ensure that something like that would never happen again. So, I guess that's how I took control over it."

R05 responded, "I thought that we could provide the outcome or we could help the outcome along the best way anyone could and that's through trained counseling and trained counselors who have had experience in this area."

R06 shared, "Control was strictly at the building level."

R08 responded, "To a certain degree."

When asked if in making their decision negative outcomes were inevitable or avoidable results were mixed. Half of the principals felt that negative outcomes were inevitable while others felt negative outcomes were avoidable. One administrator shared that negative outcomes were both inevitable and avoidable. Sweeny (2008), citing Aldwin (1991), Carver et al. (1989), Folkman and Lazarus (1980), Sweeny and Shepperd (2007) states, "If negative outcomes are avoidable, people are likely to consider active response options. If negative outcomes are unavoidable, people are likely to consider relatively passive response options (p. 67)." The results of this study show that all administrators chose an active response no matter the outcome. This can be seen in their responses for answering Q2.1. Every principal was able to describe a process they used in formulating an active response. A description of the process they used is listed below.

R01 stated, "There were highschoolers involved in the situation and my responsibility ends with my elementary children. I knew I had to reach out beyond me."

But, I also knew the severity of the situation where it was not... it wasn't enough just to reach out to the high school principal, but I really had to bring central office into the crisis. And so I took into account that... my direct supervisor is the assistant superintendent, but I did know that he was going to reach out to the superintendent but I did want to follow that protocol."

R02 stated, "Um, well, I kinda formulated a list in my mind of the people who were going to be involved. One of which was the child study team member who was the case manager for the kid, one of which was the transportation supervisor, one of which was the assistant business administrator who oversees transportation, um and the other of course was the superintendent who needed to know and obviously the parent too but I asked the case manager because she knew the parent, as soon as I found out I said please call the parent and let her know what had happened. Unfortunately she waited 2 hours to do that. I guess she didn't think it was as big a crisis as I did. So in retrospect would I do something different...I would have called the parent directly myself but knowing I had to make all these other calls I asked her to do that and she should have done it immediately."

R03 stated, "Just in my thought process. Looking at the building, knowing... having been a teacher in the building previously for ten years so I knew the lay of the land. I knew where the water was coming from. I knew where the direction of the water was heading as well; I knew what resources I had to where I could place people like students and things like that. I knew that I could under emergency situations place everyone on duty because contractually by 8:05 when this was happening everyone could be on duty and so I knew that was in place."

R04 responded, “Hmm, I didn't really see options except that I followed...I saw like a kind of linear path in my head, do the quick things I needed to do in the office as far as the phone calls, go out and be there physically myself, direct people to a safe area, keep the rest of the building calm and in place and I guess its almost like throwing a pebble into a lake you know you start with that small little circle and you just continue around that spiral until you've touched all the basis. That is pretty much how I, when I'm looking back on it how my brain was functioning at the time.”

R05 stated, “Well I think the options were pretty much, ah, I don't want to say cut and dry, but, ah, its a definite shock and you are given a short period of time to huddle together and come up with a game plan and so that's the point and time that I notified the assistant superintendent and the superintendent about what her diagnosis was and what her prognosis was. We then used the power of the district, if we can use the term, to, um, react appropriately to all stages of her decline. I was on the phone daily with the superintendent making sure that all bases were covered and then when her condition got bad that we were available as a caring and concerned faculty as well to be able to render care to her in her private life. Um, I think that there really were no...if I go this way this could happen, if I go that way that could happen. The lines were pretty well drawn and the only mistakes an administrator could have made here would have been to not stay current with her condition and her state of mind.”

R06 replied, “I looked at all people involved, determined my resources and took action to cover any situations I or my resources could consider occurring.” While R07 shared, “Ah, I guess I thought of what procedures, who needed to know. I called the police immediately. Um, I didn't call board office at that point, I called the police, figure

let them come over and I'll let board office know about it because I wanted to be back out by the kids and then when I got you know ten feet from the kids the mother and the kid showed up so then I called again and then I called the Board office to let them know.”

R08 described her response by saying, “You walk into a room, you assess a situation and first you want to secure the perimeter, you want to get rid of the children they shouldn't be seeing this, you want to make sure the teacher is getting the, um, medical help she needed at the time and the child. That child needed to be calmed regardless of the situation he was still a child.”

R09 shared, “After we assessed the damage and by assessing the damage we actually had builders, architects come in, we had an architect come in to look at the structure of the building to make sure that it was structurally sound. Um, I had an environmentalist come in to determine the quality of air to make sure that the air and these were things that were my recommendations. Um, the quality of air was okay for the children to come back. The physical, the gym floor at this point was warped and could not be used. I had permission from the board of education and business administrator to call in someone to take a look at the floor to give an estimate. Superintendent allowed me to get in contact with teachers and they did come in and assess their personal losses and came up with the amount of monies they were personally out. I then had to sit down and do inventory on all the materials that was damaged and had to come up with a monetary figure that I felt would cover all of the materials that I needed to replace what had been destroyed in the flood.”

Finally, R10 replied, “I think just based on my training, first aide, or working in emergency situations I was able to, and luckily I was there so I immediately, you know,

assessed the situation, but I also was able to see the situation unfold which sometimes in emergency we get caught up in the midst of it, like I saw the entire thing happening so I knew the level of severity that was going to cause soon as I saw the impact of her hitting that table. So based on that, then what I observed when I went to her that was how I made my judgment.”

The last question in this section asked the principals the following: At any point of the crisis did you feel overwhelmed by the event? Of the 10 principals, six stated that they did feel overwhelmed at some point within the crisis. Crisis decision theory states, “People with many response options may find the choice overwhelming, this may affect decision-making processes.” Most of the responses from the administrators who did feel overwhelmed at some point during the crisis relate more to the situation itself than to an over abundance of response options.

R01 shared her feelings by saying, “Yes, I felt very overwhelmed by the outcome because I just didn’t know what was going to happen I didn’t know if we were going to find the highschoolers. I didn’t know if we found the highschoolers if they could have already downloaded the pictures. I didn’t know how my community was going to respond to this and I have a very active family group who are very close knit so I really felt that there was a lot that I could not control.”

R02 stated, “Slightly.”

R03 said, “No.”

R04 responded, “Not during it.”

R05 shared, “Yes, absolutely. Initially, I felt overwhelmed with the diagnosis. I was overwhelmed with the incredibly rapid decline. I thought that you know you hear 6

months to a year and some people are still alive 3 years, 4 years later. I never, ever anticipated a demise as fast as this one with as severe a consequence.”

R06 stated, “During a crisis action overtakes overwhelmed. These feelings were not permitted to surface. That happens in the privacy of your home when you’ve done all you can to contain the situation.”

R07 responded, “I didn’t initially.”

R08 said, “Yes.”

R09 shared, “Yes, the very first day when I was standing in fifteen inches of water in yellow hip thigh boots I knew that I was not in control, Mother Nature was (Laughing).

R10 acknowledged, “I did. It was very scary and I was, after everything had happened, I was shaking because I literally felt like, I felt like I could see myself running and grabbing her out of the way, and my body wouldn’t allow me to get to her fast enough. So the entire day I was in shambles because I felt so bad that I couldn’t get to her fast enough and I saw the whole situation unfolding in front of my eyes. I felt helpless cause I couldn’t get there fast enough to help her.”

### **Feasibility of Response**

Crisis decision theory states that when active response options are generated and the event seems controllable, it is possible to believe that the response options are feasible given enough resources (Sweeny, 2008). Seen in Table 7 there is a strong response for each of the questions within this section. Principals felt they had enough time, funding, support from superiors, and staff. They felt they had the ability to take the necessary actions and all ten principals felt their response to the crisis was feasible.



According to Sweeny (2008), “The response options people generate at the second stage in crisis decision theory determine not only the responses they evaluate in the third stage, but they also can have direct effects on the responses people choose (p. 67).”

Table 7

*Feasibility of Responses*

Critical Decision Theory	Participant Responses to Interview Questions
Feasibility of possible responses	Q2.4: 8/10 responded they had enough time to make decision
	Q2.4: 8/10 responded they had enough funding to make decision
	Q2.4: 8/10 responded they had enough support from superiors to make decision
	Q2.4: 10/10 responded they had enough support from staff
	Q2.4: 9/10 felt they had the ability to take necessary actions
	Q2.5: 10/10 felt their response was feasible

### Evaluating Response Options

The last set of 13 questions asked the principals how they were able to evaluate their response options to the crisis especially when they were uncertain of the outcome. These questions pertain to Research Question 3.

**Research Question 3.** How do school administrators select a response when the consequences of that response are uncertain?

Crisis decision theory suggests that there are three aspects to take into account when evaluating response options: resources required to engage in a response, direct consequences of the response, and the indirect consequences of the response. Table 8 lists the ways in which administrators evaluated their options and reflected whether they weighed the pros and cons of each option or if the process happened automatically.

Table 9, Table 10, and Table 11 list the responses from the interview questions related to resources, direct consequences, and indirect consequences.

As Table 8 (Q3.7) illustrates, several administrators did evaluate the options available to them, however, when reflecting upon the event, most administrators felt that the response that was chosen happened almost automatically.

Table 8

*Evaluating Response Options*

Administrator	Ways in which administrators evaluated options	Pros and cons reviewed or automatic process
R01	Automatically called central office	Automatic
R02	Tried to prioritize what needed to be done	Automatic
R03	Quick review in my mind	Automatic
R04	Evaluated options with others	Automatic
R05	Looked at the situation and available resources	Automatic but also reviewed pros/cons
R06	Options were looked at moment by moment	Automatic
R07	Followed direction of police officer	Automatic
R08	Looked to see how many people were affected and to protect them	Reviewed pros/cons
R09	Looked at evacuation plan and followed protocols	Automatic but also reviewed pros/cons
R10	Knew my options and called 911	Automatic

R01, R02, R03, R04, R07, and R10 said, “I think the process happened more automatically.”

R05 stated, “I think the process happened more automatically, but the pros and the cons, ah, also factor in here. I think the fact that we searched out every available

resource is definitely a pro, we involved as many people as we could who were professionally trained in this area to lend assistance headed by the counselor in charge who was professionally trained. I think we had put into place a game plan for the children to have ample opportunity to visit and visit again for counseling and for, just to talk and just to express their fears and their trepidations and their anxieties about her impending death.”

R06 responded, “The process was automatic. Understand the fear and concern that everyone was feeling and grant them permission to feel these things. Prepare for every scenario that came to mind. Remind staff that our primary goal needed to be the students. Call upon their professionalism and dedication to our purpose. Being amazing educators they did exactly that until it was time to go home to their families.”

R09 shared, “The process happened automatically, but once I was involved in the crisis, I was able to kind of sit back and think about what was going on and things just worked out naturally. There were no obstacles. I did not really come up against an obstacle. Only the con would be doing damage control.”

One of the 10 principals stated they reviewed the pros and cons before responding. R08 stated, “ The pros and cons...once removing everybody else from the classroom...what do I do with this child? Do I leave him there? Or, do I continue to work towards trying to calm him and remove him from that situation and I found that I needed to be proactive, I needed to get him out of there.”

Crisis decision theory, according to Sweeny (2008), acknowledges, “The process of evaluation may be intertwined with the process of determining response options or may stand alone as a separate, subsequent process (p. 67).”

## Required Resources

Combing the results of how administrators evaluated response options it is interesting to note that the many administrators did not formulate their response in isolation. They reached out to supervisors, police, or staff members in order to bring together all possible options before making their final decision.

Table 9

### *Required Resources*

Critical Decision Theory	Participant Responses to Interview Questions
Evaluating response options	Q3.1: 5/10 stated they had only one response option Q3.2: 7/10 stated they evaluated their options before responding
Evaluating resources in choosing a response	Q3.3: 5/10 stated they would choose a response using more resources
Prioritizing resources	Q3.4: 10/10 were able to prioritize how they would spend specific resources

R01 stated, "I think I had many. I could have just called the high school principal. I could have tried to keep it in house as much as possible, but I think those outcomes would have been not successful." In response to if she evaluated options R01 said, "I don't think I evaluated the options that I think I had, I just automatically knew I had to call central office."

R02 responded, "Several options." In response to if he evaluated options, R02 stated, "I tried to prioritize what needed to be done. So I tried to kinda, what needed to be done first, second, and third. You know tried to kind of formulate a list in my mind of what needed to be done."

R03 shared, "There were multiple options." In response to if he evaluated options, R03 said, "A quick review in my mind. As I said, just through observation I knew

something was wrong. Being intuitive in some ways...Lots of it was just purely observational, a lot of it was intuitive, a good deal of it was having prior knowledge of the physical plant was very helpful.”

R04 responded, “I think your options are limited in a situation like this. There didn’t seem to be like a, until you get wider in that pool, of that rippling pool, you just kind of go from one thing to the other. That is what I did.” In response to if she evaluated options, R04 stated, “I would say once I had the support and assistance of the police officers and my superintendent and assistant superintendent, we evaluated options together.”

R05 answered, “I don’t think we had many. We may have had more than one, but I think any district in any state in this union would have acted accordingly.” In response to if he evaluated options R05 stated, “By looking at the situation, by looking at the diagnosis/prognosis, the obvious impact on children and families, the resources available within the district, the fact that proper and correct and immediate notification to superiors needed to be made, I think that was all part of it. It helped.”

R06 said, “Yes, maintain order and safety.” In response to if she evaluated options R06 responded, “Again, options were looked at moment by moment. I pulled upon knowledge, ideas, and skills from staff members to have a check and balance on keeping the day as normal as possible for the children.”

R07 shared, “I think only one option. I think your option, there wasn’t an option, you had to call the police, notify them, keep the kids safe.” In response to if he evaluated options R07 said, “At the time, I kinda followed what he (policeman) directed me. I never handled a gun with a clip in it, so I just followed his direction.”

R08 responded, “There was only one option.” In response to if she evaluated options R08 said, “I needed, I looked to see how many people were affected and what was my job. My job is to protect children and educate them.”

R09 stated, “I had only one.” In response to if she evaluated options R09 responded, “Well, one of the first things that I did do is look at the evacuation plan that we had. The ones that we have today are much more extensive than what we had 10 years ago. But there was an evacuation plan in place and it did involve the protocols that I used which included the superintendent, the fire department, the police, the custodian, and so on. So I would have to say, how did I evaluate my options, I would have to say I pretty much went with the protocol that was there.”

R10 responded, “I think I had a few options. But I think based on what I witnessed I chose the best one possible.” In response to if she evaluated options, R10 shared, “I knew what my options were, there weren’t many because of what had happened. Basically, to be on the safe side, for her own safety and health, I chose the option of calling 911.”

The amount of resources available during a crisis could impact the response options administrators make during times of crisis. Sweeny (2008), citing Weinstein (1993), states, “All else being equal, people are more likely to choose a response that requires few resources (p. 68).” However, half of the administrators in this study stated they would choose a response using more resources. R09 shared, “I would always respond using all my resources, whatever is available to me at the time.” R03 expressed it was more related to the crisis, “I would say more (resources) in that instance, because it took a team effort or it took a large team to get things back into control, under control.”

Resources influence the evaluation of response options. Although when asked to list four resources (money, time, energy, and strength) in the order they would spend them during a crisis there were almost as many different responses as to amount of administrators responding to the question. This result is insignificant.

R01 stated, "Time, energy, strength, money."

R02, R04, R06 stated, "Energy, strength, time, money."

R03 stated, "Time, energy, money, strength."

R05 stated, "Strength, time, energy, money."

R07 stated, "Money, time, energy, strength."

R08 stated, "Time, strength, energy, money."

R09 stated, "Strength, energy, time, money."

R10 stated, "Energy, money, strength, time."

### **Direct Consequences**

When the consequence to a response during a crisis is uncertain, crisis decision theory states direct consequences are outcomes that change the status of the negative event for better or for worse. In Table 10 the results show that the majority of administrators experienced positive direct consequences by responding to a crisis. Successful elements could be seen and felt and new learning occurred for the majority of administrators both personally and district-wide.

Table 10

*Direct Consequences*

Critical Decision Theory	Participant Responses to Interview Questions
New Learning	Q3.11: 8/10 stated that the crisis led to learning for the district
	Q3.11: 9/10 stated that the crisis led to new learning for them
Potential to Improve Situation	Q3.11: 8/10 successful elements could be seen and felt
New Awareness	Q3.12: 5/10 perceived of a problem in the crisis area before the crisis took place

R01 stated, “Yes, I definitely think that the district was more cognizant of the scheduling that was occurring off district property and that was changed when they looked at the schedule. I know that they looked at it not just for my school but they looked at it specific to all of the elementary schools so that this would not occur again.”

R02, R04, R08, and R10 affirmed for both new learning for self and for the district.

R03 stated, “I think it was a situation that was beneficial in making a decision. I think it was actually a very, very positive moment for me because it was a self-realization that I could do this job under difficult circumstances. I could lead people and get them to actually listen (laughing). You know I felt it was a very positive experience.”

R05 responded, “I believe for both. It brought me aware of the fact that this can happen.”

R06 found, “This experience made me acutely aware of the grave responsibility we have as school administrators. All of those people in our care, children and adults, must come before anything else in our lives during times of crisis.”



R09 shared “Now we take everything off the floor when it rains. We just automatically put it up on crates. So if we know it’s raining, I hit the button and I say please make sure you go into flood mode (laughing).”

Several administrators stated that they had perceived of a problem in the crisis area before the crisis took place. For example, R01 shared, “I think I sensed the boys were not supervised well. I did have a sense that it wasn’t supervised the way that it should have been.”

R02 responded, “Yes, and I had spoken with transportation many times about their disorganization of lists of kids who should be on buses, the bus driver and aides unawareness of who these kids are, where they belong and where they are going. And I spoke with many people, many times and to me it was a matter of time for something like that to happen.”

R04 shared, “Maybe so, that’s an interesting question. Yes, I think I probably did think or consider that there was too much traffic in our parking lot before this happened and that it could have presented a problem.”

R08 said, “Absolutely.”

R10 stated, “I think that it (the crisis) made me realize that I have to take those extra little steps and work with my custodians to take, just ensure extra safety for anyone who comes in contact with our building.” New learning took place as administrators learned to pay attention to areas that registered a concern.

### **Indirect Consequences**

Unexpected emotions, how a decision could affect others, impact on job status these are just some of the indirect consequences within crisis decision theory that are

possible when responding to a crisis. The results of this study show all 10 principals took into account how the decision they made would affect others. Their thoughts were more directed towards their student and staff well being. Not surprisingly, the majority of administrators did not take into consideration how their response might affect their professional standing, job status or other areas of their life.

Table 11

*Indirect Consequences*

Critical Decision Theory	Participant Responses to Interview Questions
Indirect Personal Consequences	Q3.5: 6/10 did not evaluate how response might affect professional standing or job status.
	Q3.9: 7/10 did not consider how decision would affect other areas of their life.
Indirect Consequences for Others	Q3.8: 5/10 took into consideration how others would feel regarding your response
	Q3.10: 10/10 took into consideration impact of decision would affect others
Emotional Consequences	Q3.6: 8/10 aware of emotions during crisis

When asked if administrators took into consideration how others would regard their decision on a scale of 1-5, half of the administrators did think about the reaction others might have.

R01 stated, "Oh 5, I knew this was a big PR piece."

R02 gave it a 4.

R03 said, "Probably, I'd say no more than 2. A 2, because of the impact it would have on children. I mean that's always, that's always been my first consideration."

R04 responded, "At the time, none."

R05 said, “I would push that all the way to the 5. Only because in an elementary school we’re all so tightly grouped in here and as a principal yourself, a principal knows that when you-know-what hits the fan everyone looks to you and its just like the old E.F. Hutton ad, all eyes go right to the boss and they expect the boss to handle it properly. That’s what you are there for, or that’s why you were given the job. That’s why you were made a principal and that’s why you are no longer in the classroom. Because you are expected to take these situations, handle them appropriately and do what needs to be done and not collapse or become dysfunctional.”

R06 shared, “While I called upon their talents and assistance, I did not take the time to consider feelings with regard to my actions. So...a 1.”

R07 responded, “When it initially happened I wasn’t thinking of how it was gonna be perceived out there to the general public. When it was all over, it was now time to do patch up or protect our reputation. Let people know that kids weren’t injured, at no time were they ever in danger. Towards the end it was more critical, 4 or 5, yeah.”

R08 gave it a 5.

R09 shared, “1, I wasn’t concerned about what others thought.”

R10 gave it a 3.

A majority of the administrators expressed that they were aware of their emotions during the crisis. According to crisis decision theory it is possible to experience a full range of emotions as a consequence of responding to a crisis.

R01 stated, “I was very aware of my emotions. I was very scared. I wanted to crawl under my desk. I just envision parents coming with pitchforks wanting to kill me. It’s what I really thought of, I actually visualized it.” This administrator shared that this

crisis event took place her first year as an administrator. When on the phone with the mother whose child was photographed, the principal listened to what she had to say and the principal took detailed notes. The administrator continued to recount the event by saying, “I could hear the severity of the situation and told her I would call her back. I got off the phone and called the assistant superintendent to share with him what had occurred. He then said he would call me back. I stood by the phone which seemed like forever, but really was a very short period of time.”

R02 stated, “Well, I was, uh, upset that the situation happened. I was actually embarrassed for the district that something like this would happen. Um, but I was also relieved that it could have been so much worse, the kid could have been injured, harmed, abducted. And I was relieved that he was actually safe, um, but it was a very unsettling situation.”

R03 stated, “I was aware of my emotions. Where I'm in adrenaline and I'm in overdrive yet my exterior is very placid to try to remain composed to try to, you know, you can't panic or least portray the appearance of panic.” This administrator had a great deal to contend with on the day the crisis occurred in his school. He had just transferred back to the school he was filling in as an interim vice principal. That morning the principal called to say he had just been in a car accident and would be late. Additionally, this administrator's wife had an important doctors appointment related to the birth of their first child. So before entering the building this administrator had his cup filled with emotional needs even before understanding the full impact of the crisis situation within the building. Interesting to note that at the conclusion of the day and in reflecting about the event this administrator shared that handling the crisis was a very positive moment.

He realized that he could handle being an administrator under difficult situations and he had the ability to lead others when a crisis took place.

R04 shared, “I was not aware of any emotions. I just, I was very, very calm on the outside. I mean inside you are aware of yourself pushing everything back and saying to yourself, ‘I’ll deal with the emotions later, right now I have to do what I have to do and take care of the situation’.”

R05 stated, “All too frequently, I was aware of them in every stage of the game. I had the feelings of remorse. I had the feelings of obvious sadness in the fact that I’m going to lose a friend, as I said those days that I perhaps could have gone over to her house and didn’t, I had feelings certainly of guilt. Um, but looking back at the situation as a whole I’m relatively happy with my response.” This administrator had years of experience dealing with intense crisis situations. He had to respond and help people who were injured and killed. And yet he shared the following, “When you involve children it takes on a whole different meaning and it has to be viewed through a whole different lens than it is when you are approaching it adult to adult. When you are dealing with the child’s mind that’s very moldable, impressionable you’ve got to be careful. Because things that happen to kids at this age remain with them for a lifetime.”

R06, stated, “Shock...and then on autopilot. Emotions were kept in check to remain in control and assess and assist.” Having just arrived to school on September 11<sup>th</sup> the principal was out of her office visiting classrooms. She was called back into the office when her husband called to inform her about what was taking place in New York City. From that point on the information coming into the school was sporadic and confusing in the initial stages of the event. Her superintendent called to confirm the attacks and he

wished her good luck in handling the day. The principal's objective was to make the school day as normal as possible. This administrator goes on to say, "This crisis changed the atmosphere of being responsible for children and staff members that will stay with us for the rest of time in the field of education. The role of building administrator carries with it a far greater weight than ever before."

R07 responded, "I was kinda heightened a little bit." Being that this administrator had over 25 years of experience this event wasn't a huge challenge for him. He had had to call the police to many crisis situations when he had previously served in a high school earlier in his career.

R08 shared, "Yes, I was very aware of my emotions. I was frustrated with the situation and not overwhelmed, not overwhelmed emotionally but just knowing that I physically didn't have the strength, physically have the strength to deal with that child. So I had to find a different way which was of course addressing him with eye contact and conversation." The frustration experienced by this principal came from the fact that she had on numerous occasions shared with district personnel her concerns regarding this student. She stated, "I don't know whether they couldn't or if they wouldn't address the situation as we saw it getting worse and worse." Her feelings expressed her exasperation with the lack of support regarding this one child and his emotional needs.

R09 said, "Yes, I was very aware of my emotions. When I walked into that building and saw, first of all my superintendent in yellow boots, looking at me, and handing me mine, um, I was say visibly upset, because I saw a building that I had taken so much pride in. I thought about my children in the building and how they're going to come back and want to know what's going on."

R10 responded, “At the time of the incident my emotions were of, no, they didn’t matter. My focus was on worrying about her. After she left, you know, my emotions came out. You know, after, once I had the time to debrief what happened then my emotions came out.”

### **Summary**

The purpose of this study is to examine and explore how a group of elementary principals in a northern school district in New Jersey make decisions in a time of crisis. The research results were presented using a framework based on crisis decision theory. A qualitative research method called CIT was used to gain insight about these findings. Chapter IV includes a summary of the interview responses from the principals, conclusions that can be drawn from the study related to making decisions during times of crisis and recommendations for further research into this topic.

## Chapter V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### **Introduction**

The purpose of this study is to examine and explore how a group of elementary principals from a northern New Jersey public school district (district factor group CD) make decisions in a time of crisis. This is an exploratory empirical study focusing on the three steps of crisis decision theory. CIT, a qualitative research methodology, was employed to gain insight into their experiences. Chapter I presents the three research problems to be studied: (a) What are the decision processes that occur when school administrators' respond to a crisis? (b) What are the factors that predict response choices? (c) How do school administrators select a response when the consequences of that response are uncertain? Chapter II contains a literature review that focuses on crisis decision theory, decision-making models, CIT in education, ECIT credibility checks and principal decision-making. Chapter III describes the qualitative method of critical incident technique used in the study to evaluate the responses of the elementary principals. Chapter IV includes an analysis of data collected. Chapter V offers a summary, conclusions and recommendations for future research.

To explore the three research questions, the three stages of crisis decision theory were used to construct a 34 question interview guide. Ten elementary principals were interviewed and asked to describe a crisis they had previously responded to and then asked to further examine their response to the crisis through the interview guide.



### Summary of Research

School leaders in times of crisis must respond yet there are conflicting viewpoints as to how they should respond and what they need to first determine before making a decision. Researchers have only recently begun to start analyzing the crisis management process. The literature speaks of weighing the pros and cons, assessing the success and failure components as outcomes, understanding emotions that arise during times of stress and relying on past experiences in making a decision. The researcher analyzed the results of elementary principals descriptions of crises they personally experienced in order to determine their decision processes. This study advances existing knowledge by determining if school administrators respond to crisis correlated to stages of crisis decision theory and to build on previous studies that used CIT in the area of education. The findings of this study are explained in the following paragraphs.

**Research Question 1.** What are the decision processes that occur when school administrators' respond to a crisis?

In order to gain insight into their experiences, participants were asked to describe the crisis they had to respond to and explain the steps taken to seek out information related to what happened. Pearson and Clair (1998) defined success in decision-making when the decision is grounded in facts and not fantasy driven. It is important for principals to look openly at the crisis.

In the first stage of crisis decision theory it is necessary to assess the level of danger or destruction that is taking place. The more intense the crisis the greater investment of time and energy invested into considering all possible responses (Sweeny, 2008). It is possible to gain information about the severity of a crisis when an

administrator tries to determine whether the crisis is at a heightened sense of urgency or if the crisis level is low but has the potential to worsen. Therefore, the principals were asked the following question: When you first became aware of the crisis did you perceive it to be immediately severe or did you perceive it to be neutral but it became severe over time? As can be seen in Table 3, 80% of the administrators determined the severity of the crisis and determined it to be immediately severe. They knew that action must be taken. One principal said, “ Oh, I recognized it immediately. When the mother originally called me to tell me what occurred, I got a sinking feeling in my stomach.” Sayegh et al. (2004) would describe this reaction as emotional memory. Emotional memory is the ability to make decisions by way of a “gut feeling.” It allows for quick decisions to be made based on an emotional reaction to a similar event from a person’s past. One of the limitations of crisis decision theory that can also be found in coping theories is their tendency towards being excessively cognitive and rational (Sweeny, 2008).

To further break down the process of determining what caused the event the researcher asked the principals: Was the event caused by your own behavior? How so? If not, did an external agent cause the event? If so, what? Table 3 shows that 90% of the respondents felt that they were not the cause of the crisis, and that they responded to an external event. Only one principal felt a level of responsibility towards the crisis because she had been witness to a procedure in her school that she recognized as being unsafe. Administrators who feel responsible for the event may experience a more intense perception of the crisis. 80% of the administrators felt that the crisis could affect many people deeply and chose to actively respond to crisis. Research has shown that people are

most likely to actively engage in responding to a crisis if they feel a sense of responsibility (Brickman et al. as cited in Sweeny, 2008).

Crisis decision theory states that comparisons are made to evaluate a crisis in order to differentiate the event from a similar situation and to place it in a recognizable context (Sweeny, 2008). Principals were asked if they had reached out to a colleague during the crisis. Research has shown that it is common to reach out for support when a crisis occurs. Social support may include reaching out to other professionals who have experienced similar situations who are able to look at the crisis event more objectively to evaluate and offer suggestions (Sweeny, 2008). Several questions were asked related to this area of inquiry with the results found in Table 4.

The principals were asked: Did you consult a colleague regarding the crisis event to get their feedback? Eighty percent of the principals affirmed that they did contact a colleague. They were then asked: Did you consider that person to be your equal, less or more experienced than yourself? Sixty percent of the principals stated they considered the person to be more experienced, 20% stated they considered the colleague to be their equal. When asked if they had chosen the person because of their knowledge base or personal relationship, 70% of the principals responded they chose the person because of their knowledge base. The results in Table 4 indicate that principals are more likely to reach out to a colleague who they perceive as having more experience than themselves. Administrators tended to look towards a colleague's knowledge base more so than their personal relationship. Here is where the importance of networking with colleagues becomes essential. For new administrators who are taking on principal positions for the first time the ability to connect and ask for assistance from their mentor or district

colleagues becomes so important. This study showed that the majority of principals did not work in isolation to respond to the crisis. They sought out support. Especially administrators who could not reference past experience, reaching out and gaining another perspective assisted them in making a decision on how to respond. As seen in research the ability to manage the stress associated with the demands of a situation such as a crisis can be mediated through social support at work (Kontogiannis, as cited in Christianson & Kohls, 2003).

Another way of comparing information, found in Table 4, is to measure a current situation with a past one, using known schemas to gain information. When the principals were asked if they referenced past experience in dealing with crisis situations to help respond to the current one, 50% of the administrators stated that they did reference past experience. It was surprising that only half of the respondents used past experience in dealing with the current crisis. However, as further explanation was given, for some of the administrators this was the first crisis they had to handle as an administrator or it was a unique crisis that didn't connect to anything they had previously experienced.

For novice administrators it is important for them to understand that administrators are constantly bombarded with information throughout their day. As they walk through their buildings or have conversations with staff or parents they are given opportunities to make mental notes of possible safety issues on the horizon. If administrators got into the practice of writing down areas of concern and then took the time to investigate it is possible that certain crises could be avoided.

Critical decision theory suggests that schema availability, past experience, and behavior, and the availability of outside opinions can make the processes of responding to a negative event (i.e., crisis) quicker and more automatic (Sweeny, 2008).

Another decision process principals use to determine response options is to consider information about consequences. Crisis decision theory states that people use information about potential consequences to assess severity in making their decision. Table Five indicates that overall principals were not concerned about larger social issues in dealing with the content of their crisis, however, there was concern related to the potential damage to their reputation within their schools.

Crises that are likely to result in negative consequences will seem more severe (Sweeny, 2008). There are moments in the process of determining a response that a principal may consider the consequences of his/her decision, therefore several questions were asked such as: Did the crisis have the potential to damage your reputation? Sixty percent of the administrators felt that the crisis had the potential to damage their reputation. One administrator shared that there was no control over what happened, "Ah, I think if I had attempted to stonewall the situation without giving it its due process I would have definitely harmed the situation. But I think I acted, looking back, I acted appropriately."

Administrators were asked the following questions: Were there any negative social consequences connected to this event? Eighty percent of the principals did not feel there were any negative social consequences connected to the event, however, when they were asked what were the specific consequences they were concerned about in

formulating their response to the crisis, their responses all pertained specifically to the health and well being of their students, staff and community.

Crisis decision theory also states that a crisis leading to immediate consequences may be assessed differently than events leading to far-distant consequences. Ninety percent of the administrators believed that the crisis had immediate and potential far-reaching consequences and 60% felt that the timing of what consequence could occur affected the type of decision they would make. The results in Table 5 of this study show that principals are more likely to take into account both immediate and far-distant consequences and weigh them equally as being important which defies crisis decision theory.

Also in Table 5, 60% of the principals stated that in making their decision of what to do next, they took into account the timing of possible consequences. Principals felt the tension to make their decision based on the possible consequences related to the crisis. There was also awareness that the crisis had the potential to damage their reputation within their school community.

To sum up this first section, this study found that administrators do assess the level of severity when faced with a crisis situation. Many of the crises shared within this study required immediate action. The timing of possible consequences immersed as a real concern because there wasn't a lot of time to make a decision. So new administrators need to have the understanding that reviewing possible consequences can help them determine the level of severity of the event that this is a normal part of the process. Thinking about how it will affect their reputation is a likely reaction to the pressure of

making a decision. But it shouldn't be the determining factor in what they do to respond to the crisis.

**Research Question 2.** What are the factors that predict response choices?

In order to elicit the most essential factors related to response choices, principals were asked to think about controllability of outcomes and the feasibility of responses. Crisis decision theory states it is necessary to determine all the available responses based on factors that might limit possible options. As shown in Table 6, administrators were asked: Did you feel that in making your decision negative outcomes were inevitable or avoidable? Fifty percent felt that negative outcomes were inevitable, 40% felt negative outcomes were avoidable, and one administrator felt their crisis had the potential for both negative outcomes and outcomes that could be avoided. The results of this study show that all administrators chose an active response no matter the outcome. This may be based on the fact that 80% of the administrators believed that the outcome to the crisis was controllable.

Emotions arise when during the course of a school day's normal routine is interrupted by unexpected events. The interruption generates arousal (i.e., of the autonomic nervous system) and initiates an interpretation of the interruption that implicates particular emotions (Wood, Quinn, & Kashy, 2002). When administrators were asked if at any point of the crisis if they felt overwhelmed by the event, 60% responded positively to feeling overwhelmed.

New administrators need to understand that there are going to be times when they will have to respond to a crisis where the outcomes may or may not be in their control.

That feeling overwhelmed is a natural reaction yet not allowing their feelings to get in the way of moving forward in making their decision.

Crisis decision theory states that when active response options are generated and the event seems controllable, it is possible to believe that the response options are feasible given enough resources (Sweeny, 2008). Resources are important factors to take into account when determining a response to a crisis. Seen in Table 7, administrators were asked to recall in choosing their response if they felt they had enough time, funding, support from superiors, support from staff, and personal abilities to make their decision. Eighty percent of the principals felt they had enough time to make their decision, funding, and support from their superiors. All of the principals felt they had the support of their staff members. Ninety percent of the principals felt they had the ability to take the necessary actions and all ten principals felt their response to the crisis was feasible.

To sum up this section of the study there are many factors, when in place, lead to a response in making a decision. If an administrator has the time to make the decision they feel is best; have enough funding to support their decision, have the support from both staff and superiors; and have the self-efficacy that they have the ability to make the necessary actions, principals will move forward in making their decision in responding to a crisis. This study shows that the end result will most likely be a successful conclusion to the crisis with new learning gained for both the district and for the administrator.

But what if these pieces of the puzzle are not in place. What if an administrator does not have the support from their superiors to make the decision thought best for their staff and students in dealing with the crisis situation? What if an administrator feels as if they have the ability to take the necessary action but are denied the opportunity? The



recommendation from this research is for the administrator to do their utmost to convince their superiors of why they think certain action should be taken. Be detailed in their description with as much data as possible. In the end, it may not make a difference but at least the administrator will feel that they did as much as they could to defend the response that they thought was most appropriate.

**Research Question 3.** How do administrators select a response when the consequences of that response are uncertain? Administrators were asked if they reviewed pros and cons before responding to the crisis, or if the process happened more automatically. As Table 8 illustrates, 90% of the administrators did evaluate the options available to them, however, when reflecting upon the event, most administrators felt that the response that was chosen happened almost automatically. Sweeny (2008) states that:

Processing at each stage of crisis decision theory may be more or less automatic. Much of human experience is non-conscious and conscious processing is often disadvantageous due to its depletion of mental and energy resources. In the case of responding to negative events, engaging in relatively automatic processing at each stage benefits people by reserving their resources for the final point of active responding (p. 70).

Participants were asked to consider required resources, direct and indirect consequences related to their response. In Table 9, administrators were first asked to evaluate response options. Half of the principals felt that they had only one response option related to their crisis. However, 70% of the principals stated that they did evaluate their options before responding. New administrators would be wise to take a pause before making the final decision to evaluate options, as it is good practice. Jotting down a list of

possible responses and reviewing each one, weighing the pros and cons makes sense even if in the final analysis the response chosen feels more automatic. It is interesting to note that for many administrators the process to evaluate response options did not take place in isolation. Reaching out to supervisors, police, or staff members allowed principals to elicit an optimum amount of options before making the final decision.

In Table 9, administrators were asked the following question pertaining to required resources: Would you be more likely to choose a response to a crisis that uses fewer resources or more? Fifty percent of the respondents shared that they would use more resources than fewer. According to crisis decision theory most people are likely to choose a response that requires few resources. The possibility of losing resources is a major contributor to stress, therefore people are highly motivated to conserve resources whenever possible. However, when more resources are available there may be less of a concern regarding the overall cost involved in a specific response. Even so, minimizing resources must be considered in choosing between response options (Sweeny, 2008). Sweeny differentiates the use of resources between the second and third stage of crisis decision theory:

Information about required resources (the third stage) differs from information about response feasibility (the second stage). Information about feasibility indicates whether a response is possible, whereas information about required resources indicates whether a response is desirable. Responses that are unfeasible given available resources will not be considered at the third stage of crisis decision theory (p. 68).

In Table 10, administrators were asked to determine direct consequences related to their crisis. Upon reflection, in the end did the crisis situation lead to new learning for you or the district? Eighty percent of the administrators believed that the crisis led to new learning for the district, while 90% felt the crisis led to new learning for themselves. The results of this study show that the majority of administrators experienced positive direct consequences by responding to a crisis. Successful elements could be seen and felt. New learning occurred for the majority of administrators both personally and district-wide.

In Table 10, principals were asked: Did you at any time perceive of a problem in the crisis area before the crisis took place? Fifty percent of the respondents shared that they did perceive of a problem in the crisis area. Hoy et al (2006) states, "Mindfulness requires flexibility, vigilance, openness, and the ability to break set (p. 238)."

Mindfulness is the ability to continuously reflect upon experiences with a lens of looking for subtle context clues and to identify slight changes within the context of events. By filtering experiences through this process administrators can heighten their awareness to possible crises upon the horizon.

As administrators travel throughout their school it may be beneficial to bring along a pad of paper to jot down things that catch their attention. Then at the end of the day scan the list and make a mental note of issues or observations. In that way, it may be possible to catch hidden clues within the school that could turn into possible crisis areas in the future. Making this a daily practice may alleviate many problems down the line.

Table 11 explored indirect consequences associated with evaluating response options. Principals experienced a wide range of emotions during the crisis event. Eighty percent of the administrators were aware of their emotions that included feeling scared,

upset, remorseful, shocked and frustrated. Crisis decision theory states it is possible to experience a full range of emotions as a consequence of responding to a crisis (Sweeny, 2008).

Principals were asked: In evaluating your response to the crisis did at any point you think about how it would affect your professional standing or job status? Sixty percent of the principals stated they did not evaluate how response might affect professional standing or job status. They were also asked: In evaluating your response to the crisis did you think about how your decision would affect other areas of your life? Seventy percent of the principals did not consider how their decision would affect other areas of their life. When asked if they took into consideration how much impact their decision would affect others, 100% of the administrators thought about the affect their decision would have on others and half of the principals considered how others would feel regarding their response.

To sum up this section, administrators evaluate response options by looking at the resources available at the time of the crisis, they reach out to others in order to formulate as many response options as necessary and they evaluate the direct and indirect consequences associated with their final response decision.

### **Conclusion**

The purpose of this study is to examine and explore how a group of elementary principals from a northern New Jersey public school district (district factor group CD) make decisions in a time of crisis. This is an exploratory empirical study focusing on the three steps of crisis decision theory. CIT, a qualitative research methodology was employed to gain insight into their experiences. Three research questions were asked: (a)

What are the decision processes that occur when school administrators' respond to a crisis? (b) What are the factors that predict response choices? (c) How do school administrators select a response when the consequences of that response are uncertain? In order to determine decision-making during times of crisis, 10 elementary school administrators were interviewed.

In conclusion for research question 1, what are the decision processes that occur when school administrators' respond to a crisis? Principals must determine the severity of an event and the level of severity in order to respond appropriately. Reaching out to colleagues with more experience for feedback helped support the decision process in moving forward. Principals take into consideration all levels of consequences related to their response. They think about the potential damage their response may have on their reputations, they think about whether their decision will have immediate and far-distant consequences. Most of all they take into consideration the health and well being of the members of their school including staff and students in determining the best response related to the crisis at hand.

In conclusion of research question 2, what are the factors that predict response choices? In formulating a response to the crisis principals tend to determine the options available to them. Administrators take into account what resources they have available and how and when to best use those resources in responding to the crisis. Most administrators feel that they respond automatically to the crisis using past experiences as a springboard in their response when possible.

In conclusion of research question 3, how do school administrators select a response when the consequences of that response are uncertain? Administrators tend to

evaluate their options and choose the best option related to the resources available to them. Both direct and indirect consequences are evaluated to determine how their response decision will impact others. Administrators do not leave crisis situations empty-handed, new learning occurs at both the personal and district levels. Overall, crisis decision theory is a strong indicator of the rational thinking process administrators experience as they respond to crisis situations.

New administrators need to realize that if they are motivated to take on the responsibility of running a school they must be the type of person who cares deeply for others. Administration is all about service, service to the community, service to their staff, and service to their students. The study shows that the majority of administrators prioritized their response with the thought of how it would affect others. Making sure they understood the impact it would have and making their final decision based on that information.

### **Recommendations for Future Research**

Since this was the first study to examine how elementary principals respond to crisis situations through the framework of crisis decision theory, there are many opportunities to replicate this study in other educational settings to determine if similar results occur. For instance, a study can be constructed focusing on middle or high school principals' response to crisis. Will the level of severity at these grade levels be equal to or more severe than at the elementary level, if so, how do the administrators respond? A comparison of different socio-economic districts throughout the state is a possibility, being that the type of crisis may be more severe in some areas than others. Will the lack of funding and fiscal constraints affect administrators' ability to successfully respond to a

crisis? Are there significant differences between how the gender of an administrator affects the response to a crisis?

Additionally, this particular study was done using a qualitative method of investigation, critical incident technique. Within the study crisis decision theory was used to construct the questions. A similar study could be done not using leading questions but allowing principals to just share whatever part of their crisis experience they wish to share.

It is possible to reconstruct aspects of this study in a quantitative investigation using Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) Scale (Hadley, Pittinsky, Sommer, & Zhu, 2009). This scale was conceived and constructed at Harvard University to measure leadership qualities that affect the ability to assess information and to make decisions in times of crisis. This team of researchers also referenced aspects of critical decision-making theory in the construction of the scale. Using this scale in similar studies examining gender differences, socio-economic differences or school level differences would be recommended.

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