An Investigation of Attributes of School Principals in Relation to Resilience and Leadership Practices

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AN INVESTIGATION OF ATTRIBUTES OF SCHOOL PRINCIPALS IN RELATION TO RESILIENCE AND LEADERSHIP PRACTICES.

By

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This work is dedicated to my wife and kids, Renate, Jasmine, Coleridge and Rozann, without them it would not have been possible, neither would there have been any joy in its completion.
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ABSTRACT

The purpose of this investigation was to determine relationships among the dimensions of resilience, leadership practices, and individual demographics of high school principals toward strengthening the leadership abilities of principals. This quantitative study employed the survey method in its research design. Those surveyed included 68 high school principals, 136 assistant principals, and 340 teachers selected from 6 school districts in the State of Florida. The investigation used three on-line questionnaires to collect data on the dimensions of resilience, leadership practices and demographics of these principals. The data were analyzed by using three statistical methods: Pearson-Product Moment Correlation, T-test, and Analysis of Variance (ANOVA). Hypothesis testing was introduced to determine statistical significance.

The investigation found significant relationships among the resilience dimensions of Positive: The World, Focused, Flexible: Thoughts, Organized and Proactive, and the leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart of high school principals. Thus, the researcher concluded that high school principals who have a higher percentage of resilience dimensions of Positive: The World, Focused, Flexible: Thoughts, Organized and Proactive are better able to employ the leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart to become more effective high school principals. The implications of the investigation suggested a base of knowledge from which school principals could assess their leadership strengths and weaknesses and improve their leadership performance. It also provided a basis for the selection of materials for enhancing in-service components in school leadership for school districts and for pre-service courses in educational leadership for universities charged with training principals. Further research was recommended on resiliency in education because it is a critical component to successfully managing change.
CHAPTER ONE

INTRODUCTION

The topic on leadership in education has been widely studied by scholars. Kouzes and Posner (2002) studied leadership behaviors for over two decades and found that leadership is the “art of mobilizing others to want to struggle for shared aspirations” (p. 21). According to Yukl (1989), leadership has been studied in different ways, depending on the researcher’s conception of leadership and the method of the research. Researchers in educational administration suggest that school leadership is imperative for school improvement. Today, education leaders find themselves leading groups, schools, and organizations across a rapidly changing environment and society toward a new destination in the twenty-first century (Cunningham & Cordeiro, 2000). A new approach to leadership is critical, particularly in our educational institutions.

This chapter should help the reader gain a better understanding of the leadership research in this investigation by providing information regarding its, background, purpose, significance, assumptions, delimitations, definitions of key terms and summary.

Study of Leadership

Although the study of leadership is considered a most fascinating topic, it is also viewed as a complex matter (Owens, 1991; Thomas & Davis, 1998). Researchers found that leadership is critical to the success of an organization and can exhibit tremendous influence (Parrish, 2001). School administrators have frequently been cited in research studies as key figures in bringing about needed school reform and student achievement in schools. Most of the reports on educational reform confirm that improved leadership could facilitate change and contribute to the achievement of excellence in schools (Bjork & Ginsberg, 1995). School improvement can also come from other sources; therefore, school principals should encourage faculty and staff to come
up with ideas, innovations and proposals to support change throughout the school (Snowden & Gorton, 2002).

Over the years, considerable efforts have been made to identify specific responsibilities of the school principal. Among the most important responsibilities are the development of a vision and motivation of faculty and staff toward achievement of student success (Cunningham & Cordeiro, 2000). The principal of tomorrow’s schools must be a school leader, one who possesses the requisite skills, capacities, and commitment to deal with increased responsibilities and to lead the accountability parade. Without good leadership, the chances for systemic improvement in teaching and learning are not good. A commitment to effective leadership would help principals adapt significantly to the changing circumstances (Tirozzi, 2001).

Because of the nature of the school organization and its demanding environment, school administrators rely extensively on leadership as the primary vehicle for influencing faculty and students (Greenfield, 1995). Bass (1990) recognized that leadership can have a “determining effect” on the behaviors and activities of a group and those leaders can influence group members by their own examples (p.13-14). According to Owens (1991):

- Leadership is a function of groups, not individuals. Although individuals are being considered as leaders, leadership occurs only in the processes of two or more people interacting with each other. During the interaction process, one person is able to persuade the others to think and behave in certain ways.

- Leadership is the intention of exercising influence on the behavior of other people.

A 1999 report from the National Association of State Boards of Education stated that the principal’s job has become more complex and demanding (Tirozzi, 2001). With increasing populations came larger schools that compounded complex administrative duties. Although no two schools are alike, most school administrators experience common conditions, problems, responsibilities, uncertainties and concerns. Each faces the same constellation of parents, students, teachers, staff members, buildings, school board members, legal, budget and curriculum decisions, and the district office. And as principals try to mediate between growing needs and shrinking resources, they are faced with a public demand to account for every action taken. In fact, principals’ work has become a very complex and demanding job (Barth, 1980). The question remains, whether today’s principals have the leadership qualities, skills, and abilities to face this mammoth task.
Cunningham and Cordeiro (2000) believe that the “leader needs to be prepared to deal with the inevitable social, cultural, economic, technological, bureaucratic, and political obstacles that can block improvements efforts” (p. 137). On the other hand, Greenfield (1995) argued that an effective administration is not possible without efficient and effective leadership, and if school leadership is to be successful, it must deal with the five demands: moral, social, instructional, managerial, and political. Researchers concluded that effective schools hinge on the performance of the principal (Aitken, 1995).

Leadership is about motivating other people. But to motivate others, leaders should have certain leadership qualities or characteristics. Whitaker and Turner (2000) maintained that a successful school principal must possess many leadership characteristics. Observations by managers and human resource specialists, as well as dozens of research studies indicate that leaders have certain personality traits (Du Brain, 1998). According to Cunningham and Cordeiro (2000), the qualities of leadership are similar whether the discipline is education, business, health, government, criminal justice, higher education, engineering, or any other field. Based on their research, Kouzes and Posner (2002) stated that leadership consists of a set of skills and practices that enable them to get extraordinary things done, even through in rough or laborious times. Leaders should be prepared to take considerable risks to achieve their mission. Webster (2000) emphasized that leaders should have high expectations and high standards for themselves and their followers at all times.

Background

Throughout history, good educational leadership has been the focus of intense, debate and speculation. Moreover, the importance of the principal as a key factor in the success of a school has rapidly become a major focus of current efforts to improve education. Based on my literature review, multiple evaluations, school surveys and research are being done to establish a better understanding of the nature of educational leadership. The principal of today and tomorrow faces a rapidly and continuously changing environment. The political, social, economic, technological, and environmental forces which are influencing our society so dramatically have a significant impact on all aspects of the school itself – the leadership, the
curriculum, the school organization, the faculty, student behavior, community relations, and the learning-teaching process.

Schools are aware that they need to adapt to rapidly changing times. Therefore, principals must be more than administrators; they must facilitate change in the school by structuring challenges with reasonable risk to improve their leadership and management skills and the school’s progress and success (Osburn, 1993). According to Cunningham and Cordeiro (2000) leadership is about doing the right things, management is doing things right, and the administrator is responsible for both functions. Indeed, administrators are expected to be effective leaders and efficient managers.

Furthermore, principals should also demonstrate high levels of educational leadership to address complex and changing tasks (Whitaker & Turner, 2000). In order to respond creatively, flexibly and quickly to the changing realities of life outside the school, the principal requires certain skills to deal with their circumstances, oversee change and improve student achievement. Conner (1993) posited that the “ability to confront change in a way that maintains or enhances current levels of functioning is a critical element of productive human existence” (p. 89). Garmezy and Masten (1996) maintained that to master change successfully a leader requires psychological and biological strengths, which are called resilience. Although definitions of resilience differ across studies and disciplines, the most common aspects relating to change are the ability to recover; to bounce back; coping and adaptation; willingness and ability to implement change; overcoming adversity; withstand hardship; and strength to confront difficult circumstances. The question remains: do our principals have the willingness and the strength to confront the overwhelming changes and obstacles that stifle school performance.

**Purpose of the Study**

The purpose of this investigation was to determine relationships among the dimensions of resilience, leadership practices, and individual demographics of high school principals toward strengthening the leadership abilities of the principals. Conner’s (1992) research over the years defined seven general dimension of resilience: Positive (Yourself), Positive (The World), Focused, Flexible (Thoughts), Flexible (Social), Organized, and Proactive. Based on this model, Conner (1992) concluded that resilient people have these dimensions in common enabling them
to confront the overwhelming obstacles they are bound to face in life. The *Personal Resilience Questionnaire* (PRQ) was developed to assess individuals on the seven dimensions of resilience. The instrument was applied in this investigation to high school principals.

A second part of the investigation asked high school principals, assistant principals and teachers to assess leadership actions and behaviors of the principals that reflect the quality of their leadership (Kouzes and Posner, 1995). Kouzes and Posner (1987,1993) designed the *Leadership Practices Inventory* (LPI) questionnaire to measure leadership actions and behaviors based on the five leadership practices: challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart.

A third part of the investigation asked high school principals to provide individual demographic information about themselves, such as age, gender, marital status, level of education, teaching experience and administrative experience. As for this investigation, there will be lesser emphasis on the individual demographics of school principals.

Using the above data for high school principals, the investigation attempted to answer the seven research questions below toward meeting the above stated purposes.

1. Are there significant relationships among resiliency dimensions (predictor variable: it predicts one independent variable form the other) and leadership practices (predictor variable) of high school principals? The expectation is that there are significant relationships among the resiliency dimensions and leadership practices of high school principals to become more effective school leaders.

2. Are there significant differences between principals’ self-assessments of their leadership practices (predictor variable) and their teachers’ peer assessments (predictor variable) of them? The expectation is that there are significant differences between the principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them to become more effective school leaders.

3. Are there significant differences between principals’ self-assessments of their leadership practices (predictor variable) and their assistant principals’ peer assessments (predictor variable) of them? The expectation is that there are significant differences between the principals’ self-assessments of their leadership practices and their assistant principals’ peer assessments to become more effective school leaders.
4. Are there significant differences among resiliency dimensions (predictor variable) and the individual demographics (criterion variable: it assesses the effect of the predictor variable) of high school principals? The expectation is that there are significant differences among resiliency dimensions and the individual demographics of high school principals to become more effective school leaders.

5. Are there significant differences between teachers’ perceptions of leadership practices of their principals in rural (predictor variable) and urban (predictor variable) high schools? The expectation is that there are significant differences between rural and urban high schools in regard to the principals’ leadership practices to become more effective school leaders.

**Significance of the Study**

School leadership has always been viewed as critical to the success of the school (Parrish, 2001). Researchers on educational reform have viewed leadership of utmost importance for systemic improvement in teaching and learning in schools. Tirozzi (2001) contends that a commitment to leadership would help principals adapt significantly to the changing circumstances. Hence, this investigation should add information to the scholarly research and literature in the field of school leadership. Kouzes and Posner (1995) stated that there is a need for leaders to lead us into the future. Consequently, they turn their research into practical ideas that leaders at all levels can use. *The Leadership Challenge* model of Kouzes and Posner, which is based on years of empirical research, provides practical guidance to leaders in every organization on how to lead, as well as practical suggestions of how to act during difficult situations. Roland Barth, educator, author, former teacher, principal and founding director of the Harvard University’s Principals’ Center, stated that *The Leadership Challenge* model provides school leaders with the qualities to become good leaders, and to enable them to improve public schools (Kouzes and Posner, 2002).

The role of the leader and manager in an organization has often been confused, although most scholars viewed them as two separate functions (Kotter, 1988; Bolman & Deal, 1997; Bass, 1990; Cunningham & Cordeiro, 2000). Lately, the major emphasis of research in this area centers on the overlap and interdependency of leadership and management (Bass, 1990; Gardner,
A more elaborate discussion on the above concepts will be discussed in Chapter two: Review of literature.

School principals are constantly exposed to the demands of a complex and changing education environment. To manage change in a world where increasingly complex problems emerge, principals need to interpret and perpetually be the conscience of the school so that students’ interests are upheld. Since resilience enables more effective handling of change (Conner, 1993; Flach, 1988), it has immense potential relevance to education. According to Henderson and Milstein (1996), resilience is the ability to bounce back from negative life experiences and become stronger while overcoming them. Although, every person, group or organization has the capacity to assimilate change, do resilient principals have the capacity, willingness, and ability to implement change for themselves and others? When resilient school principals face the ambiguity, anxiety, and loss of control that come with change, they tend to grow stronger rather than be defeated (Conner, 1993). This investigation was designed to discover resilient dimensions that can provide the school principal with new skills and practices to absorb change while maintaining their productivity, physical and emotional stability to achieve desired objectives.

The results of this investigation served as a basis for school principals to assess their leadership strengths and weaknesses, and used the findings to become more effective school leaders. It also provided the principal with her or his personal resiliency scores and how these relate to managing change. Additionally, the data suggested a basis for the selection of materials for enhancing of in-service components in school leadership for school districts and for pre-service courses in educational leadership for universities charged with preparing school principals.

Assumptions of the Study

The investigation was based on the following assumptions:

1. The principal exerts leadership characteristics and skills to implement reforms aimed at empowering students, teachers, staff members and parents to implement the desired changes.
2. Through practice, principals acquire the necessary skills that improve their leadership capacity to inspire and motivate others toward a common purpose.
3. “Leaders do exhibit certain distinct practices when they are doing their best” (Kouzes and Posner, 1995, p. xxiii).

**Delimitations of the Study**

The investigation had the following delimitations:
1. The investigation included only high school principals from six public school districts in the state of Florida.
2. All the participants (school principals, assistant principals and teachers) of the investigation were restricted to public high schools in six public school districts.
3. The investigation included only high school principals as the administrator for schools who catered for grades nine through twelve students.

**Definitions of Key Terms**

For this investigation, the following definitions applied:

- **Secondary or High School**: Schools who catered for grades nine through twelve students.
- **Leadership Practices**: The five competency areas that enabled a leader to get extraordinary things done, as defined by Kouzes and Posner (1995, 2002).
- **Skills**: The competency in a certain area.
- **Predictor variable** (Independent variable): It predicted one variable from the other variable.
- **Criterion variable** (Dependent variable): It assessed the effect of the predictor variable.
- **Individual demographics**: These were the basic demographics (Age, Gender, Marital status, Level of education, Teaching experience and Administrators’ experience) of high school principals and did not refer to socioeconomic status.

**Summary**

This chapter reviewed the importance of educational leadership in schools and how principals’ leadership skills and abilities could facilitate change and contribute to the achievement of excellence in their schools (Bjork & Ginsberg, 1995). Researchers believed that
administrative leadership is needed if schools are to improve significantly. Also discussed in this chapter were the background, purpose, research questions, significance, assumptions, delimitations, and the definitions of key terms of the study.

The remaining four chapters of this investigation will be organized as follows:

- Chapter Two presents a review of the literature for the two independent (predictor) variables, resiliency dimensions and leadership practices.
- Chapter Three explains the research methodology and procedures of the investigation.
- Chapter Four presents an analysis and interpretation of the data gathered by the researcher.
- Chapter Five consists of a summary, conclusions, implications and discussions, limitations and recommendations for further study.
CHAPTER TWO

LITERATURE REVIEW

In the rapidly changing environment of the new millennium, school leaders must have the skills and behaviors to guide the development of their leadership capacity and practices to meet the serious challenges in education. In the literature, one may find numerous concepts and approaches to develop and practice good leadership. Because so many variables of personality and context go into the workings of leadership, it is not surprising that people have observed and studied leadership from many different perspectives. By their behavior, leaders earn trust and inspire loyalty. Schools, certainly as much as any other institution, deserve good leadership.

The review of the literature related to the problem is organized around the two topics: Resilience and Leadership.

Construct of Resilience

This section is divided into several parts. Firstly, it discusses the multiple definitions of the construct of resilience, and how it has been conceptualized over the years in the literature. Secondly, it describes the operationalization of the construct of resilience for this investigation. Thirdly, it reviews and discusses the various research studies on resilience, and lastly describes and discusses how the construct is being measured.

Definitions

The term resiliency, which is derived from the Latin roots meaning, “to jump (or bounce) back,” has no universally accepted definition although most definitions used in the literature are very similar. Definitions have evolved as the concept has been examined independently by researchers from a variety of professional disciplines; the disciplines include psychology, psychiatry, medicine, epidemiology, nursing, social sciences, human development, and change
management (see Table 1 below). Each definition provides a different perspective or emphasis, yet a common sense of resiliency emerges. Based on the research, most fields viewed resiliency as a human capacity, strength, or ability (Conner, 1993; Joseph, 1994; Henderson & Milstein, 1996; Wolin & Wolin, 1993; Flach, 1988; Pianta & Walsh, 1998; Murphy & Moriarty, 1976; Werner & Smith, 2001; Garmez, 1993; Masten, 1989; Rutter, 1987; Wayman, 2002; Hollister-Wagner, Foshee, & Jackson, 2001). A study in the field of nursing, for example, provides a helpful description for resilience, namely, as a regenerative power (Jones, 1991). The fields of psychiatry, psychology, and social sciences refer to resilience as a strength (Flach, 1988; Sagor, 1996; Wolin & Wolin, 1993), while human development and change management call it an ability (Werner & Smith, 2001; Conner, 1993).

As indicated in the literature above, certain events evoke the need for resilience, such as adversity; stressful experiences; obstacles or setback; defeat; misfortune; trauma; change; disruption; challenging situations; hardship; behavior problems; physical complications; dysfunctional situation; and crisis. Some researchers have indicated that these factors could be generated either internally or externally (e.g., Colgate, 1995). Several studies in the literature indicate a variety of accelerating events: Higgins (1994) interviewed and conducted psychological tests with 40 adults who endured severe abuse and trauma as children; Moskowitz and Krell (1990) examined the survivors of wars and concentration camps; Werner and Smith (2001) monitored the impact of biological and psychological risk factors, stressful life events, and protective factors on the development of men and women; Wolin and Wolin (1993) studied the long-term consequences of having alcoholic parents; Rutter (1987) conducted a 14-year follow-up study of British women who were placed in an institution as a result of being abused or abandoned as small children; and Conner (1993) observed, recorded and analyzed the behavior of thousands of leaders and managers in organizations as they attempted to implement major change.

Although definitions of resilience differ across studies and disciplines, the researchers attempted to identify some basic features of the concept. The most common aspects are the ability to recover; to bounce back; coping and adaptation; willingness and ability to implement change; overcoming adversity; withstand hardship; and strength to confront.

Outcomes depicted in the resilience studies, include high levels of ego development and a higher economic status than their family (Higgins, 1994); self-discipline (Flach, 1988); and
survival of those subjected to war and concentration camp trauma (Moskovitz, 1983). Other outcomes are effective and capable leaders (Conner, 1993; Henderson & Milstein, 1996); growth and development (Jones, 1991); and health and well-being as an outcome (Billing & Moos, 1994).

In view of the many definitions, several inferences can be made that will increase the current understanding of resilience. Firstly, the term signifies growth or recover, either physically or mentally. This is manifested in the study of Higgins (1994) where the “potential subjects are able to cope with the challenges in order to complete the important development tasks that confront them as they grow.” Hence, Higgins (1994) describes resiliency as the process of self-righting and growth. In addition, Garmezy (1974) describes resiliency to recover from psychological trauma. Thus, the individual bends in the presence of stress and is able to return to the previous level of functioning or recover from the stress. Secondly, resiliency implies action or strength, which is noted as bouncing back, managing frustration and/or persisting in the face of it, modifying behavior or environment, and negotiating (Colgate, 1995). Researchers who studied these factors are: Conner (1993), who describes resiliency as the ability to demonstrate strength; Wolin and Wolin (1993), who describe it a “forging lasting strength in the struggle”; Dugan and Coles (1989), who describes it as bounce back from a obstacle or setback; and Joseph (1994), who describes it as the ability to bounce back from a bad or difficult circumstance. In these situations, individuals think, feel, and act in the face of adversity by drawing on strengths, skills, and past experiences to identify an adequate solution for a particular situation (Colgate, 1995). Thirdly, the term also implies coping or adaptation, particularly to a unique situation. Researchers, such as Wang and Gordon (1994), describe the term as “successful adaptation,” and Ahn (1991) and Bennett, Novotny, Green and Kluever (1998), describe it as the individual’s general adaptability. While Garmezy and Masten (1986) describe resiliency as the ability to cope with challenges and threats, while maintaining an internal, and integrated sense of self. Fourthly, the resiliency implies a sense of success or survival. Werner and Smith (2001) indicate in their Kauai longitudinal study that most of the high-risk children became successful individuals in their adult life, in spite of impoverished home lives and other detrimental factors. Also, Moskovitz (1993) indicated in his study how resilient individuals survived the situation in the wars and concentration camps. Usually, this achievement is mostly based on an individual’s own cognitive processes, which resulted in an amplified sense of power that does not have to be
shared (Colgate, 1995). Fifthly, the term implies influence over the environment, which is either external or internal. Here, Flach (1988) indicated that resiliency is a strength that most individuals can develop to turn trauma to one’s benefit and not to view oneself as a victim. This is similar to Rotter’s (1966) theory on internal locus of control: the perception that positive and negative events are the consequence of one’s own actions or behavior.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>Resilience is the ability to bounce back: to withstand hardship and repair yourself (Wolin &amp; Wolin, 1993; Higgins, 1994).</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>Resilience is the psychological and biological strengths humans require to master change successfully (Flach, 1988)</td>
</tr>
<tr>
<td>Developmental Psychopathology</td>
<td>Resilience is the ability to cope with challenges and threats, while maintaining an internal, and integrated sense of self (Garmezy &amp; Masten, 1996).</td>
</tr>
<tr>
<td>Human Development</td>
<td>Resilience is the ability to withstand or successfully cope with adversity (Werner &amp; Smith, 2001).</td>
</tr>
<tr>
<td>Change Management</td>
<td>Resilience is the ability to demonstrate both strength and flexibility during the change process, while displaying minimal dysfunctional behavior (Conner, 1993).</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>Resilience is the ability to survive stress and to rise above disadvantage (Rutter, 1979).</td>
</tr>
<tr>
<td>Nursing</td>
<td>Resilience is the ability to develop regenerate power to respond to the internal or external environment for survival, growth or development (Jones, 1991).</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Resilience is the ability to bounce back from negative life experiences and become stronger while overcoming them (Henderson &amp; Milstein, 1996).</td>
</tr>
<tr>
<td>Medicine</td>
<td>Resilience is the ability to recognize pain, acknowledge its purpose, tolerate it for a while until things begin to normalize (Flach, 1988).</td>
</tr>
</tbody>
</table>

**Conceptualization of the Construct of Resilience**

Based on this research, it appears that the concept of resilience is mainly dealing with the application to people. It denotes that individuals have certain qualities to enable them to face difficult or devastating circumstances and overcome them. These individuals tend to be socially
skillful, well liked and able to solicit support and help from others when needed (Josef, 1994). They are not invincible or invulnerable; they can be hurt or wounded. Furthermore, they are not immune to the stress of daily life (Conner, 1993). The concept of resilience includes a self-reflective capacity and a self-soothing capacity (Abdullah, n.d.). Being resilient means being capable to bounce back from shock despite the pressure or odds against you. Conner (1993) stated that resilient people “have a much greater capacity for bouncing back quickly after a shock,” though they “face no less of challenge than others when confronting a crisis.”

The concept invokes “positive images such as determined, vigorous, hardy, and irrepressible. A resilient person can bounce back from disappointments and defeats; can turn losses into learning experiences; can cope with settings and life events that are normally thought of as inducing hopelessness, or failure” (Abdullah, n.d.). Resilience is conceived as a barricade that does not eliminate risks and adverse conditions in life but allows the individual to deal with them effectively (Werner & Smith, 2001).

Garmezy and Masten (1986) state that resilience happens when adaptation and competence occur under conditions in which inadequateness is anticipated. These authors further describe resilience with the concept of “stress-resistance,” which includes a person’s ability to cope with challenges and threats, while maintaining an internal, integrated sense of self (Garmezy & Masten, 1996). Thus conceptualization is further defined as pertaining to individuals who have the ability to overcome stress (Wyman, Cowen, Work and Parker, 1991). As depicted in the literature review, some of the research studies adequately conceptualized the construct of resilience (e.g., see Werner & Smith, 1982; Rutter, 1987; Flach, 1988; Conner, 1993; Wolin & Wolin, 1993; Bernard, 1993, 1995; Higgins, 1994).

The Kauai Longitudinal study conducted by Werner and Smith is considered the centerpiece in the research studies of resilience. Originated in Kauai, Hawaii in 1955, they studied 698 at-risk residents who had experienced risk factors such as poverty, prenatal stress, family discord, divorce, parental alcoholism, or parental mental illness. The participants represented an ethnic mix; many had parents or grandparents who emigrated from Southeast Asia and married local Hawaiians. The researchers established that the parents had, at most, an eight-grade education, and the sample of approximately 200 were considered high risk. Two-thirds had various problems during childhood, while the other one-third showed no problems at all. By the time the study participants reached their mid-thirties, almost all, including many of
those who had experienced problems, had become constructively motivated and responsible adults. They found that resilient children had distinct characteristics: kindly, good-natured, a sense of well-being, above average self-control, a high tolerance for others, above average verbal ability, high achievement motivation, a sense of coherence, and an internal locus of control. In addition, the resilient adolescents exhibited characteristics such as being adaptable, efficient, organized, sincere, unassuming, enterprising, idealistic, intelligent, resourceful, confident, energetic, humorous, rational, realistic, strong, emotionally responsive, gentle, nurturing, and sensitive.

Higgins (1994) conducted interviews with and administered psychological tests to 40 adults who endured severe abuse and trauma as children. In her interviews with these adults, she found that resilient children actively recruited substitute parents, sustained recruited love, and selectively internalized those relationships. These children eventually grew into adolescents who employed adoptive relationships as safe havens for the development of autonomy, competence, and the ability to distance oneself from emotional disorder. Resilient subjects tend to speak of an active faith and reliance upon personal meaning to beat the odds. Furthermore, they were staunch advocates for social and political injustices, and found satisfaction when being benevolent. She discovered that resilient adults have positive relationships, are adept in problem solving, and have motivation for self-improvement. In her 1985 study, she found characteristics such as intelligence, creativity, activism, high levels of ego development, and a higher economic status than their family.

Wolin and Wolin (1993) conducted twenty-five clinical interviews with resilient survivors. They, specifically, studied the long-term consequences of having alcoholic parents. Through their years of research, they discovered a flip side to the isolation, fear, degradation, and anguish commonly experienced by survivors of troubled families. They identified for the first time the clusters of strength or resiliencies that typically emerge as survivors battle adversity. According to Wolin and Wolin, the seven resiliencies are insights, independence, relationships, initiative, creativity, humor, and morality.

Rutter (1987) conducted a 14-year follow-up study of British women who were raised in an institution as a result of being abused or abandoned as small children. Despite their high-risk conditions, approximately one-third of the women became successful, responsible adults. This can be seen in the selection of a spouse and marrying in order to escape their home
environment of abuse or abandonment as a consequence of an illegitimate pregnancy. Resiliency was also seen in their exercising foresight in selection of employment.

Flach (1988), a psychiatrist, spent over 30 years working with psychiatric patients and observing how people survive hardships and cope with potentially dangerous situations in their lives. His experiences helped him assemble a profile of the characteristics of a resilient personality, including: a strong sense of self-esteem; independence of thought and action; a high level of personal discipline and a sense of responsibility; recognition and development of one’s special gifts and talents; willingness to dream; open-mindedness and receptivity to new ideas; a wide range of interests; a keen sense of humor; insight into one’s feelings and those of others, and the ability to communicate these in an appropriate manner; a high tolerance of distress; and focus and a commitment to life.

Conner (1993) spent nearly 20 years as a consultant, trainer, and researcher in corporations undergoing organizational change. As result of studying the behavior of people in transition, he and his associates at ODR, Inc. identified characteristics of people who are able to successfully implement major organizational change, including being focused, flexible, positive, organized and proactive. These characteristics are manifested by certain beliefs, behaviors, skills, and areas of knowledge. He also found that resilient people are more likely to perceive a situation as a challenge and less resilient people are more likely to perceive a situation as a threat. Resilient people demonstrate strength and flexibility in a difficult situation or adverse circumstances.

Based on her review of the literature on resilience, Bonnie Bernard, Prevention Specialist for the Western Center for Drug-Free Schools and Communities at Far West Laboratory for Educational Research and Development, identified the following characteristics of resilient children (Bernard, 1993): social competence, problem-solving, and sense of autonomy. She stated that resilient individuals usually have these attributes in common as indicated in Krovetz (1999). According to Bernard (1995), we are born with an innate capacity for resilience, by which we are able to develop these attributes.

The research, as depicted from the above studies, suggest that there are qualities in individuals that enable them to face difficulties and overcome them, changed, endured, or resolved in some way. Sagor (1996) concurred by stating that resilience is a set of attributes that provide people with the strength and courage to confront the overwhelming obstacles they are
bound to face in life. When individuals are judged to be resilient, the implication is that they have displayed adaptive behaviors despite facing risks and adversaries (Wang & Gordon, 1994). Thus, for this investigation, resilience conceptualizes the successful adaptation or recovery of an individual despite risk and adversity.

**Operationalization of the Construct of Resilience**

Resilience is a construct associated with bouncing back from adversity by doing something to change the situation and by managing situations with appropriate skills, behaviors, and qualities so that they no longer seem stressful. Resilient school principals, for example, should be able to flourish under demanding and difficult situations and maintain good and productive human relations at the same time (Abdullah, n.d.). When facing disappointments and defeats, they should be able to bounce back; change losses into learning experiences; and cope with life events that are normally considered as a failure. Being resilience means that you should show courage, flexibility, self-reliance, and the ability to find continued meaning and purpose in life (Abdullah, n.d.).

Drawing from the research on resilience, five characteristics emerge that would help school administrators to move ahead in the face of adversity (Patterson, 2001; Hagevik, 1998; Abdullah, n.d.; Conner, 1993; Bernard, 1995; Higgins, 1994; Henderson & Milstein, 1996; Flach, 1988).

1. **Proactive:** Resilient people take a proactive approach rather than a reactive or passive approach to problem solving. These people tend to take charge of their life situation and do not wait for others to do things for them (Abdullah, n.d.; Conner, 1993). They are usually self-reliant and independent while at the same time socially skillful to solicit help when needed (Abdullah, n.d.; Henderson & Milstein, 1996; Wolin & Wolin, 1993). Flach (1988) in his study characterized resilient people as independent in their thoughts and actions, and have the skills to set proper limits on their dependency. Patterson (2001); Hagevik, (1998); and Conner (1993) stated that when resilient school leaders face a difficult situation, they must avoid being rigid and rather take a proactive approach.

2. **Positive:** Resilient people see major changes or disruptions as uncomfortable but opportunities to grow and develop (Hagevik, 1998; Conner, 1993; Abdullah, n.d.; Patterson,
2001). Although life is rewarding, they believe they can learn from their negative experiences and challenges to deal effectively with difficult situations (Conner, 1992; Patterson, 2001). According to Bernard (1991), resilient people generative positive responses from other people, while Henderson and Milstein (1996) see resilient people as those who have a positive view of the future.

3. Focused: Resilient people are focused, committed to life, and maintain a clear vision to purposefully achieve their objectives (Conner, 1993; Flach, 1988; Hagevik, 1998). Based on his research in schools, Patterson (2001) views resilient school leaders as those who consistently and persistently apply strategies to operate from a clear set of personal and organizational values, despite any external adversities.

4. Flexible: Resilient people have the capacity to believe that change is a manageable process. School administrators who have high levels of flexibility have a high tolerance for ambiguity, and need only a short time to recover from adversity. They recognize their strengths and weaknesses and display patience, understanding and humor when dealing with change. Being flexible means they will not engage in changes beyond their personal or organizational capabilities and, as a result, will not become victims of change. Several researchers have associated one or more of these characteristics with resilience (Hagevik, 1998; Conner, 1993; Patterson, 2001; Wolin & Wolin, 1993; Bernard, 1993; Henderson & Milstein, 1996; Flach, 1988). Patterson (2001) also characterizes resilient school leaders as people who pay attention to external forces and messages and search for ways to include diverse perspectives without giving up on the ultimate goal.

5. Organized: Resilient people have the ability to quickly sort information, build structures in the midst of chaos, plan actions for efficient use of resources, and avoid acting on impulses. A number of studies have found one or more of these characteristics associated with resilience (Conner, 1993; Hagevik, 1998; Bernard, 1993).

Patterson (2001) stated that resilient school leaders find common themes to efficiently direct their energy and the energy of their organization. It is important that they anticipate hidden adversity and simply not waste time on issues that will diminish resilience (Patterson, 2001). They have the ability to manage many tasks and demands simultaneously and successfully, and must recognize when to enlist help from others (Conner, 1993).
Thus, based on this literature review, the operationalization of the construct of resilience for this investigation involves a set of characteristics that could provide school administrators with the strength and courage to overcome challenges and threats, recover from disappointments, and enable effective change management despite facing risks and adversaries.

Models on Resiliency

Based on this literature review of the construct of resilience, the major models that characterize resilient adults are as follows:

1. The first model comes from a research study conducted by Sybil Wolin, a psychologist, and Steve Wolin, a psychiatrist, published in 1993 in their book: *The Resilient Self: How Survivors of Troubled Families Rise Above Adversity*. They conducted the study through the National Institute of Alcohol Abuse and Alcoholics about people who became addicted to alcohol or other drugs. They conducted hundreds of interviews with adult children of substance abusers who did not abuse alcohol or other drugs to try ascertaining what was different about the control group whom had grown up in the same family, but did not become addicted themselves.

   After a careful study and analysis, they identified a set of attributes, which emerged in those individuals who recover from troubled circumstances or events and resume usual activity and success.

   (a) Insight: The mental habit of asking tough questions and giving honest answers, including reading signals from other people, identifying the source of the problem, and trying to figure out how things work for self and others.

   (b) Independence: The right to safe boundaries between yourself and significant others, including emotional distancing and knowing when to separate from bad relationships.

   (c) Relationships: Developing and maintaining intimate and fulfilling ties to other people, including perceived ability to select healthy partners, to start new relationships, and to maintain healthy relationships.

   (d) Initiative: Determination to master oneself and one’s environment, including creative problem solving, enjoying figuring out how things work, and generating constructive activities.
(e) Creativity and Humor: Safe harbors of the imagination where you can take refuge and rearrange the details of your life to your own pleasing, including creativity and divergent thinking, being able to use creativity to forget pain, using creativity to express emotions, using humor to reduce tension, or make a bad situation better.

(f) Morality: Knowing what is right and wrong and standing up for those beliefs, including being willing to take risks for those beliefs, and finding joy in helping other people.

2. The second model comes from a study by Sandra Hagevik (1998), author of the article, *Resilience Required*, published in the *Journal of Environmental Health*. She serves as a career consultant for Eviro Temps, Inc., a national woman-owned project staffing firm specializing in the environment careers field. She began her career as a science and health teacher and later moved into the fields of career counseling, university administration, and outplacement consultant. Over the 20 years, she counseled, coached, encouraged, interviewed, and motivated hundreds of people in career transition. She herself changed jobs and careers several times, sometimes by choice, sometimes because of politics or downsizing, or poor fit. Being in a position like this herself, she faced the challenges and turned failure into an ultimate gain. This requires and builds resilience. According to her, resilience is essential to the success of individuals and organizations faced with change. She identified the following attributes of a career resilient individual.

(a) Positive: Being positive means that you make suggestions to improve the work situation beyond simply doing what’s expected. Resilient employees tend to describe themselves as more multifaceted than others. They expect variables, view disruptions as natural results of a changing world, and try to spend their time understanding paradoxes that occur in their daily work life. While they see major changes as uncomfortable, they usually view those changes as opportunities to grow and develop. Since they see life as generally rewarding, they believe that they can learn from the lessons offered by challenges.

(b) Focus: People who are focused maintain a strong purpose or vision that serves both as a source of meaning and as a guidance system to re-established perspectives following significant disruption. They unlikely will abandon their values during a crisis, because their beliefs about work are integrated with other aspects of their lives. Someone who is not focused is less able to set and achieve personal or professional goals.
(c) Flexible: Flexibility is the capacity to believe that change is a manageable process. Employees who score high on flexibility have a high tolerance for ambiguity, need only a short time to recover after adversity, and feel empowered by transitions. They recognize their strengths and weaknesses and display patience, understanding and humor when dealing with change. These employees know when and how to accept internally or externally imposed limits. They don’t engage in changes beyond their personal or organizational capabilities. Instead, they rely on nurturing relationships for support. They are unlikely to feel as victimized during changes as those who have not developed such friendship.

(d) Organization: Being organized means being able to identify themes in confusing situations and then to consolidate what appears into projects in a single effort. These kinds of people are able to set and renegotiate priorities during change and can manage several simultaneous tasks and demands successfully. They know when to ask for help, and act only after careful planning. Those without organizational skills often become lost or confused when faced with conflicting priorities, and cannot effectively manage multiple tasks at once.

(e) Proactive: Proactive people have the capacity to determine when change is inevitable, necessary, or advantageous. They are the risk takers who draw lessons from other change-related experiences and who apply them to similar situations. At their best they are able to influence others to resolve conflicts. A lack of proactivity in the workplace could result in rigidly adhering to old or outmoded operating styles or policies. People who are not proactive may react to disruption by blaming or attacking others or “the system.” Proactive employees respond to disruptions by investing energy in problem solving and teamwork rather than acting in isolation.

3. The third model comes from a study by Daryl Conner (1993), a psychologist and author of the book, Managing at the Speed of Change: How Resilient Managers Succeed and Prosper Where Others Fail. He studied resilience in organizations for over two decades as a consultant, trainer, and researcher in corporations undergoing organizational change. Initially, he began to study the behavior of people in transition in the United States, and later extended the study to companies in Canada, Mexico, Asia, Australia, Western Europe, South America, Hungary, Russia, and South Africa. In 1974, he formed ODR Inc. (Organizational Development Resources), a research-and-development company dedicated to the study of how humans respond to major change. His extensive consulting over the world has provided him a depth of experience with change that is matched by few people. He has written two books and more than sixty
publications, including journal and magazine articles, monographs, and chapters of books on the subject of change management. In addition, his literature on resilience has been cited in numerous dissertations and studies. Conner and his associates at ODR, Inc., identified five (seven including sub-characteristics) general characteristics that are related to resilience, namely: (a) Positive: (“The World”) and (“Yourself”) (b) Focused (c) Flexible: (“Thoughts”) and (“Social”) (d) Organized (e) Proactive.

(a) Positive, The World: Most situations, and most people, have both positive and negative aspects to them. Research shows that “positive” people differ in their tendency to focus on the positive view of their environment as complex and challenging. They are able to see opportunities and possibilities in situations that at first may look like problems. Those who focus primarily on the negative can get into cycles of anxiety and depression that prevent them from seeing value and opportunity in circumstances. Having a generally optimistic outlook is important, since it allows one to find ways to turn negative situations around. In addition, people who have a positive attitude toward their environment are better able to create situations that are positive.

Positive, Yourself: A belief in oneself as a valuable, capable person can be extremely powerful. People need a strong foundation from which to face uncertainty and stress in the world. This foundation can be developed through realistically assessing one’s capabilities and achieving self-acceptance while continuing to learn and grow. When a person feels capable of reaching his or goals, that person is able to take action confidently and can weather failure without losing the feeling of self-worth. Also related to this positive view of self is the belief that one can influence the environment and what happens in one’s life, rather than the belief that external forces operate to determine one’s fate.

(b) Focused: Because change and stressful life situations are generally characterized by ambiguity and uncertainty, it should be no surprise that having a strong sense of goals and priorities is important to resilience. Having a sense of purpose and a focus in life is an advantage because when goals and priorities are clear, it is easier to get back on course following major disruption. Research suggests that people who describe themselves as strongly committed to their goals, or who see their life as having meaning or purpose, are better able to manage confusing situations: to sort out the important issues, judge the relative worth of alternatives, and use their personal energy more efficiently. Without a sense of purpose and priorities, resources
are likely to be used inefficiently, since every new situation would require a person to redetermine what is important before taking action.

(c) Flexible, Thoughts: Coping with the ambiguity that change represents a critical skill for resilience. An important aspect of this type of coping is the person’s ability and willingness to look at situations from multiple points of view, to suspend judgment while considering alternative perspectives, and to accept and live with paradoxes and contradictions as part of life. Many times, when a person is open-minded in finding different ways to view a situation, he or she will have a broader understanding of the problem and be able to form more creative, effective resolutions. Flexible thoughts allow one to find these creative, effective ways to achieve goals. In contrast, people who would rather have immediate, straightforward solutions may draw conclusions so quickly that they miss information that could be useful.

Flexible, Social: The ability to draw on the resources of others also adds to one’s flexibility. Research indicates that highly resilient people recognize their interdependence with others. They are characterized by strong social bonds that they can rely on for support during difficult times. They are able to form and maintain close relationships, are willing to engage in the give-and-take of mutually supportive friendships, and can recognize ways in which other people’s skills can complement their own. If this type of support is either not available or not sought, a person’s capacity to deal with stress or uncertainty is decreased.

(d) Organized: Another important element of resilience is the ability to organize. Organization enables one to find order in chaos and structure in ambiguity, and to move beyond thought toward action. The discipline required in assessing the available information, choosing a direction in which to proceed, and plan the steps needed to move forward is important. This requires a person to set aside information that is not helpful at the moment, focus on the elements that are important, and logically structure them into a workable, detailed plan. Without the skill of organization, a person might waste a lot of resources trying one solution, then another, without making any real progress.

(e) Proactive: The final characteristic linked to resilience is the willingness to act decisively in the midst of uncertainty rather than simply reacting to circumstances. To be proactive, one must be willing to take some risks and to endure discomfort in the belief that positive outcomes (such as growth, personal development, and the achievement of important goals) will result. Proactive individuals seek challenges rather than avoid them and respond to
disruption by investing energy in problem solving rather than withdrawing. In contrast, people who place an extremely high value on certainty, stability, and security may pass up valuable opportunities while waiting for a “sure thing” to come along.

4. The fourth model comes from a study by Nan Henderson, a clinical social worker, and Mike Milstein (1996), a professor of Educational Administration, who are the authors of the book, *Resiliency In Schools*. This research offers hope based on scientific evidence that many, if not most, of those who experience stress, trauma, and risks in their lives can bounce back. This challenges educators, administrators, and the school community to focus more on the strengths instead of deficits, to look through a lens of strength in analyzing individual behaviors, and confirms the power of those strengths as a lifeline to resiliency. Furthermore, they indicate what must be in place in institutions, especially in schools, for resiliency to grow in the lives of students and adults who learn and work there (Henderson & Milstein, 1996).

In the study, Henderson and Milstein (1996) identify six resiliency characteristics for school administrators. They are as follows:

a) **Increase Relationships**: Develop caring relationships among students, staff and faculty members.

b) **Establish Clear and Consistent Limits**: Norms, rules and limits should be clearly communicated and changes need to be shared. Administrators must participate in establishing and interpreting limits to foster a sense of ownership.

c) **Teach Life Skills**: Provide meaningful opportunities for staff development and build educator self-worth.

d) **Provide Care and Support**: Establish opportunities for regular feedback to enable administrators to maintain a satisfactory progress level. Provide rewards for excellent, committed and diligent administrators.

e) **Set and Communicate High Expectations**: Administrators must realize that they serve causes that are larger than themselves and their particular positions; they must feel and work towards accomplishing the mission, goals and vision of the school.

f) **Provide Opportunities for Meaningful Participation**: Provide opportunities for others to offer their skills and energies to their work and for continuous learning and participation in challenging activities.
5. The fifth model comes from a study by Flach (1988), a psychiatrist, who through years of research on patients, observed that resilience is a strength most of us can develop and practice. He developed his own profile of a resilient personality, which includes the following:

(a) A sense of self-esteem.

(b) Independence of thoughts and action, without fear of relying on others or reluctance to do so.

(c) The ability to compromise in interactions with others, and have a well-established network of personal friends, including one or more who serve as confidants.

(d) A high level of personal discipline and sense of responsibility.

(e) Acknowledgement of one’s own special gifts and talents.

(f) Open-mindedness and willingness to explore new ideas.

(g) A willingness to dream.

(h) A wide range of interests.

(i) A sharp sense of humor.

(j) Insight into one’s feelings and those of others, and to effectively communicate these.

(k) A high endurance of distress.

(l) Focus, a commitment to life, and philosophical structure where personal encounters can be represented with meaning and hope, even at the most despairing time in life.
Table 2. A Matrix of the Approaches and Resiliency Dimensions as Depicted in the Various Models.

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<tbody>
<tr>
<td>1</td>
<td>Positive (The World)</td>
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<tr>
<td></td>
<td>• View the environment as complex and challenging.</td>
<td>• Wide range of interests.</td>
<td>• Recognize rewards.</td>
<td>• See life as generally rewarding.</td>
<td>• Rewards</td>
</tr>
<tr>
<td></td>
<td>• See opportunities and possibilities in problematic situations.</td>
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<td></td>
<td>• Have the ability to turn negative situations around.</td>
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<td></td>
<td>• Construe the world as multifaceted and overlapping.</td>
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<td></td>
<td>• See life as generally rewarding.</td>
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<td>2</td>
<td>Positive (Yourself)</td>
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<tr>
<td></td>
<td>• Belief in oneself as valuable, capable and extremely powerful.</td>
<td>• Strong self-esteem, and show a sense of responsibility</td>
<td>• Independent.</td>
<td>• Self-esteem.</td>
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<td></td>
<td>• Have the ability to assess one’s capabilities and achieving self-acceptance while continuing to learn and grow.</td>
<td>• Independen ce of thought and action, and recognizing the support of others.</td>
<td>• Habit of asking questions and providing candid answers.</td>
<td>• A sense of ownership and the ability to communica te clearly.</td>
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<td></td>
<td>• Belief that there are important lessons to be learned from challenges.</td>
<td>• Highly positive.</td>
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<td></td>
<td>• Belief that they can influence the environment and what happens in their life.</td>
<td>• Tolerate high levels of stress.</td>
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<td></td>
<td>• Is able to take action confidently and withstand failure without losing the feeling of self-worth.</td>
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<td></td>
<td>• See major changes as uncomfortable, but believe that hidden opportunity may exist.</td>
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Table 2 continued.

|-------------|---------------------------------|--------------|----------------------|----------------|---------------------|
| 3 Focused   |  • Is strongly committed to goals and priorities.  
  • Have a sense of purpose and a focus in life.  
  • Use personal energy more effectively and efficiently.  
  • Maintain a strong vision that serves both as source of purpose and as a guidance system after a difficult situation. | Focused and committed. | Focus  
  • Maintain a strong purpose or vision.  
  • Maintain their values during a crisis.  
  • Set and achieve personal or professional goals |  • Establish boundaries. |


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<td>4</td>
<td>Flexible (Thoughts)</td>
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<td></td>
<td>• Be able to view situations from multiple points of view.</td>
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<td></td>
<td>• Accept and live with paradoxes and contradictions.</td>
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<td></td>
<td>• Find creative and effective ways to achieve goals.</td>
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<td></td>
<td>• An open-minded person is able to find multiple ways to view a situation.</td>
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<td></td>
<td>• Open-mindedness and being open to new ideas.</td>
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<td></td>
<td>• Creative.</td>
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<td></td>
<td>Flexible</td>
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<td>Flexible</td>
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<td></td>
<td>• High levels of flexibility cause high tolerance for ambiguity.</td>
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<td></td>
<td>• Feel empowered by transitions.</td>
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<td></td>
<td>• Believe that change is a manageable process.</td>
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<td></td>
<td>• Believe that change is a manageable process.</td>
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<tr>
<td>5</td>
<td><strong>Flexible (Social)</strong></td>
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<td></td>
<td>• Have the ability to elicit support of others, and are cognizant of their interdependence with others.</td>
<td>• The ability to interact with others, and have a network of personal friends.</td>
<td>• Relationships to establish morality, show sympathy and empathy towards others.</td>
<td>• Rely on nurturing relationships for support.</td>
<td>• Provide caring and support, and provide regular feedback.</td>
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<td></td>
<td>• Establish strong social bonds to rely on their support during difficult times.</td>
<td>• Sense of humor.</td>
<td>• Sense of humor.</td>
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<td></td>
<td>• Have the ability to feel empowered during the change process, while displaying patience, understanding and humor during the change process.</td>
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<td></td>
<td>• Recognize personal strengths and weaknesses and know when to accept internal or external limits.</td>
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<tr>
<td></td>
<td>• Have the ability to recover quickly from disappointments or difficult situations.</td>
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<td>6</td>
<td>Organized</td>
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<tr>
<td></td>
<td>• To find order in chaos and structure in ambiguity, and is ready to act.</td>
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<td></td>
<td>• Choose information that is relevant and helpful, focus on the elements that are important, and logically structure them into a workable detailed plan.</td>
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<td></td>
<td>• Have the ability to manage several simultaneous tasks and demands successfully.</td>
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<td></td>
<td>• Have the ability to recognize when they need help from others.</td>
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Organized
- Identify themes in confusing situations.
- Renegotiate priorities during change.
- Manage several simultaneous tasks and demands successfully.
- Know when to ask for help, and act after careful planning.

- Teaching life skills.
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<td>7</td>
<td><strong>Proactive</strong></td>
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<td></td>
<td>• Act decisively in the midst of uncertainty or confusion, and determine when change is inevitable, necessary, or advantageous.</td>
<td>• Willingness to dream.</td>
<td>• Initiative.</td>
<td>• Have the capacity to determine when change is inevitable, necessary, or advantageous.</td>
<td>• Be risk takers.</td>
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<td></td>
<td>• Be able to take risks and endure some discomfort in the belief that positive outcomes will be accomplished.</td>
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<td></td>
<td>• Invest energy in problem solving and teamwork.</td>
<td>• Have the ability to influence others to resolve conflict.</td>
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<tr>
<td></td>
<td>• Seek challenges rather than avoid them and respond to disruption by investing energy in problem solving and teamwork.</td>
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<tr>
<td></td>
<td>• Have the ability to influence others and resolve conflicts.</td>
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**Conner’s Model on Resilience**

As depicted from the matrix, one can conclude that many of these models have dimensions in common that enable resilient people to confront the overwhelming obstacles they are bound to face in life. The dimensions mentioned above involve areas of perception, thinking, and behavior that are related to the concept of resilience, and how people deal with changing circumstances and a changing world.
The dimensions of Conner, Flach, Wolin and Wolin, Hagevik, and Henderson and Milstein, all underlie aspects of the concept of resilience. However, based on my present review of the literature, Conner’s model appears to describe the most comprehensive sense of the dimensions of resilience, as shown in the matrix above. According to Conner (1993), leadership dimensions of administrators include the areas of perception, thinking, and behavior and appear to be related to the concept of resilience and how people deal with changing circumstances and a changing world. Resilient dimensions are not independent of one another, but mutually reinforcing and self-enhancing with one another so that each of them facilitates the use of others (Conner, 1993).

Patterson (2001) stated that school leaders should see change as a challenge by accepting their responsibilities and move ahead in the face of adversity, because by accepting responsibilities they become more resilient. In addition, school administrators have a challenge to provide good leadership to schools to achieve their mission, vision and goals in the face of adverse conditions and imposed changes. Consequently, it would seem reasonable to hypothesize that resilient school leadership is vital in helping school personnel, programs, and schools determine and achieve their goals in times of major disruption and change.

**Measuring Resilience**

This section discusses the following: (1) the instrument created by ODR to measure resilience by looking at the theoretical justification for using ODR’s instrument in resilience research, (2) the conceptual foundation of the instrument’s scale and subscales, and (3) the premise for selecting the ODR approach for this investigation.

Over the years, assessment on resilience has been primarily through inductive study (e.g., using open-ended life histories) (Colgate, 1995). This approach has been suitable in enabling researchers to identify the dynamics of resilience. Other than the ODR instrument, the literature review did not reveal an instrument capable of effectively measuring resilience. The instrument used by Block and Block (1980) in their research on Ego-Resiliency, empirically derived five personality types as they analyzed personality continuity and change among their subjects. The core constructs in the Blocks’ research are ego-resiliency and ego-control, dynamic individual-difference variables that organize and shape behavior across time and contexts. The Blocks’
instrument has a resilience subscale but does not measure resilience as an independent construct (Colgate, 1995). There are also instruments that only measure only one component of resilience. The instrument utilized by Folkman and Lazarus (1985, 1988) and Moos and Billings (1982), measured Coping, which is only one component of resilience. The Stress Appraisal Measure assess Primary and Secondary Cognitive Appraisal (Peacock & Wong, 1990), while Murphy and Moriate (1976) developed an instrument to measure vulnerability but not resilience. The concept of resilience is described by the developmental psychopathology researchers in terms of one end of a continuum with vulnerability at the other end of the spectrum (Garmezy, 1993; Masten, 1989; Rutter, 1987).

Biscoe and Harris (1994) developed three assessment tools (one for early childhood, adolescence, and adulthood) to measure resiliency attitudes in substance abusing women and their children. These instruments are designed to measure the construct of resilience as described by Wolin and Wolin in their 1993 Challenge Model of Resiliency. The model suggested a constellation of characteristics identified among individuals, namely: insight, independence, relationships, initiative, creativity and humor, and morality. Although, the Biscoe and Harris (1994) instruments measure certain strengths of resilience, the instruments are not sufficiently designed to cover all the dynamics of resilience. Thus, for this particular investigation, we need to have an instrument that measures all the dynamics of resilience as identified in the literature.

In 1993, Daryl Conner, a psychologist, published the book, Managing at the Speed of Change: How Resilient Managers Succeed and Prosper Where Others Fail. He studied resilience in organizations for over two decades as a consultant, trainer, and researcher in corporations undergoing organizational change. Initially, he began to study the behavior of people in transition in the United States, and later extended the study to companies in Canada, Mexico, Asia, Australia, Western Europe, South America, Hungary, Russia, and South Africa. In 1974, he formed ODR Inc. (Organizational Development Resources), a research-and-development company dedicated to the study of how humans respond to major change. His extensive consulting over the world has provided him a depth of experience with change. He has written two books and more than sixty publications, including journal and magazine articles, monographs, and chapters of books on the subject of change management. In addition, his
literature on Resilience has been cited in numerous dissertations (e.g., Colgate, 1995 and Taylor, 1997).

Conner and his associates at ODR developed an instrument, the Personal Resilience Questionnaire (PRQ)(see Appendix A) in 1990. Initially, Conner put in writing those dimensions that seemed to differentiate people who were able to absorb disruption and become stronger through change. With the assistance of ODR, Conner concluded a comprehensive literature review that covers a wide range of disciplines. As the concepts were refined through brainstorming, additional literature reviews and pilot testing, the Personal Resilience Questionnaire (PRQ) began to develop (ODR, 1996). The final version of the PRQ contains 70 items that measure the five (seven including sub – characteristics) general characteristics that are related to resilience (see Table 2), namely: (a) Positive: (“The World”) and (“Yourself”) (b) Focused (c) Flexible: (“Thoughts”) and (“Social”) (d) Organized (e) Proactive. To date, the instrument has been completed by more than 26,000 people (including employees, managers and leaders) in organizations (ODR, 1996).

According to an ODR technical information report published in 1996, the PRQ was designed as a means of assessing the dimensions that research has identified as key to personal resilience. The PRQ has been basically used as the basis for education and development efforts, with the goal of helping employees, including managers and leaders, to maximize their resilience, along with additional programs.

The resilience concept can be measured through seven sub-scales. ODR identified the dimensions as those that create resilience. The concepts or subscales are Positive (The World), Positive (Yourself), Focused, Flexible (Thoughts), Flexible (Social), Organized, and Proactive.

According to ODR, the subscales are “characteristics or dimensions” which represent an “individual’s self-described preferences and tendencies” (ODR, 1994a). The characteristics operate as a system in order to create resilience. They constantly enhance and interact with one another to facilitate the use of others. However, a high score on one of the dimension does not fully compensate for a low score on another (ODR, 2001).

Although the subscales are important for the resilience process, not every dimension is needed in every situation. Sometimes, a situation may provide some of the dimensions (e.g., a leader who imposes structure on ambiguous situations exerts an organized dimension) which is important for the leader to have a high score in that dimension. In other situations, the leader
might obtain a low score for a particular dimension. This, however, does not mean that the leader lacks this particular skill; it is just not suitable for the particular situation. To be effective as possible, the leaders should practice this skill so that they will become more integrated in their overall approach to change (ODR, 2001).

Earlier, support from the literature was provided for each of the seven subscales (dimensions) in resilience. The PRQ will be used to assess these seven subscales (dimensions). The collection of constructs that the seven subscales of the PRQ are designed to address is summarized in Table 3.

The PRQ was selected for this study because the subscales (dimensions) identified in the literature for resilience for school administrators seemed to be a best overall fit to Conner’s model (see above discussion). Also, several research investigations by external researchers (e.g., see Colgate, 1995; Taylor, 1997) and ODR were developed to determine the validity and reliability of the instrument. The validity and reliability will be discussed extensively in the Method chapter. Thus, based on this review of the literature, Conner’s model is the best developed and provides the most comprehensive sense of resilience for this investigation. The research also indicated that the dimensions (subscales) described in the model are not independent of one another, but mutually reinforcing and self-enhancing with one another so that each of them helps to facilitates the use of others (Conner, 1993).

Table 3: Resilience Constructs (Subscales) measured by the Personal Resilience Questionnaire (PRQ).

| Positive: The World | This subscale was designed to assess the tendency to see opportunities in a variety of situations. It should correlate positively with measures of positive affectivity, optimistic attribution style, and related measures (such as life satisfaction), and it should correlate negatively with measures of negative affectivity and related measures. |
| Positive: Yourself | This subscale was designed to assess a person’s general sense of self-efficacy in responding to situations. It should correlate positively with measures of internal locus of control, self-esteem, and self-efficacy. |
Table 3 continued.

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<tr>
<th>Subscale</th>
<th>Description</th>
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<tr>
<td><strong>Focused</strong></td>
<td>This subscale was designed to assess a person’s clarity of purpose; that is, the extent to which the person has a sense of direction in his or her life. There are few well-defined constructs that would be expected to correspond directly, but it should correlate with measures of meaning or purpose in life.</td>
</tr>
<tr>
<td><strong>Flexible: Thoughts</strong></td>
<td>This subscale was designed to assess the extent to which a person tends to be comfortable with ambiguity, to entertain unfamiliar or contradictory working with complex ideas. It should correlate positively with measures of ambiguity tolerance, creativity, and cognitive complexity.</td>
</tr>
<tr>
<td><strong>Flexible: Social</strong></td>
<td>This subscale was designed to assess the extent to which a person gives and receives social support; that is, the interdependence that they recognize and have established with those around them. It should correlate positively with measures of social support and extroversion, and negatively with measures of alienation.</td>
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<tr>
<td><strong>Organized</strong></td>
<td>This subscale was designed to assess the extent to which a person can impose structure on ambiguous situations, including the ability to systematize, sequence, and plan. There are few well-defined constructs that would be expected to correspond directly.</td>
</tr>
<tr>
<td><strong>Proactive</strong></td>
<td>This subscale was designed to assess the extent to which a person is willing to act on his or her environment in the face of uncertainty or risk. It should correlate positively with measures of action tendencies and risk tolerance.</td>
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**Leadership**

This section is divided into separate parts. Firstly, it describes the purpose of leadership and the nature of the leadership process. Secondly, it discusses the construct of leadership, particularly the various definitions, the conceptualization of the construct as depicted in the literature, and the operationalization of the construct for this investigation. Thirdly, it discusses the principal as a school leader, the various research models on leadership, and the rationale for selecting the Kouzes and Posner leadership model as the research model for this investigation. Lastly, it discusses the research instrument, namely the Leadership Practices Inventory (LPI).
developed by Kouzes and Posner to measure leadership actions and behaviors based on five leadership practices.

**Suggested Purposes of Leadership**

In a 1997 research project, called the Kellogg Leadership Project and titled, *Leadership in the Twenty – First Century, as an introduction*, suggested purposes of leadership as follows:

- To create an accommodating environment where people can prosper, develop, and live in harmony with each other.
- To encourage people to live in harmony with each other.
- To establish communities of mutual understanding where everyone is concerned about one another, responsibilities shared, spouses respected and supported at all times (Cunningham and Cordeiro (2000)).

Numerous other researchers on leadership have their own interpretation of the purposes of leadership. There are those (Burns, 1978; Follett, 1981; Kouzes and Posner, 1987, 1995, 2000) who maintained that leaders motivate and inspire their people to achieve their objectives, while others, Yukl (1989) and Owens (1991), argued that leaders influence the behavior of their people. However, Hollander (1986) feels that the leader is the one in charge and the one who should get things done.

**The Nature of Leadership Process**

Smircich and Morgan (1982) stated that leadership involves a process of negotiation through which certain individuals, conscious or unconscious, submit their power to define the nature of their experience to others. The leadership process is mostly visible in unstructured group situations where leadership emerges naturally and spontaneously. It is a process whereby individuals succeed in an attempt to frame and define the reality of others. According to Hollander (1986), the process could include functions like “decision-making, goal-setting, direction of the task, division of labor and communication patterns” (p.10). Moreover, he believes that leadership is not about the leader’s actions alone, but a system of relationships including the followers, their expectations, commitments, and task demands. Leaders are in
charge of the situation and are more likely the ones who get things done. However, leadership would not succeed if there were not responsive followers who contribute to achieving the goal. Leaders and their followers are not bound into rigid roles. Instead, leaders sometimes assume the role as followers to some extent. He concluded, “good leadership is achieved by the active involvement of responsive followership” (p.12).

Construct of Leadership

Definitions

Warren Bennis and Burt Nanus reported in 1985 that they had located over 350 definitions of leadership in the literature. Bass (1990), in addition, stated that there are almost as many different definitions of leadership as there are persons who have attempted to define the concept. Parrish (2001) stated that the concept goes as far back as the biblical times, and even today researchers find it hard to define it accurately. Researchers, who ultimately succeeded to present their interpretation of the concept, mostly defined it in an ambiguous or vague manner. Burns (1978) wrote that leadership is one of the most observed and least understood phenomena on earth. Nevertheless, it is unfortunate that researchers have failed to produce a proper and true definition of the concept (Stogdill, 1974; Bass, 1990).

Bass (1990) found that the earlier definitions identified leadership as a “focus of group process and movement, personality in action” (p.11). The next group of researchers viewed leadership as the “art of inducing compliance” (p.12), while the more recent researchers defined leadership in terms of “influence relationship, power differentials, persuasion, influence on goal achievement, role differentiation, reinforcement, initiation of structure, and perceived attribution of behavior that are consistent with what the perceivers believe leadership to be” (p.20).

Based on this review of the literature on the definitions of leadership, a few of the contemporary definitions of the concept are described. For instance, Gardner (1990) defined leadership as the “process of persuasion or example by which an individual induces a group to pursue objectives held by the leader or shared by the leader and his or her followers” (p.1). Bolman and Deal (1997) stated that leadership is a “subtle process of mutual influence
fusing thought, feeling, and action to produce cooperative effort in the service of purposes and values of both the leader and the led” (p.13). They also believe that “leaders make things happen” (p.14). Du Brain (1998) defined leadership as a partnership. Senge (2000) viewed leadership as “more than a technical act emphasizing effectiveness and efficiency” (p.317). While Kouzes and Posner (2002) defined leadership as the “relationship between those who aspire to lead and those who choose to follow” (p.20). Bass (1990) recognized that leadership can have a “determining effect” on the behavior and activities of a group and those leaders can influence group members by their own example (p. 8).

Stogdill (1974) indicated that there is adequate similarity between definitions to permit a common theme. He came up with ten categories: “as a focus of group processes; as personality and its effects; as the art of inducing compliance; as the exercise of influence; as actor behavior; as a form of persuasion; as a power relation; as an instrument of goal achievement; as an effect of interaction; as a differentiated role; and as the initiation of structure” (p.100). Rost (1993) also grouped definitions into a framework: “leadership as achieving group or organizational goals; leadership as management; leadership as influence; leadership as traits; and leadership as transformation” (p.76).

The common dominator in all of these definitions of leadership is the idea of influence a leader has over followers, in achieving goals or in shaping the organizational culture. Though, the influence of leaders over followers can have both positive and negative results (Yukl, 1989).

**Conceptualization of the Construct of Leadership**

Drawing from the research, leadership has been the subject of study and theorizing for the most part of the twentieth century (Bass, 1990). And there is no central concept of leadership, which is due to scholars who have worked in separate disciplines and sub-disciplines in search of different and often unrelated questions and problems (Burns, 1987).

Initially, one can assume that the leader of a group is the individual who assumes an official position, such as a principal or chairperson. In a highly structured organization, it may appear that leadership is tantamount with official position. In this particular circumstance, the leader is voluntarily granted extensive power by the members of the group by shared agreement.
The group is an important source of power for the leader, but the leader is the one who has influence on the group itself (Owen, 1991).

A popular concept of leaders, supported by years of philosophical speculation and research studies, is that leaders are people who have certain traits or characteristics, shaped for that specific leadership position. There is a popular belief that “traits such as intelligence, imagination, perseverance, and emotional stability characterize the individual qualified to exercise leadership” (Owen, 1991, p.135). Obviously, individuals with these kinds of traits have the potential to assume a leadership role. Kouzes and Posner (2002) in their research emphasized the personality or characteristics of the leader, but they felt it was not all about personality or characteristics; it was also about practice. They found that leaders demonstrated certain practices when they perform at their best. By demonstrating these practices, the leader transforms values into actions, visions into realities, obstacles into innovations, separateness into solidarity, and risks into rewards. This kind of leadership creates a climate in which people turn challenging opportunities into success.

Bolman and Deal (1997) hold the opinion that leaders make things happen. They are not independent actors in the organization but are shaped by their constituents. Furthermore, “leadership is not simply a matter of what a leader does but also of what occurs in a relationship” (p.44). Du Brain (1998) supported this opinion by stating that leadership is in fact a partnership. Obviously, a partnership can only exist if there is a relationship. In a partnership, the leader and the group members are connected and share the power among them. A partnership can only be validated if there “is an exchange of purpose, a right to say no, joint accountability, and absolute honesty” ( Du Brain, 1998, p.3).

An early theorist, Mary Parker Follet (1981), believed that leaders could motivate followers to make their own decisions and work towards a common goal or purpose. Senge (1994) stated that the leader must be willing to take a stand for the guiding ideas he or she considered as important for the organization, while remaining open and flexible to the viewpoints of others. Moreover, it is imperative that the leader emphasized the importance of communication skills of a shared vision.

Most of the studies are divided into certain research categories and can be classified according to their specific goal and purpose. Shelton (1997) published a number of conceptions of leadership:
• People leadership (Bonsigno, 1997)
• Superleadership (Manz, 1997)
• Brave leadership (Peters, 1997)
• Limitless leadership (Tice, 1997)
• Visionary leadership (Nanus, 1992)
• Strategic leadership (Hesselbein, 1997)
• Credible leadership (Kouzes & Posner, 1993)
• Quality leadership (Deming, 1997).
• Creative leadership (Eisner, 1997)
• Situational leadership (Hersey & Blanchard, 1988)
• Emotional leadership (Bardwick, 1988)
• Passionate leadership (Bell, 1997)
• Inspirational leadership (Suters, 1997)
• Authentic leadership (Shelton, 1997).
• Transformational leadership (Burns, 1978)
• Servant Leadership (Greenleaf, 1970)
• Principle-Centered leadership (Covey, 1989)
• Steward leadership (Block, 1993)

**Operationalization of the Construct of Leadership**

The operationalization of the construct of leadership for this investigation is based on conceptualization of the Kouzes and Posner leadership model. Their research, which they conducted over almost twenty-years, suggested that leadership is a reciprocal relationship between those who choose to lead and those who decide to follow. Leaders mobilize others to want to act because of the credibility they have. These followers want to believe in their leaders. They want to have faith and confidence in them. Whatever the leader says is viewed as the truth. These leaders must have the knowledge and skill to lead, and they, as the followers, are excited and enthusiastic about the leadership (Hartford, 2000).
Also, imbedded in Kouzes and Posner’s (1987, 1995, 2000) findings are the consensus that leaders must appreciate and articulate a shared vision of the future. It is important that leaders should have the ability to communicate the shared vision effectively. Leaders do not command and control but serve and support their people. They work as a family, and care about them. In their research into follower expectations, they found four elements that follower’s desire, namely, honesty, vision, inspiration and competence. They also view leadership not as a position, but as a collection of practices and behaviors. These practices serve as guidance for leaders to accomplish their achievements or “get extraordinary things done” (p.13). These practices are: Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart. An extensive elaboration of these leadership practices will be described under the models of leadership.

**Leadership, Managers and Administrators.**

Bolman and Deal (1997) stated that although leadership is different from management, the two functions are typically confused. Two leadership researchers, Warren Bennis and Burt Nanus, describe, in Owen (1991), leaders as people who do the right things, and managers as people who do things right. Their view is echoed by Cunningham and Cordeiro (2000) who feel that leadership is about doing the right things, management is doing things right, and the administrator is responsible for both functions. Administrators are expected to be effective leaders and efficient managers.

Bass (1990) also supported the previous researchers on the difference between the positions, but found that the two positions overlap because the skill as a leader is critical at all levels of supervision. Leaders clearly announce and advocate their purpose and mission while managers tend to be more ambiguous or silent about the purpose. Moreover, leaders articulate their ideas and project them into images, while managers are more concerned about the process. Kotter (1988) also sees the two functions differently, where management is about planning, organizing and controlling. Leadership in his view is about a change-oriented process of visioning, networking, and the building of relationships.

Gardner (1990), who held the same view as Bass to the overlapping of the two functions, stated that most managers exhibit some leadership skill, and most leaders in certain
situations find themselves managing. But, he is firm that leadership and management are not the same thing. He continues by stating that the manager is more tightly linked to the organization while the leader thinks longer-term, influences constituents, emphasizes vision and renewal and has the political skills to cope with the challenging requirements of multiple constituents.

In the light of the above, the researcher believes that a school principal assumes the roles of leader, manager, and administrator throughout his or her career. Professional literature on school administration has long emphasized that one of the major responsibilities of the school administrator is to provide leadership. The administrator who assumes the leadership role cannot spend all his time on leadership. Roland Barth (1980) in his book, *Run School Run*, reported in a research study that 58% of the principal’s time is devoted to the category of management responsibilities, while 17% of his or her time is occupied by instructional leadership responsibilities during a school day. Adequate attention must also be given to the administration of the school. The administrator’s role differs from the role of the leader and manager, in the sense that he or she is mostly concern with maintaining the established structures, procedures or goals of the institution. School effectiveness research indicates that some type of leadership contribution is necessary to administer the school effectively (Snowdon & Gordon, 2002).

**Principal as the School Leader**

Cunningham and Cordeiro (2000) stated that the principal as a leader “needs to be prepared to deal with the inevitable social, cultural, economic, technological, bureaucratic, and political obstacles that can block improvements efforts” (p. 137). Bacharach and Mundell (1995) viewed school leadership as a reciprocal relationship. The relationship between them and their followers are of utmost importance. However, they are the leaders not only for the internal constituencies but also for the external constituencies to influence the environment and get support for the development and effectiveness of school programs. According to Foster, Loving, & Shumate (2000), principals are cognizant of the fact that they cannot achieve school success without the help and support of teachers, students, staff, parents, community partners, and university collaborators.

The National Association of Secondary School Principals (NASSP) was one of the first organizations to look into needed proficiencies for principals. They
emphasized the ability of the principal as school leader, and believed that to lead schools, school leaders need to:

- Develop teams, delegate responsibilities and include team members from the community.
- Initiate and manage change and deal with ambiguities resulting from a dynamic system.
- Design effective learning environments for a wide range of students.
- Comment orally and in writing with acute sensitivity to a diversity of public.
- Motivate students and staff to reach high expectations.
- Use technology to assist in instructing students and to manage the school.
- Evaluate programs and be accountable for student learning.
- Value and integrate culturally diverse students and staff into the life of the school, creating a positive school culture.
- Work within the political forces which shape schooling (Cunningham & Cordeiro, 2000).

In a related fashion, Florida Statue 231.087 was amended in 1981 to increase the scope of emphasis on and research the competencies needed by effective school principals. Subsequently, nineteen competencies for principals were developed which serve as a basis for selecting, training, certifying, and appraising school principals in Florida. According to Drummond and Snyder (1988), these competencies are a “complex set of relationships between the principal’s intent and action and the resulting intended and unintended outcomes of that action” (p.49).

Different principals may apply these competencies differently depending on the circumstance, but would achieve similar outcomes. In certain situations, the principal’s intentions and actions may vary as she or he applies a particular competency. The nineteen Florida Principal Competencies are listed in Appendix A.

**Models of Leadership**

Based on this literature review on the constructs of leadership, illustrative contemporary models of leadership are described below.

1. Transformational leadership

   Although the idea of transformational leadership was studied by Burns (1978), Leithwood (1992, 1993) added greatly to its understanding. These researchers discovered that transformational school leaders are in continuous pursuit of three fundamental goals:
• Help staff members develop and maintain a collaborative, professional school culture.
• Foster teacher development.
• Help teachers solve problems together more effectively.

Transformational leaders recognize and exploit existing needs or demands of potential followers. They also look for potential motives in followers, seek to satisfy higher needs, and engage the full person of the follower. Burns also noted that the transformational leadership results in mutual stimulation and elevation – that will change followers into leaders and leaders into moral agents. Bass (1990) stated that through transformational leaders, the “aspirations of followers are raised, legitimated, and turned into political demands” (p. 218).

Transformational leaders are highly self-confident and are resolute in achieving their goal. Their ability to have insight into the nature of people makes them skillful motivators. They have charm and create hope for the future, generating commitment, enthusiasm, and energy. They know when people want more from their work, including seeking meaning and purpose (Lashway, 1997).

Transformational leaders are vehicles by which solutions are transferred into subsequent practice by building the capacity of individuals and the group. In addition, transformational leadership is the process to shape and elevate goals and abilities so as to achieve significant improvements through common interests and collective actions. Such leadership creates the scenario for collaborative goal setting, shared power and responsibility, continued professional growth, resolve discrepancies, teamwork, engagement in new activities, a range of perspectives, validated assumptions, periodic reflection, monitored progress, and intervention when process comes to a standstill (Bennis & Nanus, 1985).

**Advantage:** These leaders have the ability to motivate and inspire their followers.

**Limitations:** Kenneth Leithwood (1993) stated that transformational leaders require highly developed intellectual skills and a well-defined values system. Principals should be able to be well acquainted with the culture of the school, identify and solve current problems, look at the bigger picture, and think outside the box. This will enable them to see the school as it is. Transformational strategies also create high expectations that cannot be easily realized, especially when the change process is slow.

2. The New Science of Leadership
Margaret, G. Wheatly (1992) suggests a fundamental shift in thinking in which leaders look for order rather than control in organization. Order is inherent in living systems. It does not evolve from avoiding different or disturbing information, or from smoothing turbulence, defining situations, standardizing approaches, writing procedures, and telling people what to do. Order is inherent – people naturally seek to make their conditions coherent. A small change can disturb and threaten order or equilibrium and result in chaos throughout a system. But even chaos will act within specific parameters with order and predictability. Chaos has boundaries beyond which it will not go.

Disequilibrium creates growth, and, under proper conditions, the system will respond and evolve to a new, improved order. Successful organizations take advantage of the opportunities or possibilities for renewal and enhancement. Such opportunities involve longer, more thoughtful conversations, greater participation, and more risk taking, tolerance of mistakes, openly shared information, acceptance of chaos, volatility of politics, and effort toward figuring out what works and what doesn’t. The foundation of leadership is a welcoming of diverse and rich viewpoints, inclusion of many different people in the process of thinking together in self-renewal and continuous improvement.

Living systems pass through stages of chaos as they continuously improve them selves. Leaders often become wary of these periods of turbulence and clamp on controls, retreat, tune out information, and create rigid structure to calm the waters. Some administrators focus on holding all the pieces together and smoothing the political and ideological debate. Unfortunately, this “circle the wagons” mentality short-circuits the learning and improvement process that is needed for success and excellence by cutting off the uncertainty, debate, disagreement, confusion, conflict, and other elements of chaos. Administrators who react this way stop the organization from learning, responding, and regenerating itself and force it back into equilibrium – the status quo. A principal, for example, seeing that test scores are falling, might abandon a new program and go back to simpler, more basic past standard practices to avoid the debate, concern, and confusion that result.

The effort to gain control cuts off learning and shuts down the natural, life-enhancing processes of responding and improving. The problem cited above might, in fact, be with the instructional strategy that worked for the old program but doesn’t work for the new one. Organizations cannot become more fit in their present environments unless leaders are willing to
risk the perils of the path through chaos, which leads to knowledge, growth, order, and regeneration. Leaders help the system to reform, renew, reconfigure and recreate itself to better suit the new demands and environment. Over time, people naturally organize the complexity they face and make it coherent and easy to understand. They use it as a foundation for further improvements. Educational improvements will require new kinds of leadership. We need to create conversations to change the levels and kinds of discourse going on in and around schools, and to stimulate inquiry, questioning, problem solving, and a focus on learning for everyone in the system, not just students.

3. The Seven Habits of Highly Effective People.

Stephen R. Covey’s book, The Seven Habits of Highly Effective People (1989), described the seven habits of highly effective people as:

- Habit 1: Be Proactive. Take the initiative, responding and making things happen. Realize you have freedom to choose, be aware of self, and develop knowledge and integrity in choices.
- Habit 2: Begin with the End in Mind. Start with an image or paradigm of the end in mind. Have a clear understanding of where you are going, where you are, and what it is going to take to get to the destination. Leadership comes first.
- Habit 3: Put First Things First. Practice effective self-management day in and day out. Discipline comes from within and is measured by personal integrity. All truly successful people make present decisions, which help achieve desired outcomes. Organize your time and tie weekly goals, your principles, priorities, and vision together.
- Habit 4: Think Win/Win. Have a frame of mind that always seeks to have all parties feel as though they have won – the benefits to be mutually shared. All parties feel good about decisions made and are committed to the plan of action. Cooperation is the key.
- Habit 5: Seek First to Understand, and Then Be Understood. Practice empathetic listening skills so that you understand other people from their frame of reference. Listen with not only ears, but with eyes and hearts. Then, present your ideas logically, clearly, specifically, and in the context of understanding the other person.
- Habit 6: Synergize. Create new alternatives. Leave your comfort zones to confront new and unknown challenges. Value differences, respect them, and use them to build on strengths. Discard old scripts, and write new ones. You are limited only by your own
imagination. Develop unity and creativity with others. Unleashed new powers create new, exciting alternatives.

- Habit 7: Sharpen the Saw. Take time to preserve the most important asset – yourself. Take the time to minister to your own physical, mental, social/emotional, and spiritual needs. Leading people requires a tremendous amount of energy. Make a constant effort to manage health needs. Model good self-help techniques. Convince others that they are valued and should value others. Enjoy and celebrate accomplishments.

4. Toward a New Model of Educational Leadership.

In his book, *Schools That Learn*, Senge (2000) proposed a leadership model that focuses on four key competencies to allow people to lead without having to control.

- **Engagement:** It is the capability to recognize an issue or situation that has no clear definition, no simple cause and no obvious answer. When faced with such complexity, convening the appropriate people in the system and facilitating their conversations and learning is called for.

- **System Thinking:** The ability to recognize the hidden dynamics of complex systems, and to find leverage, goes hand in hand with engagement. School leaders, in this regard, might look at a situation from the perspectives of the next larger system, the school district or elsewhere.

- **Leading Learning:** The ability to engage people and to study systems is not enough for dealing with complex issues in public education. To lead learning means to model a “learner-centered,” as opposed to an “authority-centered,” approach to all problems, inside and outside the classroom. Leading learning gives principals and superintendents the freedom to say, “I don’t know where we’re going…and I’m still willing to dig into this ‘mess’ to discover a way for us to go” (p. 416).

- **Self-Awareness:** Leaders must be self-aware. They must know the impact they are having on people and the system and how that impact has changed over time. Self-awareness is a position of strength. Knowing one’s strength, personal vision and values, and where your personal “lines in the sand” are drawn will build a base of self-awareness that allows you to craft your career and have more good days than bad.
5. The Kouzes and Posner Leadership Model.

Kouzes and Posner began their book, *The Leadership Challenge*, as a research project in 1983. Their aim was to find out what leaders did at their “personal best” when they lead others. They asked hundreds of managers to describe their personal best experience, and learned that there was a pattern of behavior that people used to lead and to achieve extraordinary results (Kouzes and Posner, 1987, 1995, 2002).

They designed a personal best survey that consisted of 38 open-ended questions, and collected 550 of these surveys. They also designed a shorter form of the survey that has been completed by an additional 780 managers. Furthermore, they conducted forty-two in-depth interviews, basically with managers in middle-to senior-level organizational positions in a wide range of private and public sector companies (Kouzes and Posner, 1987, 1995, 2002).

They developed a model of leadership after analyzing the personal best cases, and subsequently developed *The Leadership Practices Inventory* (LPI) to enable them to measure the leadership behaviors, actions and performance uncovered during their research. By asking over 3,000 managers and their subordinates to assess the extent to which the managers used the practices, they discovered that leaders do exhibit certain distinct practices when they are doing their best. They also learned that there are few differences of these behaviors from industry-to-industry and profession-to-profession. They concluded that the leadership process enables ordinary managers to exhibit the best from themselves and others (Kouzes and Posner, 1987, 1995, 2002).

In their studies, Kouzes and Posner, set out to uncover the fundamental practices that enable leaders to get extraordinary things done. Their findings are discussed below:


Leadership is an active process. To lead others to greatness, leaders seek opportunities to change the status quo or to make a paradigm shift. If leaders would like to change the status quo, they should look for innovation to improve the organization, take risks, accept responsibility, and be accountable for their actions. And because leaders know that risk taking involves mistakes and failures, they accept the inevitable disappointments as learning opportunities. These leaders seek and accept challenging opportunities to test their abilities, a quest for change; they do their utmost best (Kouzes and Posner, 1987, 1995, 2002).
By either creating new ideas or recognizing and supporting new ideas, leaders show willingness to challenge the system in order to turn these ideas into actions and to get new products, processes, and services adopted. In order to succeed, leaders must be prepared to make mistakes because every false step opens the door to a new opportunity. Instead of punishing failure, they encourage it. They learn from their mistakes rather than shift the blame on someone else (Kouzes and Posner, 1987, 1995, 2002).

Thus, for leaders to perform at their personal bests, they must experience the project itself as pleasing and challenging. They must expect others to use their skills and talents to the fullest. If leaders expect the best results from others, they must search for opportunities where people are able to give their best. Therefore, leaders must create opportunities for people to solve problems, make discoveries, explore new ground, reach a difficult goal, and figure out how to deal with an external threat. It is imperative that leaders know the skills and capabilities of their people. In order to find the proper balance between action opportunities and individual skills, leaders must be cognizant of the abilities of others and what they find personally challenging. When setting goals, the leader should not set them so high that people will only feel frustration. Instead, the leader should raise the level gradually and offer coaching and training to build skills to reach each new level. Most importantly, the leader should not be the only one being challenged, but everyone should be exposed to challenges within their capabilities to perform. By participating in challenging opportunities, people often bring forth skills and abilities that were otherwise being oblivious. Kouzes and Posner point out that when ordinary managers are given opportunity and support, they can get extraordinary things done in the organization. In order to perform effectively, leaders should continuously seek and accept challenging opportunities to test their abilities (Kouzes and Posner, 1987, 1995, 2002).

b. Inspiring a Shared Vision

Effective leaders passionately believe that they can make a difference by envisioning the future and creating an ideal and unique image of what the organization can become. Through their magnetism, persuasion and inspiration they enlist others in their dreams (Kouzes and Posner, 1987, 1995, 2002).

It is imperative that leaders create a vision for their organization. Kouzes and Posner (1987, 1995, 2000) stated that visions set the agenda and give direction and purpose to the future. A vision is portrayed by an ideal and unique image of a common future. It is, in fact, a mental
picture of what tomorrow will look like. The more positive someone feels about the future, the better he or she will be able to communicate it positively to others. Kouzes and Posner found that a leadership vision is essential but inadequate for an organization to move forward purposefully toward a common destination. However, a vision is only effective when the leader has the ability to communicate that vision so that others could see what the leader wants them to see. The image that followers develop in their minds is highly dependent upon the leader’s description of that specific image. In other words, a shared vision is possible only if followers find the purpose appealing, motivating and inspiring. The more positive a leader feels about the future, the better he or she will be able to communicate it positively to others.

It is important that leaders use various modes of expressions to clearly state their vision to their followers. As Kouzes and Posner (1987) relate concerning leaders, “Through skillful use of metaphors, symbols, positive language, and personal energy, they generate enthusiasm and excitement for the common vision” (p. 42).

c. Enabling Others to Act.

Leaders foster collaboration and build cooperative relationships with colleagues, because they know that they cannot do it alone. “It takes partners to get extraordinary things done in organizations” (Kouzes and Posner, 1995, p.18). Therefore, they actively involve others in planning and give them freedom of choice in the decision-making. Leaders understand that mutual respect is what sustains extraordinary effort; they strive to create an atmosphere of trust and human dignity. They strengthen others and help each person feel capable and powerful. They consider the needs and interests of others and let them feel as if they carry ownership and responsibility in the organization. If one in the organization wins, everyone wins (Kouzes and Posner, 1987, 1995, 2000).

Teamwork is critical for an organization to be productive. The leader and employees must collaborate in order to develop employee commitment and skills, solve problems, and be responsive to environmental pressures. By fostering collaboration, leaders unleash the energies and talents available in their organization. Shared vision and values bind employees together in collaborative pursuit. Tasks that require people to interact, communicate and exchange ideas and resources underscore the notion that people have cooperative goals. When employees jointly work together, they realize that they require information from each other in order to be successful. They also become convinced that everyone in the organization should contribute, and
by cooperating, they can all accomplish tasks successfully (Kouzes and Posner, 1987, 1995, 2000).

Compatible goals promote trust among employees. By working towards the achievement of cooperative goals, people in the organization will be able to ensure each other’s success (Kouzes and Posner, 1987, 1995, 2002). People or departments are more likely to cooperate when they know that there is a likelihood that they can interact or work with each other in the future. Research indicates that frequent interactions between people promote more positive feelings about each other. Therefore, leaders should strive to provide employees with opportunities to interact and work with each other.

Trust is essential for building collaborative relationships between employees. Leaders who build trusting relationships within their organization feel comfortable dealing and working with their people. They are willing to consider alternative perspectives and ideas, and utilize others’ expertise and abilities. They also give their people opportunities to exercise influence over decisions and open the line of communication among people to make extraordinary things happen (Kouzes and Posner, 1987, 1995, 2002).

By building mutual and trusting relationships, leaders create a sense of agreement to nurture and develop people in the organization. When a leader is viewed as helpful and perceptive, other people will more likely be committed to the leader and the organization’s goals (Kouzes and Posner, 1987, 1995, 2002).

d. Modeling the Way

Leaders need to have a philosophy, a set of high standards by which the organization is measured, a set of principles concerning the way people should be treated and the way goals should be pursued that make the organization unique and distinctive. They create a program of excellence and then set the example for others to follow (Kouzes and Posner, 1987, 1995, 2002).

These leaders show by example that they live by the values they advocate. It is consistency between words and deeds that build their credibility as a leader (Kouzes and Posner, 1987, 1995, 2002). The leader’s values serve as the standards for others about what is important in the organization. According to Kouzes and Posner, several studies shared values:

1). Foster strong feelings of personal effectiveness.
2). Promote high level of company loyalty.
3). Facilitate consensus about key organization goals and stakeholders.
4). Encourage ethical behavior.

5). Promote strong norms about working hard and caring.

6). Reduce levels of job stress and tension.

Kouzes and Posner (1987, 1995, 2002) stated that leading by example is visible management. Visibility enhances accessibility and promotes the values and principles advocated by the leader. Leaders who lead by example serve as visible models for those committed to the course of action in the organization. Leaders set the stage and by enabling others to act make it possible for members of the team to visibly demonstrate their own levels of commitment. Leaders foster visibility by staging activities where both individuals and groups participate, such as ceremonies and symbols to promote identification.

e. Encouraging the Heart.

In winning teams, members share in the rewards of their efforts. Leaders give recognition to those contributing to the success of the project and encourage staff members by celebrating team accomplishment regularly. They express pride in the accomplishments of their teams. By recognizing such accomplishments, leaders let others know what they mean to the organization. The leader always looks for opportunities to celebrate accomplishments (Kouzes and Posner, 1987, 1995, 2002).

People often need encouragement and motivation to achieve the goals set by the organization. Successful leaders have high expectations for themselves and their employees. Their credibility is based on their record of achievements, dedication, and daily demonstrations of what and how things need to be done (Kouzes and Posner, 1987, 1995, 2002).

By influencing employee motivation, leaders attach rewards and recognition to job performance. Kouzes and Posner (1987, 1995, 2002) stated that there are three criteria for an integrated performance reward system: make sure that employees know what is expected of them, provide feedback about performance, and reward only those who meet the standards and achieve the objectives.

Leaders should come up with different kinds of rewards and not only rely on formal rewards. Instead, leaders can make tremendous use of intrinsic rewards, such as certificates, plaques, and other tangible gifts. Spontaneous and unexpected rewards are often more meaningful and powerful than the expected formal rewards (Kouzes and Posner, 1987, 1995, 2002).
Kouzes and Posner (1987, 1995, 2002) suggested seven strategies that leaders can use to recognize accomplishments:

1) Develop tough, measurable, achievable performance standards.
2) Install a formal systematic process for rewarding performance.
3) Be creative about rewards.
4) Let others help design the non-monetary compensation system.
5) Make recognition a public affair.
6) Go out and find people who are doing things right.
7) Coach people.

Kouzes and Posner (1987, 1995, 2002) stated that leaders play a special role in the celebrating of individual or group achievements, because they are the most prominent personality in the organization and serve as a role model. By celebrating achievements together, leaders let people feel that they are part of the group and part of something significant. It also increases the sense of belonging. When leaders encourage their employees through recognition and celebration, they inspire them to perform better.

As depicted from models above, one can conclude that leaders mainly have two tasks, namely, to get things done and influence others to achieve their goals. They must involve and motivate staff, create a positive culture, build a group vision, develop quality programs, and create a positive environment. By setting high standards, the leader demonstrates commitment to serve the organization and its members.

The leadership models of Burns, Wheatly, Covey, Senge, and Kouzes and Posner all underlie aspects of good leadership. However, based on this review of literature, the Kouzes and Posner model, *The Leadership Challenge*, appears to describe the most comprehensive sense of a good leader. Based on their research of over two decades, they gathered sound statistical evidence that *The Leadership Challenge* model improves leadership skills so that leaders are better equipped to lead people to achieve their objectives. It emphasizes practical skills and behaviors identified through empirical studies and interviews of successful leaders (Kouzes and Posner, 1987, 1995, 2002). *The Leadership Challenge* model provides the skills that can be learned and applied by school administrators to improve their leadership. Therefore, this approach was selected because the characteristics identified in the literature and for principals for
good leadership seemed to be a best overall fit to the Kouzes and Posner model and because a viable measurement and comparative instrument exists.

**Measurement for the Kouzes and Posner Leadership Model**

Kouzes and Posner (1993) developed their instrument, the *Leadership Practices Inventory* (LPI), through a triangulation of qualitative and quantitative research methods and studies. Through in-depth interviews and written case studies from people’s personal-best leadership experiences, they generated the five leadership practices: challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart. The LPI empirically measures the leadership actions and behaviors based on the five leadership practices. The LPI also helps the leader discover to what extent he or she has adopted these five practices.

Currently, the LPI contains thirty statements, six statements will be used to measure each of these leadership practices using a five point-Likert scale. These statements describe each of the various leadership actions and behaviors. All statements are ranked as follows: rarely or very seldom, once in a while, sometimes, fairly often, very frequently or almost always.

To determine the leader’s practices, the values of the items marked for each scale will be totaled. Each of these totals represents the participants’ responses to the six statements about one of the five leadership practices. The totals can range from a low of 6 to a high of 30. By ranking the scores from the highest to the lowest, it can be determined which leadership practices of the principal apply most often, second-most often, and so on. A principal’s high LPI scores represent areas in which he or she feels comfortable and confident. Low LPI scores represent areas in which he or she feels less confidence. Ultimately, the leadership practice that the principal is the least comfortable with will be identified (Kouzes and Posner, 1993). A more extensive elaboration of the psychometric process will be discussed in the Method Design section of Chapter Three.
Summary

The research indicates that there is no single specific definition for the concept of resiliency. Definitions have evolved from several professional disciplines, such as psychology, psychiatry, medicine, epidemiology, nursing, social sciences, human development, and change management. Studies indicated that certain events evoke the need for resilience, such as adversity; stressful experiences; obstacles or setback; defeat; misfortune; trauma; change; disruption; challenging situations; hardship; behavior problems; physical complications; dysfunctional situations; and crisis. Although researchers did not develop a basic definition of resilience, they identified basic features of the concept. The most common aspects are ability to recover; to bounce back; coping and adaptation; the willingness and stability to implement change; overcoming adversity; withstand hardship; and strength to confront. Based on these features, several inferences can be made that will increase the current understanding of resilience. It signifies growth or recover; it implies action or strength; coping or adaptation; a sense of success or survival; and influence over the environment. Based on this investigation, resilience conceptualizes the successful adaptation or recovery of an individual despite risk and adversity. The operationalization of the construct for this investigation involves a set of characteristics that could provide school principals with the strength and courage to overcome challenges and threats, recover from disappointments, and enable effective change management despite facing risks and adversaries.

Based on the literature, various models on resiliency are described that characterize resilient adults. These are research studies conducted by Wolin and Wolin (1993); Sandra Hagevik (1998); Daryl Conner (1993); Henderson and Milstein (1996); and Flach (1988). Based on this review of the literature, Conner’s model appears to describe the most comprehensive sense of the dimensions of resilience, and has a viable measurement instrument.

Leadership is a concept that goes as far back as the biblical times; researchers find it hard to define it accurately. Warren Bennis and Burt Nanus in 1985 located over 350 definitions of leadership in the literature. Based on the research, the common dominator in all of these definitions is the idea of influence a leader has over followers to achieve the organizational objectives. The operationalization of the construct of leadership for this investigation is based on
the conceptualization of the Kouzes and Posner leadership model, which suggest that leadership is a reciprocal relationship between those who choose to lead and those who decide to follow.

Based on this review of literature, researchers have concluded that there are differences between the roles of leaders and managers, but found that the two roles overlap because the skill as a leader is critical at all levels of supervision. The school effectiveness research indicates that some type of leadership contribution is necessary to administer the school effectively (Snowdon & Gordon, 2002). Most authors in the field of educational administration today agree that the school principal is critical for school improvement. The State of Florida developed nineteen principal competencies, which serve as a basis for selecting, training, certifying, and appraising school principals.

Five contemporary models of leadership are described in this literature review. These are transformational leadership by Burns, New Science of leadership by Wheatly, Seven Habits of Highly Effective People by Covey, Senge’s model on educational leadership, and the Kouzes and Posner leadership model, The Leadership Challenge. The leadership models of Burns, Wheatly, Covey, Senge, and Kouzes and Posner, all underlie aspects of good leadership. However, based on this present review of literature, the Kouzes and Posner model, “The Leadership Challenge,” appears to describe the most comprehensive sense of a good leader. Based on their research of over two decades, they gathered sound statistical evidence that “The Leadership Challenge” improves leadership abilities so that leaders are better equipped to lead people to achieve their objectives. It emphasizes practical skills and behaviors identified through empirical studies and interviews of successful leaders (Kouzes and Posner, 1987, 1995, 2002). “The Leadership Challenge” model provides the skills that can be learned and applied by school administrators to improve their leadership abilities. The Kouzes and Posner, Leadership Challenge model was selected because the characteristics identified in the literature and for principals who want to become more effective seemed to be a best overall fit to the Kouzes and Posner model and because a viable measurement and comparative instrument exists.

The remaining three chapters of this investigation will be organized as follows:

- Chapter Three explains the research methodology and procedures of the investigation.
- Chapter Four presents an analysis and interpretation of the data gathered by the researcher.
• Chapter Five consists of a summary of the study, review of the findings, conclusions, implications and discussions, limitations and recommendations for further study.
CHAPTER THREE

METHODOLOGY AND PROCEDURES

Chapters Two and Three provided background and support for why the strengthening of leadership abilities is critical for school improvement. This chapter described the purpose of the investigation, and procedures and methods that were used in accumulating and analyzing the data acquired.

Purpose of the Investigation

The purpose of this investigation was to determine the relationships among the dimensions of resilience, leadership practices, and individual demographics of high school principals toward strengthening the leadership abilities of school principals. The specific questions that will be answered include:

1. Are there significant relationships among resiliency dimensions and leadership practices of high school principals?
2. Are there significant differences between principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them?
3. Are there significant differences between principals’ self-assessments of their leadership practices and their assistant-principals’ peer assessments of them?
4. Are there significant differences among resiliency dimensions and the individual demographics of high school principals?
5. Are there significant differences between teachers’ perceptions of leadership practices of their principals in rural and urban high schools?
Information derived from this investigation can be utilized to add to the scholarly literature in the field of school leadership toward strengthening principal’s leadership abilities. *The Leadership Challenge* model provided principals with a tool to improve their leadership abilities and influence school improvement. Furthermore, principals used their leadership skills to absorb change while maintaining their productivity as well as their physical and emotional stability to achieve their objectives (Conner, 1993). The results of this investigation served as a basis for school principals to assess their leadership strengths and weaknesses, and used the findings toward the improvement of their leadership abilities. The investigation also provided the participating principals with their personal resiliency scores and how these relate to managing change. Additionally, the data suggested potential topics for the enhancement of in-service courses in school leadership for school districts and for pre-service courses in educational leadership for universities charged with preparing school principals.

**Research Design**

This quantitative investigation employed the survey method as its research design. The survey was cross-sectional because the data were collected at one point in time. Creswell (1994) defines a survey design as a “quantitative or numeric description of some fraction of the population – the sample – through the data collection process of asking questions of people” (p. 117). According to Babbie (1990), the purpose of survey research is to generalize from a sample to a population so that inferences can be made about some characteristics, attitude, or behavior of the population. The survey research approval was elected for this investigation because it possesses all the qualities that are necessary for scientific research, as discussed below.

Scientific research strives to be logical (Babbie, 1990). It denotes a rational activity that seeks to make sense of some phenomenon. Also, it sanctions “the rigorous, step-by-step development and testing of logical explanations” (p. 41). Researchers are able to test complex propositions involving several variables that occur together (Harford, 2000). This investigation, particularly, investigates the interaction of two independent (predictor) variables: resilience dimensions and leadership practices, within an organizational setting.
Babbie (1990), reported that scientific research strives to be deterministic. Presumably, all events have causes that can be identified and understood. Because survey research helps a researcher “attempt to explain the reasons for and sources of observed events, characteristics, and correlations, the inquiry must assume a deterministic posture” (p. 41). Furthermore, he maintained that survey research is helpful in going beyond two variables by investigating the relationship between several intervening variables. This is valuable for this study because the purpose was to investigate the relationships among the dimensions of resilience and leadership practices.

According to Babbie (1990), scientific research also searches for a general understanding “rather than at the explanation of individual events” (p. 24). Survey research accomplishes this because surveys are conducted for “purposes of understanding the larger population from which the sample was initially selected” (p. 42). It helps generalize to the larger population. This investigation can be replicated with other samples to lend generalizability to the conclusions.

Scientific research strives to be parsimonious (Babbie, 1990). This implies that it attempts to understand events, objects, or phenomena using as few variables as possible. Thus, survey research is beneficial to scientific research because it permits researchers to collect information about several variables and circumspectly examine the significance of each (Harford, 2000).

Babbie also indicated that scientific research must be specific. This implies that the variables that will be measured in the investigation must be clearly defined so that the findings can be understood and generalized. Hence, survey research is suitable for this investigation because both operational and conceptual definitions of the variables are stated in the investigation.

Scientific research also requires empirical verification (Babbie, 1990). It requires that the conclusions developed from one study must be verifiable in a similar study. Researchers should be able to judge if conclusions are acceptable or not acceptable in appropriate settings.

Scientific research seeks to be “intersubjective and open to modification” (Babbie, 1990, p.50). Accordingly, researchers should be able to follow the scientific process in one study and replicate it in another study. Survey research will be appropriate to this requirement because the survey method from this investigation can be utilized in another setting. However, the conclusions are open for modification.
Babbie cited three purposes of survey research, including description, explanation, and exploration. “Surveys are frequently conducted for the purpose of making descriptive assertions about some population; that is, discovering the distribution of certain traits or attributes” (p. 52). As for this investigation, the major purpose is to determine the relationships among dimensions of resilience, leadership practices and demographics of high school principals.

It is important that the researcher decides what survey approach is appropriate for a particular study. There are five approaches: mail, telephone, personal administration, interview and the on-line method. Each approach has its advantages and disadvantages. According to Gay (2000), mail surveys provide the greatest standardization of items and procedures. It is also easy to score items and is fairly inexpensive. But, the response rate may be small, and mail surveys do not allow follow-up or questions regarding unclear responses. Personal administration is efficient if participants are closely situated, but requires time and training for questionnaire administrators. Personal interviews allow more complete responses, but are time-consuming, open to partiality and offer no anonymity. Telephone surveys tend to have high response rates and a quick data collection, but require phone numbers and can be expensive. On-line surveys are easy to administer, inexpensive and less time consuming, but require accessibility to a computer. It has a high response rate provided the participants have access to computers and are connected to the internet. Follow-ups can easily be administered via the internet. Considering all the factors, it was decided that an on-line survey method would be administered for this investigation.

Participant Selection

The participants for this study were drawn from all the public high schools in six school districts in the State of Florida. They were the principals, assistant principals and five teachers per high school. The districts with the most schools were selected for this investigation. Furthermore, districts selected can be viewed as reasonably representative sample because it represents a balance of urban and rural schools in the State of Florida. For this investigation, the researcher selected the purposive sampling method, also referred to as judgment sampling, for selecting the school districts. According to Gay and Airasian (2000) purposive sampling is based on the researcher’s experience and knowledge of the group to be sampled. Thus, the sample of
school districts selected for this investigation is based on the researcher’s information on the classification of urban and rural areas.

According to the United States Census Bureau, an “urban” area is one that has an overall density of at least 500 people per square mile, while rural areas have less than 500 people per square mile. The districts selected for this study, half urban and half rural, are based on this classification – Duval (1,007 per square mile), Hillsborough (951 per square mile), Orange (988 per square mile), Bay (182 per square mile), Volusia (360 per square mile), and Okaloosa (174 per square mile). Based on the Florida Department of Education 2002-2003 data, the schools listed in the 6 districts are Urban: Duval (19 high schools), Hillsborough (15 high schools), and Orange (15 high schools); Rural: Bay (6 high schools), Volusia (9 high schools), and Okaloosa (4 high schools). Only those schools that are designated as high schools were considered as appropriate for the purpose of this investigation.

Based on the number of principals and assistant principals in the 6 districts, it was determined that all of the principals and assistant principals in the 6 districts would be surveyed. These districts included 49 urban high school principals and 98 urban assistant principals; 19 rural high school principals and 38 rural assistant principals. There were 7,000 full-time regular classroom teachers employed in the 6 school districts. A random sample of 340 teachers was selected for the investigation, 5 teachers for each principal. The five randomly selected teachers for each school were selected as follows. The total number of teachers per school was divided by 5. For example: If School A had 40 teachers, 40/5 =8, and the researcher surveyed every 8th teacher from an alphabetical list of teachers in School A.

Data Collection Instruments

The data for this investigation were collected using three on-line questionnaires: The Personal Resilience Questionnaire, Leadership Practices Inventory (Self), and Leadership Practices Inventory (Observer). The questionnaires were 3 intact instruments. A human subject’s application was submitted to the Human Subjects Committee, and approval was given for the data collection. The questionnaires were sent to 68 high school principals, 136 assistant-principals, and 340 teachers in the 6 school districts (Duval, Hillsborough, Orange, Bay, Volusia, and Okaloosa).
The first part of the *Personal Resilience Questionnaire (PRQ)* obtained demographic information about school principals, such as age, gender, marital status, level of education, teaching experience, and administrative experience. It captured a single response to each of these variables, as below.

1) Age (20 to 30 years, 31 to 40 years, 41 to 50 year, 51 years and more).
2) Gender (male or female).
3) Marital status [single, married, other (divorced or widowed)].
4) Level of education (Bachelor, Masters, Specialist, Doctorate).
5) Teaching experience (0 to 2 years, 3 to 5 years, 6 to 8 years, 9 years and more).
6) Administrative experience (0 to 2 years, 3 to 5 years, 6 to 8 years, 9 years and more).

The second part of the *Personal Resilience Questionnaire (PRQ)* (1993) (see Appendix B) is a copyrighted scale, and was developed by Daryl Conner and his associates at ODR, Inc. in 1990 (Conner, 1993). The PRQ gathered individual information on the resiliency of principals. The instrument was selected because it is a viable and comparative instrument that exists from earlier research. Also, the subscales (characteristics) identified in the literature for resilience for school principals seemed to be a best overall fit to the ODR model (see chapter two, review of literature). The instrument was used to assess the seven dimensions of resilience: Positive (The World), Positive (Yourself), Focused, Flexible (Thoughts), Flexible (Social), Organized, and Proactive. The 70 questions in the PRQ reflect the resilience dimensions above and were discussed in Chapter Two.

The response choices for the 70 items are based on a six-point Likert scale; they are: strongly disagree, disagree, slightly disagree, slightly agree, agree, and strongly agree. ODR made a deliberate decision not to offer a neutral response (e.g., don’t know, undecided, unsure) in order to elicit an opinion on each item. The decision created the opportunity for a forced decision by some respondents who would otherwise have chosen the neutral response (Judd, Smith, & Kidder, 1991).

The second questionnaire, *The Leadership Practice Inventory (Self), LPI (Self)*, (see Appendix C), was used as a self-assessment instrument by school principals to measure their leadership actions and behaviors. The instrument was developed by Kouzes and Posner (1987) to empirically measure the leadership actions and behaviors of a leader based on five leadership practices: challenging the process, inspiring a shared vision, enabling others to act, modeling the
way, and encouraging the heart, as discussed in Chapter Two. Six statements are used to measure each of these practices using a five-point Likert scale. All statements are ranked as follows: rarely or very seldom; once in a while; sometimes; fairly often; very frequently or almost always, with a higher value representing greater use of the leadership practices. To determine the participant’s leadership practice, the value of the items marked for each scale will be totaled. Using the participants’ total scores, group mean scores are calculated for each leadership practices. The totals can range from a low of 6 to a high of 30. By ranking the scores from the highest to the lowest, it could be determined which leadership practice of the principal apply most often, second-most often, and so on (Kouzes and Posner, 1993). This result will identify the principal’s leadership strengths and weaknesses.

The third questionnaire, The Leadership Practices Inventory (Observer), LPI (Observer), (see Appendix D), was completed by both the assistant principals and teachers to measure the leadership actions and behaviors of their principal. Scores on this questionnaire were calculated in similar fashion to those of the LPI (Self).

Data Collection

Initially, personal contact was made with the 6 superintendents or their representatives in each of the selected school districts. The superintendents were asked for permission to conduct the investigation in their respective school districts, as well as to provide a list of the high schools, names of the school principals, assistant principals, teachers and their email addresses. After getting permission, properly informing all participants, and ensuring anonymity and confidentiality, three on-line instruments were addressed and send via the internet to each potential participating principal, assistant principal and teacher. Each instrument was coded for the purposes of analyzing data and necessary follow-up. Also, attached to the questionnaires were a letter that further explained the purpose of the survey, the benefits, and the subject’s consent to participate in the study, and a letter from each district office that allowed the researcher to conduct the investigation. By completing the consent part of the letter, participants agreed to be involved in this investigation. In the letter, participants were also assured that their names would not appear in any of the results and the responses to the questionnaire would be
kept confidential, only be identified by number, and used solely for the purposes of correlating data and necessary follow-up, and that only group findings would be reported.

The participants were asked to return the completed questionnaires to the researcher via the internet. Approximately one week after the questionnaires were sent to the potential participants, a follow-up letter along with a questionnaire was sent to those who had not return the questionnaires, urging them to respond. Those who did not respond to the follow-up reminder were telephoned, and, once again, the importance of a high rate of return was stressed, as well as the benefits they could gain from the investigation.

The data of the PRQ were scored by the researcher and ODR in Atlanta. The database was set up to provide anonymity and confidentiality. The data of the two LPI questionnaires captured by the researcher used an Excel spread sheet. The researcher carefully entered the item responses of each survey participant. The item responses and totals for each variable were transported into the “Data Editor” of the SPSS. The scores of the PRQ and LPI were used to do the statistical analyses.

**Data Analysis**

The data obtained from this investigation were analyzed with the Pearson Product-Moment (PPM) correlation, the T-test statistics and Analysis of Variance (ANOVA) using the Statistical Package for the Social Sciences (SPSS) computer program. To determine the principals’ leadership practice on the LPI, the value of the items marked for each scale were totaled and the participants’ total scores and group means scores were calculated for each leadership practice. By ranking the scores from the highest to the lowest, it determined which leadership practices of the principals applied most often, second-most often, and so on (Kouzes and Posner, 1993). Similarly, the principals’ resiliency group means scores were calculated for each dimension.

The research questions were analyzed as follows:

**RQ1**: Are there significant relationships among resiliency dimensions (predictor variable) and leadership practices (predictor variable) of high school principals?

**Null hypothesis**: There are no significant relationships among resiliency dimensions and leadership practices of high school principals.
The Pearson Product-Moment (PPM) correlation was selected to test the relationship among two continuous variables. The PPM is expressed as a coefficient, r, and it determines if there is a degree of relationship between the variables, and if the relationship is positive or negative (Gliner and Morgan, 2000). In order to establish whether or not relationships exist between the variables in research question one, Pearson product-moment correlations were computed among the resilience dimensions [Positive (Yourself), Positive (The World), Focused, Flexible (Thoughts), Flexible (Social), Organized and Proactive] and leadership practices [Challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart]. If the statistical significance level has been achieved, the researcher rejects the null hypothesis, and accepts the hypothesis that resiliency dimensions and leadership practices are related. The statistical significance level was set at p (probability) < .05. In other words, the p-value indicates a 5 percent chance that the statistical test results in a rejection of the null hypothesis. The data used to analyze RQ1 were obtained from the PRQ.

**RQ2:** Are there significant differences between principals’ self-assessments of their leadership practices (predictor variable) and their teachers’ peer assessments (predictor variable) of them?

**Null hypothesis:** There are no significant differences between principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them.

In order to establish whether or not differences among the variables exist in research question two, the T-test was computed to establish whether or not there were significant differences between the group mean of the principals’ self-assessments of leadership practices and group mean of their teachers’ peer assessments of them. If the statistical significance level has been achieved, the researcher rejects the null hypothesis and accepts the hypothesis that principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them are different. The statistical significant level was set at p< .05. The data used to analyze RQ2 were obtained from the LPI (Self) and the LPI (Observer).

**RQ3:** Are there significant differences between principals’ self-assessments of their leadership practices (predictor variable) and their assistant principals’ peer assessments (predictor variable) of them?

**Null hypothesis:** There are no significant differences between principals’ self-assessments of leadership practices and their assistant principals’ peer assessments of them.
In order to establish whether or not differences among the variables exist in research question three, the T-test was computed to establish whether or not there were significant differences between the group mean of the principals’ self-assessments of leadership practices and the group mean of their assistant principals’ peer assessments of them. If the statistical significance level has been achieved, the researcher rejects the null hypothesis and accepts the hypothesis that principals’ self-assessments of their leadership practices and their assistant principals’ peer assessments of them are related. The statistical significant level was set at $p < .05$. The data used to analyze RQ3 were obtained from the LPI (Self) and the LPI (Observer).

**RQ4:** Are there significant differences among resiliency dimensions (predictor variable) and the individual demographics (criterion variable) of high school principals?

**Null hypothesis:** There are no significant differences among resiliency dimensions and the individual demographics of high school principals?

The T-test was selected to describe the differences between a normally distributed independent (predictor) variable and another independent (predictor) variable. To answer question four, the T-test was computed to establish whether or not there were differences among group means of the principals’ resiliency dimensions and the group means of their individual demographics. If the statistical significance level has been achieved, the researcher rejects the null hypothesis, and accepts the hypothesis that there are differences among the resiliency dimensions and the individual demographics of high school principals. The statistical significance level was set at $p$ (probability) $< .05$. The data used to analyze RQ4 were obtained from the PRQ.

**RQ5:** Are there significant differences between teachers’ perceptions of leadership practices of their principals in rural (predictor variable) and urban (predictor variable) high schools?

**Null hypothesis:** There are no significant differences between teachers’ perceptions of leadership practices of their principals in rural and urban high schools?

To answer question five, Analysis of Variance (ANOVA) was selected to establish whether or not there were differences between the teachers’ perceptions of leadership practices of their principals in rural high schools and their perceptions of leadership practices of their principals in urban high schools. If the statistical significance level has been achieved, the researcher rejects the null hypothesis, and accepts the hypothesis that there are differences between the teachers’ perceptions of leadership practices of their principals in rural and urban
high schools. The statistical significant level was set at p (probability) < .05. The data used to analyze RQ5 were obtained from the LPI (Observer).

**Reliability and Validity**

When tools for measurement are chosen or developed, the researcher must keep in mind two important characteristics: validity and reliability. Reliability can be defined as the consistency with which the instrument produces the same results under the same conditions at different times (Gliner & Morgan, 2000). One considers reliability in determining the appropriateness of an instrument in a particular study (Gliner & Morgan, 2000).

Gay (1992) stated that the most important quality of any standardized instrument is validity. Best and Khan (1998) maintained that validity is the process to which an instrument measures what it claims to measure. While, Suen and Ary (1989), defined validity as the degree to which a set of data represents what it is supposed to represent. Thus, validity determines whether an instrument is believable to measure a certain construct.

**Personal Resilience Questionnaire (PRQ)**

After two decades of research, recording, observation and analyzing the resilience in organizations, Conner (1993) started to develop a tool to measure the concept of resilience. The items were written to reliably and efficiently illustrate the characteristics; they were designed to measure with minimal overlap between concepts. The questionnaire was also constructed in a way that it captured the span of resilience while minimizing potential sources of partiality. And the wording was written on a seventh grade level. Some of the items (46%) are reverse scored to minimize the possibility of response bias. Careful attention was given to the reliability and validity of the instrument (Conner, 1993).

The validity and social desirability psychometrics of the PRQ were derived from a study on 226 undergraduate students at the Georgia Institute of Technology in 1993. The population contained a fairly even split on gender (121 males, 104 females), and the participation was anonymous, contingent upon informed consent, and available for extra credit (ODR, Inc., 1994a). Each participant completed the PRQ and 26 other instruments that tested constructs
similar to the Personal Resilience Profile sub-scales (ODR, 1994). After analyzing the data, a final set was chosen for internal consistency and span of construct coverage. To establish construct validity of the *Personal Resilience Questionnaire* (PRQ), it was determined whether the instrument measured the concepts it was designed to measure. Accordingly, the PRQ measured the seven different constructs of resilience: Positive (The World), Positive (Yourself), Focused, Flexible (Thoughts), Flexible (Social), Organized, and Proactive. By comparing individual scores on the resilience sub-scales to scores on other validated scales that were used to measure the same constructs, Conner confirmed that the Personal Resilience Profile sub-scales did measure the concepts that they were theoretically designed to measure (ODR, 1996).

By establishing the predictive validity of the PRQ, Conner (1993) wanted to determine whether high scores on the PRQ correspond to high performance of the subjects. Data obtained from 86 employees of a leading financial institution in the midst of a major change; 66 were described as high performers, and the rest were classified as low performers. They compared the scores of these groups on the seven components of resilience, and found that the high performers showed higher scores than the low performers on Positive (The World), Positive (Yourself), Focused, Flexible (Thought), Flexible (Social), Organized, and Proactive. The result suggests that scores on the PRQ can be used to predict job performance in organizations undergoing change, but that relationships may differ across organizations.

Discriminant validity was used to determine how well LPI scores differentiated between high – and – low performing managers. Thus, discriminate validity was tested by applying the same 26 scales to the rest of the Personal Resilience Profile sub-scales. Thus, if scale A was expected to correlate highly with one of the Personal Resilience Profile sub-scales, then it was also expected to yield a low correlation with the remaining six sub-scales, indicating that scale A could discriminate between the sub-scales. In general, the results indicate low discriminate validity, although some sub-scales discriminate better then others. ODR attributed this to the fact that some of the sub-scales are conceptually interrelated as reflected in their inter-correlations (ODR, 1994).

Internal consistency reliability for each of the PRQ subscales was computed by using Cronbach’s alpha coefficients. Cronbach’s alpha coefficient is a mathematical formula that measures the reliability of measurement by estimating the extent to which the measurement provides the same results on repeated trials or it measures how well a set of items or variables
(characteristics of resiliency) measures the same underlying construct (resiliency). Cronbach’s alpha is a value between 0 and 1. Values near 0 indicate low reliability, while values near 1 indicate high reliability (Crocker & Algina, 1986). The following Cronbach’s alpha coefficients were calculated for each sub-scale: Positive (The World) .83, Positive (Yourself) .81, Focused .82, Flexible (Thoughts) .71, Flexible (Social) .74, Organized .68, Proactive .65. These figures indicated that the items that make up each scale have a fairly high level of covariance; that is, people tend to respond similarly to the various questions in each scale. This is an indication that the questions constituting a given sub-scale are all measuring the same concept (ODR, 1996).

The internal consistency reliability for the PRQ, the subscales or characteristics of resiliency that measured the construct of resiliency, showed high alpha values. Thus, the psychometrics of this scale indicated that the PRQ exhibited acceptable validity and reliability.

**Leadership Practices Inventory (LPI)**

Utilizing only the responses from the LPI-Observer, Kouzes and Posner examined the relationship between leaders’ effectiveness and their leadership practices (as measured by the LPI). Including only the responses from constituents about their managers, they used independent assessments, thereby minimizing potential self-report bias. Regression analysis was performed, with leader effectiveness as the dependent variable and the five leadership practices as the independent variables. The regression equation was highly significant \[F (statistical\ formula\ to\ test\ hypothesis) = 318.88, p < .0001\]. The leadership practices explained over 55 percent \[\text{adjusted } R^2 = .756\] of the variance around constituents’ assessments of their managers’ effectiveness (Kouzes and Posner, 1995).

From further validation of the LPI, Kouzes and Posner determined how well the LPI scores differentiated between high – and low – performing managers. Utilizing discriminant analysis as a classification technique, they wanted to determine how well LPI scores could group managers into various performance-based categories – the lowest third and highest third of the managers on the LPI Observer leader effectiveness scale formed the low – and high – performing categories. Approximately 85 percent of the sample of LPI-Observer respondents was used to create the discriminant function, with the remaining 15 percent were used to create a holdout
sample for classification purposes. One discriminant function was derived; it correctly classified 92.6 percent of the known cases and 77.8 percent of the cases in the holdout sample. Including the middle third of the sample in this analysis resulted in correct classification of 71.1 percent of the known cases and 67.9 percent of the holdout sample. All four of these results are considered as statistical significant.

Posner and Kouzes (1988, 1993) reported construct validity evidence for the 30-item LPI constructed to measure the five competencies in samples of N=2,168 and N=30,913. Results from the LPI have shown high face validity and predictive validity, meaning that the results not only make sense to people but also predict whether a leader’s performance is high, moderate, or low. Scores on the LPI are positively correlated with measures of a leader’s credibility, effectiveness with upper management, team-building skills, work-group norms, and actual levels of output (Kouzes and Posner, 1993, expanded edition).

Posner and Kouzes (1995) reported internal reliability with Cronbach’s alpha coefficients ranging from .80 to .91. Reliabilities for the LPI-Self (ranging between .71 and .85) are somewhat lower than those for the LPI-Observer (ranging between .82 and .92). Other studies have found similar levels of internal reliability. For example, reliabilities ranged from .80 to .92 in a study of engineering managers and their constituents’ and between .71 and .82 in a study of women in executive positions in banking and higher education. Overall, the LPI has shown sound psychometric properties.

**Summary**

This investigation studied relationships between two independent variables (resiliency dimensions and leadership practices) to strengthen the leadership abilities of high school principals. Data from several high schools in six school districts in the State of Florida were analyzed by the SPSS for the Windows computer program, and three statistical analyses [Pearson Product-Moment (PPM) correlation, T-test and ANOVA] were selected to determine relationships or differences among the variables.

The results of this investigation can enable school principals to assess their leadership strengths and weaknesses and use the findings to become better school leaders. The investigation also provided the participating principals with their personal resiliency scores and
how these relate to managing change. Additionally, the data suggested the topics for the enhancement of in-service courses in school leadership for school districts and for pre-service courses in educational leadership for universities charged with preparing school principals. This investigation also adds information to the scholarly research and literature in the field of school leadership.

The remaining two chapters of this study will be organized as follows:

- Chapter Four presents an analysis and interpretation of the data gathered by the researcher.
- Chapter Five consists of a summary of the study, review of the findings, conclusions, implications and discussions, limitations and recommendations for further study.
CHAPTER FOUR

ANALYSIS AND RESULTS OF THE DATA

This investigation was conducted to determine the relationships among the dimensions of resilience, leadership practices, and individual demographics of high school principals to strengthen their leadership abilities. A statistical analysis of the data obtained is presented in terms of the relationships or differences between the variables. The data were obtained from the survey instruments completed by the respondents. This chapter reports the investigation and subsequent tests regarding the five research questions introduced in Chapter Two. Information about the participants’ responses in the investigation is first reported followed by an explanation of the analysis for each research question.

Participant Response

Table 4 below illustrates the distribution of the participants’ responses in the investigation. From the total sample of 68 school principals, 28 (41.2%) responded and completed the survey. From the total sample of 136 assistant principals, 53 (39%) responded and completed the survey. While from the total sample of 340 teachers, 81 (23.8%) responded and completed the survey. From all the responses to the surveys, 1 principal, 11 assistant principals and 17 teachers were unusable because they did not match with the participants from a particular school.

The participants were each divided into rural and urban settings based on the school district they represented. The rural school districts were Bay, Volusia and Okaloosa Counties. From the sample of 19 rural school principals, 10 (52.6%) responded and completed the survey. From the sample of 38 rural assistant principals, 21 (55.3%) responded and completed the
survey, and from the sample of 95 rural teachers, 26 (27.4%) responded and completed the survey.

Table 4: Summary of Surveys Mailed, Number Responded and Percentage of Responses.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number mailed</th>
<th>Number responded</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals:</td>
<td>68</td>
<td>28</td>
<td>41.2</td>
</tr>
<tr>
<td>Urban</td>
<td>49</td>
<td>18</td>
<td>36.7</td>
</tr>
<tr>
<td>Rural</td>
<td>19</td>
<td>10</td>
<td>52.6</td>
</tr>
<tr>
<td>Assistant Principals:</td>
<td>136</td>
<td>53</td>
<td>39</td>
</tr>
<tr>
<td>Urban</td>
<td>98</td>
<td>32</td>
<td>32.7</td>
</tr>
<tr>
<td>Rural</td>
<td>38</td>
<td>21</td>
<td>55.3</td>
</tr>
<tr>
<td>Teachers:</td>
<td>340</td>
<td>81</td>
<td>23.8</td>
</tr>
<tr>
<td>Urban</td>
<td>245</td>
<td>55</td>
<td>22.4</td>
</tr>
<tr>
<td>Rural</td>
<td>95</td>
<td>26</td>
<td>27.4</td>
</tr>
</tbody>
</table>

The urban school districts selected for this study were Duval, Hillsborough and Orange Counties. From the sample of 49 high school principals, 18 (36.7%) responded and completed the survey. From the sample of 98 assistant principals, 32 (32.7%) responded and completed the survey, and from the sample of 245 teachers, 55 (22.4%) responded and completed the survey.

Findings of Individual Demographic Data Collected from the School Principals

A description of the respondents is presented in Table 5 below. Frequencies and percentages were calculated for the demographic data collected. As reported in Table 5, from the sample of 28 responding principals, 10 females and 18 males responded and completed the surveys. The participants were asked to list their age; 16 (57.1%) were 51 years and older, 11 (39.3%) were between 41 and 50 years and 1 (3.6%) was between 31 and 40 years. The participants’ marital status ranged from 26 married, 1 divorced and 1 single. As for the level of education of responding principals, 19 had master’s degrees, 6 doctoral degrees and 3 specialist degrees. The participants were also asked to indicate the number of years of teaching experience, which ranged from 23 (82.1%) with 9 years or more years, 4 (14.3%) between 6 and 8 years, and 1 between 3 and 5 years experience. As for the principals’ administrative experience, 18 (64.3%) had 9 years or more, 7 (25%) had between 6 and 8 years, and 3 (10.7%) had between 3 and 5 years experience.
Table 5: Individual Demographic Differences of High School Principals. 
(n = 28)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 (51 years or more)</td>
<td>11 (between 41 and 50)</td>
<td></td>
</tr>
<tr>
<td>1 (between 31 and 40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Females</td>
<td>18 Males</td>
<td></td>
</tr>
<tr>
<td>Marital status:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Married</td>
<td>1 Divorced</td>
<td></td>
</tr>
<tr>
<td>1 Single</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of Education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Master degrees</td>
<td>6 Doctorate degrees</td>
<td></td>
</tr>
<tr>
<td>3 Specialist degrees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching experience:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 (9 years or more)</td>
<td>4 (between 6 and 8 yrs)</td>
<td></td>
</tr>
<tr>
<td>1 (between 3 and 5 yrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative experience:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 (9 years or more)</td>
<td>7 (between 6 and 8 yrs)</td>
<td></td>
</tr>
<tr>
<td>3 (between 3 and 5 yrs)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings of the Research Questions

RQ1: Are there significant relationships among resiliency dimensions (predictor variable) and leadership practices (predictor variable) of high school principals?

Null hypothesis: There are no significant relationships among resiliency dimensions and leadership practices of high school principals.

As indicated in Table 6 below, research question one utilized the Pearson Product-moment (PPM) correlation to investigate relationships between resilience dimensions [Positive (Yourself), Positive (The World), Focused, Flexible (Thoughts), Flexible (Social), Organized and Proactive] and leadership practices [Challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart] of high school principals. The statistical significant level was set at p< .05.

The PPM measured the degree of linear relationship between two variables. The sign (+ or -) of the correlation indicated the direction of the relationship. The magnitude of the correlation (from 0 to 1) indicated the degree to which the data fit on a straight line. This statistic
was used to assess the relationships between the two predictor variables, namely, resilience dimensions and leadership practices.


<table>
<thead>
<tr>
<th></th>
<th>Challenging the process</th>
<th>Inspiring a shared vision</th>
<th>Enabling others to act</th>
<th>Modeling the way</th>
<th>Encouraging the heart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive: The World</strong></td>
<td>Pearson Correlation</td>
<td>0.034</td>
<td>-0.077</td>
<td>-0.564</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.864</td>
<td>0.048*</td>
<td>0.015*</td>
<td>.978</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Positive: Yourself</strong></td>
<td>Pearson Correlation</td>
<td>0.210</td>
<td>0.141</td>
<td>0.346</td>
<td>0.322</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.283</td>
<td>0.474</td>
<td>0.071</td>
<td>0.094</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Focused</strong></td>
<td>Pearson Correlation</td>
<td>0.371</td>
<td>0.578</td>
<td>0.322</td>
<td>0.507</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.052</td>
<td>0.047*</td>
<td>0.095</td>
<td>0.032*</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Flexible: Thoughts</strong></td>
<td>Pearson Correlation</td>
<td>0.297</td>
<td>0.543</td>
<td>0.324</td>
<td>0.574</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.125</td>
<td>0.018*</td>
<td>0.093</td>
<td>0.011*</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Flexible: Social</strong></td>
<td>Pearson Correlation</td>
<td>-0.129</td>
<td>0.056</td>
<td>-0.060</td>
<td>0.102</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.513</td>
<td>0.776</td>
<td>0.763</td>
<td>0.604</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Organized</strong></td>
<td>Pearson Correlation</td>
<td>0.550</td>
<td>0.590</td>
<td>0.596</td>
<td>0.627</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.002*</td>
<td>0.001*</td>
<td>0.001*</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td><strong>Proactive</strong></td>
<td>Pearson Correlation</td>
<td>0.532</td>
<td>0.583</td>
<td>0.0523</td>
<td>0.587</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.050*</td>
<td>0.330*</td>
<td>0.008*</td>
<td>0.040*</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

*p < .05

Table 6 displays the correlation matrix between resilience dimensions and leadership practices for this investigation. Statistically significant, positive relationships were observed among:

- Positive: The World with **inspiring a shared vision** (r = .770, p = .048) and **enabling others to act** (r = .564, p = .015).
- Focused with **inspiring a shared vision** \( (r = .578, p = .047) \) and **modeling the way** \( (r = .507, p = .032) \).
- Flexible: Thoughts with **inspiring a shared vision** \( (r = .543, p = .018) \), **modeling the way** \( (r = .574, p = .011) \) and **encourage the heart** \( (r = .531, p = .022) \).
- Organized with **challenging the process** \( (r = .550, p = .002) \), **inspiring a shared vision** \( (r = .590, p = .001) \), **enabling others to act** \( (r = .596, p = .001) \), **modeling the way** \( (r = .627, p = .000) \) and **encouraging the heart** \( (r = .573, p = .011) \).
- Proactive with **challenging the process** \( (r = .532, p = .050) \), **inspiring a shared vision** \( (r = .53, p = .033) \), **enabling others to act** \( (r = .523, p = .008) \), **modeling the way** \( (r = .587, p = .040) \) and **encouraging the heart** \( (r = .558, p = .017) \).

Based on the strength and the statistical significance of the relationships, the researcher rejected the null hypothesis that there were statistically significant relationships among: Positive: The World with **inspiring a shared vision** and **enabling others to act**; Focused with **inspiring a shared vision** and **modeling the way**; Flexible: Thoughts with **inspiring a shared vision**, **modeling the way** and **encourage the heart**; Organized with **challenging the process**, **inspiring a shared vision**, **enabling others to act**, **modeling the way** and **encouraging the heart**; Proactive with **challenging the process**, **inspiring a shared vision**, **enabling others to act**, **modeling the way** and **encouraging the heart** of high school principals. Table 7 below displays all the significant relationships of RQ1.

### Table 7. Significant Relationship Matrix of RQ1.

<table>
<thead>
<tr>
<th>Challenging</th>
<th>Inspiring</th>
<th>Enabling</th>
<th>Modeling</th>
<th>Encouraging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive:W</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Positive:Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focused</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Flexible:Th</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Flexible: S</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organized</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Proactive</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

X indicates a significant relationship
RQ2: Are there significant differences between principals’ self-assessments of their leadership practices (predictor variables) and their teachers’ peer assessments (predictor variable) of them?

**Null hypothesis:** There are no significant differences between principals’ self-assessments of their leadership practices, and their teachers’ peer assessments of them.

Research question two utilized the T-test to establish whether or not there were significant differences between the principals’ self-assessments of leadership practices and their teachers’ peer assessments of them. The statistically significant level was set at p< .05.

In order to test for differences between the principals’ self-assessments of leadership practices and their teachers’ peer assessments of them, two-tailed T-tests for independent groups were computed. According to the T-test, as displayed in Table 8 below, the leadership practice of enabling others to act indicated a T value of 2.232 and p = .029. These values suggested that this leadership practice (enabling others to act) showed statistical significance, indicating that there was a significant difference between the principals’ self-assessments and their teachers’ peer assessments on this leadership practice. Therefore, the researcher accepted the hypothesis that there was a statistical difference between the principals’ self-assessments and the teachers’ peer assessments of them with regard to the leadership practice of enabling others to act.

<table>
<thead>
<tr>
<th>Leadership Practices</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging the process</td>
<td>0.708</td>
<td>62.591</td>
<td>0.482</td>
<td>0.0857</td>
</tr>
<tr>
<td>Inspiring a shared vision</td>
<td>-0.885</td>
<td>107</td>
<td>0.378</td>
<td>-0.1182</td>
</tr>
<tr>
<td>Enabling others to act</td>
<td>2.232</td>
<td>74.313</td>
<td>0.029*</td>
<td>0.2279</td>
</tr>
<tr>
<td>Modeling the way</td>
<td>-0.036</td>
<td>107</td>
<td>0.972</td>
<td>-0.0047</td>
</tr>
<tr>
<td>Encouraging the heart</td>
<td>-0.222</td>
<td>107</td>
<td>0.825</td>
<td>-0.0312</td>
</tr>
</tbody>
</table>

*p < .05

As for the other leadership practices of challenging the process (T value of .708, p=.48), inspiring a shared vision (T value of .885, p=.37), modeling the way (T value of .036, p=.97), and encouraging the heart (T value of .222, p=.82), the T value suggested that there were differences between the principals and the teachers but the size of the differences were not statistically significant because the p values were greater than .05. Therefore, based on the
p value of these leadership practices, the researcher failed to reject the null hypothesis that there were no significant differences between the principals and teachers’ perceptions on the leadership practices of challenging the process, inspiring a shared vision, modeling the way, and encouraging the heart. Table 9 below displays the only the significant relationship of RQ2.

Table 9. Significant Differences Matrix of RQ2.

<table>
<thead>
<tr>
<th></th>
<th>Challenging</th>
<th>Inspiring</th>
<th>Enabling</th>
<th>Modeling</th>
<th>Encouraging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspiring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modeling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

x indicates a significant difference.

**RQ3:** Are there significant differences between principals’ self-assessments of their leadership practices (predictor variable) and their assistant principals’ peer assessments (predictor variable) of them?

**Null hypothesis:** There are no significant differences between principals’ self-assessments of leadership practices and their assistant principals’ peer assessments of them.

Research question three utilized the T-test to establish whether or not there were significant differences between the principals’ self-assessments of leadership practices and their assistant principals’ peer assessments of them. The statistical significant level was set at p < .05.

As indicated in Table 10 below, the T values of the leadership practices of challenging the process (T value .247, p=.805), inspiring a shared vision (T value.506, p=.614), enabling others to act (T value 1.096, p=.276), modeling the way (T value .005, p=.996), and encouraging the heart (T value .089, p=.929) suggested a difference between the principals’ self-assessments and their assistant principals’ peer assessments but the size of the differences showed no statistical significant. Therefore, the researcher failed to reject the null hypothesis that there were no statistically significant differences between the principals and assistant principals on these leadership practices.
Table 10. Independent Sample T-test Between Principals’ Self-Assessments of Their Leadership Practices and the Assistant Principals’ Peer Assessments of Them.

<table>
<thead>
<tr>
<th>Leadership practices</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging the process</td>
<td>0.247</td>
<td>79</td>
<td>0.805</td>
<td>0.0366</td>
</tr>
<tr>
<td>Inspiring a shared vision</td>
<td>-0.506</td>
<td>79</td>
<td>0.614</td>
<td>-0.0769</td>
</tr>
<tr>
<td>Enabling others to act</td>
<td>1.096</td>
<td>79</td>
<td>0.276</td>
<td>0.1659</td>
</tr>
<tr>
<td>Modeling the way</td>
<td>-0.005</td>
<td>79</td>
<td>0.996</td>
<td>-0.0009</td>
</tr>
<tr>
<td>Encouraging the heart</td>
<td>0.089</td>
<td>79</td>
<td>0.929</td>
<td>0.0153</td>
</tr>
</tbody>
</table>

*p < .05

**RQ4:** Are there significant differences among resilience dimensions (predictor variable) and the individual demographics (criterion variable) of high school principals?

**Null hypothesis:** There are no significant differences among resilience dimensions and the individual demographics of high school principals?

To answer research question four, the T-test was computed to establish whether or not there were differences among the school principals’ resilience dimensions and their individual demographics. Each individual demographic interval was combined in two levels to justify the categorical variable. The statistical significant level was set at p < .05.

As indicated in the tables below, the researcher found significant differences among the resilience dimensions of:

- Positive: The World (T value of 2.904, p = .013) and Proactive (T value of 2.708, p = .045) and the individual demographic of age (Table 11a). This data suggested that principals of different ages had different views about the resilience dimensions of Positive: The World and Proactive. According to the descriptive data, the researcher concluded that principals under 50 years of age (mean score of 54.0) are more likely to apply the Positive: The World resilience dimension than those over 50 years of age (mean score of 51.38). While principals over 50 years of age (means score of 62.75) are more likely to apply the resilience dimension of Proactive than those under 50 years of age (mean score of 61.17), in their leadership approach.
Table 11a. Independent Sample T-test Between Resilience Dimensions and the Individual Demographic of Age of High School Principals.

<table>
<thead>
<tr>
<th>Resilience Dimensions</th>
<th>T</th>
<th>df</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive: The World</td>
<td>2.904</td>
<td>26</td>
<td>0.013*</td>
</tr>
<tr>
<td>Positive: Yourself</td>
<td>0.382</td>
<td>26</td>
<td>0.705</td>
</tr>
<tr>
<td>Focused</td>
<td>0.153</td>
<td>26</td>
<td>0.879</td>
</tr>
<tr>
<td>Flexible: Thoughts</td>
<td>0.052</td>
<td>26</td>
<td>0.959</td>
</tr>
<tr>
<td>Flexible: Social</td>
<td>0.241</td>
<td>26</td>
<td>0.811</td>
</tr>
<tr>
<td>Organized</td>
<td>0.122</td>
<td>26</td>
<td>0.904</td>
</tr>
<tr>
<td>Proactive</td>
<td>-2.708</td>
<td>26</td>
<td>0.045*</td>
</tr>
</tbody>
</table>

*p < .05

- Focused (T value of 2.712, p = .043) and Flexible: Social (T value of 2.323, p = .049) and the individual demographic of gender (Table 11b).

This data suggested that female principals (mean score of 56.20) are more Focused than male principals (means score 54.22) in their leadership approach. While male principals (mean score 60.78) are more Flexible: Social than female principals (mean score 59.80) in their leadership approach.

Table 11b. Independent Sample T-test Between Resilience and the Individual Demographic of Gender of High School Principals

<table>
<thead>
<tr>
<th>Resilience Dimensions</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive: The World</td>
<td>-1.320</td>
<td>26</td>
<td>0.198</td>
</tr>
<tr>
<td>Positive: Yourself</td>
<td>0.627</td>
<td>26</td>
<td>0.536</td>
</tr>
<tr>
<td>Focused</td>
<td>2.712</td>
<td>26</td>
<td>0.043*</td>
</tr>
<tr>
<td>Flexible: Thoughts</td>
<td>-0.459</td>
<td>26</td>
<td>0.650</td>
</tr>
<tr>
<td>Flexible: Social</td>
<td>-2.323</td>
<td>26</td>
<td>0.049*</td>
</tr>
<tr>
<td>Organized</td>
<td>-0.140</td>
<td>26</td>
<td>0.889</td>
</tr>
<tr>
<td>Proactive</td>
<td>-0.722</td>
<td>26</td>
<td>0.477</td>
</tr>
</tbody>
</table>

*p < .05
• Positive: The World (T value of 2.934, p = .040) and Flexible: Social (T value of 2.411, p = .010) and the individual demographic of level of education (Table 11c).

The data suggested that principals with master’s and bachelor’s education levels (mean score of 54.32) were more likely to apply the Positive: The World resilience dimension than principals with specialists and doctoral levels of education (mean score of 48.67).

Likewise, principals who have master’s and bachelor’s education levels (mean score of 61.79) were more likely to apply the Flexible: Social resilience dimension than principals with specialist or doctoral level of education (mean score of 57.56), in their leadership approach.

<table>
<thead>
<tr>
<th>Resilience Dimensions</th>
<th>T</th>
<th>df</th>
<th>Sig. (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive: The World</td>
<td>-2.934</td>
<td>26</td>
<td>0.040*</td>
</tr>
<tr>
<td>Positive: Yourself</td>
<td>-0.263</td>
<td>26</td>
<td>0.795</td>
</tr>
<tr>
<td>Focused</td>
<td>-0.134</td>
<td>26</td>
<td>0.39</td>
</tr>
<tr>
<td>Flexible: Thoughts</td>
<td>0.106</td>
<td>26</td>
<td>0.917</td>
</tr>
<tr>
<td>Flexible: Social</td>
<td>-2.411</td>
<td>26</td>
<td>0.010*</td>
</tr>
<tr>
<td>Organized</td>
<td>-1.058</td>
<td>26</td>
<td>0.300</td>
</tr>
<tr>
<td>Proactive</td>
<td>0.230</td>
<td>26</td>
<td>0.820</td>
</tr>
</tbody>
</table>

* p < .05

• Positive: The World (T value of 2.646, p = .012), Focused (T value of 2.814, p = .018) and Flexible: Thoughts (T value of 2.896, p = .006) and the individual demographic of teaching experience (Table 11d).

The data suggested that principals with 9 or more years of teaching experience were more likely to apply the resilience dimensions of Positive: The World (mean score of 53.57), Focused (mean score of 56.0) and Flexible: Thoughts (mean score of 59.91) than principals with [( Positive: The World, mean score of 47.60) ( Focused, mean score of 50.0), ( Flexible: Thoughts, mean score of 54.40)] with less than 9 years of teaching experience in their leadership approach.
Table 11d. Independent Sample T-test Between the Resilience and the Individual Demographic of Teaching Experience of High School Principals.

<table>
<thead>
<tr>
<th>Resilience Dimensions</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive: The World</td>
<td>-2.646</td>
<td>26</td>
<td>0.012*</td>
</tr>
<tr>
<td>Positive: Yourself</td>
<td>-0.721</td>
<td>26</td>
<td>0.477</td>
</tr>
<tr>
<td>Flexible: Thoughts</td>
<td>-2.896</td>
<td>26</td>
<td>0.006*</td>
</tr>
<tr>
<td>Flexible: Social</td>
<td>-0.137</td>
<td>26</td>
<td>0.892</td>
</tr>
<tr>
<td>Organized</td>
<td>0.035</td>
<td>26</td>
<td>0.972</td>
</tr>
<tr>
<td>Proactive</td>
<td>-1.054</td>
<td>26</td>
<td>0.302</td>
</tr>
</tbody>
</table>

*p< .05

- Focused (T value of 2.078, p = .048) and Proactive (T value of 2.743, p = .033) and the individual demographic of administrative experience of high school principals (Table 11e).

The data suggested that principals who have between 3 and 8 years of administrative experience (mean score of 58.40) were more Focused in their leadership approach than principals with 9 or more years of administrative experience (mean score of 53.0). Furthermore, principals with 9 or more years of administrative experience (mean score of 63.44) were more Proactive in their leadership approach than principals with less than 9 years of administrative experience (mean score of 59.60).

Table 11e. Independent Sample T-test Between the Resilience and the Individual Demographic of Administrative Experience of High School Principals.

<table>
<thead>
<tr>
<th>Resilience Dimensions</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive: The World</td>
<td>0.670</td>
<td>26</td>
<td>0.509</td>
</tr>
<tr>
<td>Positive: Yourself</td>
<td>-0.260</td>
<td>26</td>
<td>0.797</td>
</tr>
<tr>
<td>Focused</td>
<td>2.078</td>
<td>26</td>
<td>0.048*</td>
</tr>
<tr>
<td>Flexible: Thoughts</td>
<td>0.423</td>
<td>26</td>
<td>0.676</td>
</tr>
<tr>
<td>Flexible: Social</td>
<td>0.816</td>
<td>26</td>
<td>0.422</td>
</tr>
<tr>
<td>Organized</td>
<td>-0.436</td>
<td>26</td>
<td>0.666</td>
</tr>
<tr>
<td>Proactive</td>
<td>-2.743</td>
<td>26</td>
<td>0.033*</td>
</tr>
</tbody>
</table>

*p<.05

Table 12 below displays all of the significant relationships of RQ4.
Table 12. Significant Differences Matrix of RQ4.

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>Education</th>
<th>Teaching Exp</th>
<th>Admin. Exp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive: W</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Positive: Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focused</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Flexible: T</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Flexible: S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organized</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactive</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

X indicates significant differences.

The researcher rejected the null hypotheses that there were significant differences among the resilience dimensions of: Positive: The World and Proactive and the individual demographic of age; Focused and Flexible: Social and the individual demographic of gender; Positive: The World and Flexible: Social and the individual demographic of level of education; Positive: The World, Focused and Flexible: Thoughts and the individual demographic of teaching experience; and Focused and Proactive and the individual demographic of administrative experience of high school principals.

**RQ5:** Are there significant differences between teachers’ perceptions of leadership practices of their principals in rural (predictor variable) and urban (predictor variable) high schools?

**Null Hypothesis:** There are no significant differences between the teachers’ perceptions of leadership practices of their principals in rural and urban high schools.

To answer question five, a two-way Analysis of Variance (ANOVA) was selected to establish whether or not there were differences between the teachers’ perceptions of the leadership practices of their principals in rural and urban high schools. The statistical significant level was set at \( p < .05 \).

As indicated in Table 13 below, teachers’ perceptions of leadership practices of their principals in rural and urban high schools were challenging the process \( F(4.008), p < .048 \), inspiring a shared vision \( F(4.384), p < .041 \), enabling others to act \( F(5.142), p < .05 \), modeling the way \( F(0.253), p < .616 \) and encouraging the heart \( F(0.010), p < .921 \). The data suggested that there were not significant differences in the teachers’ perception of the leadership practices of modeling the way and encouraging the heart. Therefore, the researcher fails to reject the null hypothesis that there were no significant differences of the teachers’ perceptions of leadership.
practices of modeling the way and encouraging the heart of their principals in rural and urban high schools.


<table>
<thead>
<tr>
<th>Leadership practices</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging the process</td>
<td>Rur/Urb</td>
<td>1</td>
<td>1.544</td>
<td>4.008</td>
<td>0.048*</td>
</tr>
<tr>
<td>Inspiring a shared vision</td>
<td>Rur/Urb</td>
<td>1</td>
<td>0.511</td>
<td>4.384</td>
<td>0.041*</td>
</tr>
<tr>
<td>Enabling others to act</td>
<td>Rur/Urb</td>
<td>1</td>
<td>0.031</td>
<td>5.142</td>
<td>0.050*</td>
</tr>
<tr>
<td>Modeling the way</td>
<td>Rur/Urb</td>
<td>1</td>
<td>0.093</td>
<td>0.253</td>
<td>0.616</td>
</tr>
<tr>
<td>Encouraging the heart</td>
<td>Rur/Urb</td>
<td>1</td>
<td>0.004</td>
<td>0.01</td>
<td>0.921</td>
</tr>
</tbody>
</table>

* p < .05

Table 14 below displays all the significant relationship of RQ5.

Table 14. Significant differences matrix of RQ5.

<table>
<thead>
<tr>
<th>Leadership practices</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging the process</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Inspiring a shared vision</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Enabling others to act</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Modeling the way</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouraging the heart</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X indicates significant differences

As for the leadership practice of challenging the process, enabling others to act and inspiring a shared vision, the researcher concluded that there were statistical significances of the teachers’ perception of these leadership practices of their principals in rural and urban high schools. Therefore, the researcher rejects the null hypothesis that there were significant differences between teachers’ perceptions of the leadership practices of challenging the process.
inspiring a shared vision and enabling others to act of their principals in rural and urban high schools.

As indicated in Table 15 below, the descriptive statistics indicated that the group mean scores for teachers’ perception of principals in urban high schools were higher than the group mean scores for teachers’ perception of principals in rural high schools on the leadership practices of challenging the process (rural mean = 3.7949, urban mean = 4.1636) and inspiring a shared vision (rural mean = 4.0705, urban mean = 4.3424), but for enabling others to act (rural mean = 4.2372, urban mean = 4.2273) the rural mean score was higher than urban mean score of the teachers’ perception of their principals.

This implies that the principals in urban high schools are more often challenging the process and inspiring a shared vision than principals in rural high schools. Principals in rural high school are more often enabling others to act than principals in urban high schools.

Table 15. Descriptive Statistics of Teachers in Rural and Urban Schools

<table>
<thead>
<tr>
<th>Leadership practices</th>
<th>Rur/Urb</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Challenging the process</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>26</td>
<td></td>
<td>3.7949</td>
<td>0.63475</td>
<td>0.12448</td>
</tr>
<tr>
<td>U</td>
<td>55</td>
<td></td>
<td>4.1636</td>
<td>0.66395</td>
<td>0.08953</td>
</tr>
<tr>
<td><strong>Inspiring a shared vision</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>26</td>
<td></td>
<td>4.0705</td>
<td>0.61495</td>
<td>0.1206</td>
</tr>
<tr>
<td>U</td>
<td>55</td>
<td></td>
<td>4.3424</td>
<td>0.63214</td>
<td>0.08524</td>
</tr>
<tr>
<td><strong>Enabling others to act</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>26</td>
<td></td>
<td>4.2372</td>
<td>0.67523</td>
<td>0.13242</td>
</tr>
<tr>
<td>U</td>
<td>55</td>
<td></td>
<td>4.2273</td>
<td>0.60295</td>
<td>0.0813</td>
</tr>
<tr>
<td><strong>Modeling the way</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>26</td>
<td></td>
<td>4.2051</td>
<td>0.60426</td>
<td>0.1185</td>
</tr>
<tr>
<td>U</td>
<td>55</td>
<td></td>
<td>4.2606</td>
<td>0.60923</td>
<td>0.08215</td>
</tr>
<tr>
<td><strong>Encouraging the heart</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>26</td>
<td></td>
<td>4.2115</td>
<td>0.71423</td>
<td>0.14007</td>
</tr>
<tr>
<td>U</td>
<td>55</td>
<td></td>
<td>4.3667</td>
<td>0.62476</td>
<td>0.08424</td>
</tr>
</tbody>
</table>

**Summary**

This chapter presented an analysis of the data for the investigation. Sixty-eight school principals, one hundred and thirty-six assistant principals, and three hundred and forty teachers
were surveyed in the high schools in the six school districts of Orange, Duval, Hillsborough, Bay, Volusia and Okaloosa Counties. Of these participants, 28 (41.1%) principals, 53 (39.0%) assistant principals, and 81 (23.8%) teachers responded.

In RQ1, positive relationships were found among the resilience characteristics [Positive (Yourself), Positive (The World), Focused, Flexible (Thoughts), Flexible (Social), Organized and Proactive] and leadership practices [Challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart] of high school principals. Statistically significant relationships were found among: Positive: The World with inspiring a shared vision and enabling others to act; Focused with inspiring a shared vision and modeling the way; Flexible: Thoughts with inspiring a shared vision, modeling the way and encourage the heart; Organized with challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart; Proactive with challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart of high school principals.

In RQ2, a statistically significant difference was found between principals’ self-assessments of the leadership practice of enabling others to act and their teachers’ peer assessments of them. While in RQ3, no statistically significant differences were found between the principals’ self-assessments about their leadership practices and their assistant principals’ peer assessments.

In RQ4, statistically significant differences were found among the resilience dimensions of: Positive: The World and Proactive and the individual demographic of age; Focused and Flexible: Social and the individual demographic of gender; Positive: The World and Flexible: Social and the individual demographic of level of education; Positive: The World, Focused and Flexible: Thoughts and the individual demographic of teaching experience; Focused and Proactive and the individual demographic of administrative experience of high school principals.

As for the RQ5, the researcher found a statistically significant difference between the teachers’ leadership practices of challenging the process, inspiring a shared vision and enabling others to act of their principals in rural and urban high schools.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarizes and reviews the findings of the present investigation. Conclusions based on the interpretation of the data generated by the research and related to the review of the literature also are discussed. The chapter concludes with implications and recommendations for further study.

Summary of the Investigation

This study investigated the relationships among the dimensions of resilience, leadership practices, and individual demographics of high school principals to strengthen the leadership abilities of these principals. Specifically, this study was designed to answer the following research questions:

1. Are there significant relationships among resiliency dimensions and leadership practices of high school principals?
2. Are there significant differences between principals’ self-assessments of their leadership practices, and their teachers’ peer assessments of them?
3. Are there significant differences between principals’ self-assessments of their leadership practices, and their assistant principals’ peer assessments of them?
4. Are there significant differences among resiliency dimensions and the individual demographics of high school principals?
5. Are there significant differences between teachers’ perceptions of leadership practices of their principals in rural and urban high schools?
Three on-line questionnaires were used to collect the data for this quantitative study. The survey was cross-sectional because the data were collected at one point in time. The *Personal Resilience Questionnaire* (PRQ) (see Appendix B) is a copyrighted scale and was developed by Daryl Conner and his associates in ODR in 1990. The instrument was utilized to obtain demographic information and information on the resiliency of the high school principals. The responses for 70 items were based on a six-point Likert scale. The second questionnaire, The *Leadership Practice Inventory* (Self) (see Appendix C) is also a copyrighted scale and was developed by Kouzes and Posner (1987, 1993, 1995, 2002) to measure leadership actions and behaviors through the five leadership practices: challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart of the principal. The 30 item questionnaire, which is based on the five-point Likert scale, consists of six statements for each of the five leadership practices.

The third questionnaire, The Leadership Practices (Observer) (see Appendix D) is similar to the LPI (Self), and was completed by both the assistant principals and teachers to measure the leadership actions and behaviors of their principals.

Participants of the study included 68 high school principals, 136 assistant principals, and 340 teachers from six school districts, namely, Duval, Hillsborough, Orange, Bay, Volusia, and Okaloosa counties in the state of Florida. Forty-one percent (28) of the PRQ and LPI (Self) were returned from the principals, 39% (53) of the LPI (Observer) were returned from the assistant principals and 24 % (81) of the LPI (Observer) were returned from the teachers.

Data were analyzed using the following statistical treatments: (a) the Pearson Product-Moment correlation to determine relationships among: resiliency dimensions and leadership practices of high school principals; resiliency dimensions and the individual demographics of high school principals. (b) the T-test to examine the differences between: principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them; principals’ self-assessments of their leadership practices, and their assistant principals’ peer assessments of them; (c) and ANOVA for teachers’ perceptions of leadership practices of their principals in rural and urban high schools.
Review of the Findings

The study found:

1. Significant relationships (see Table 7) among the resilience dimensions of Positive: The World, Focused, Flexible: Thoughts, Organized, and Proactive and the leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart of high school principals.

2. A significant difference (see Table 9) between the principals’ evaluations and their teachers’ evaluations of them on the leadership practice of enabling others to act.

3. There were no significant differences (see Table 10) between the principals’ evaluations and their assistant principals’ evaluations of them on leadership practices.

4. Significant differences (see Table 12) were found among the resilience dimensions of:
   - Positive: The World and Proactive and the individual demographic of age.
   - Focused and Flexible: Social and the individual demographic of gender.
   - Positive: The World and Flexible: Social and the individual demographic of level of education.
   - Positive: The World, Focused, and Flexible: Thoughts and the individual demographic of teaching experience.
   - Focused and Proactive and the individual demographic of administrative experience of high school principals.

5. Significant differences (see Table 14) exist between the teachers’ perceptions of the leadership practices of challenging the process, inspiring a shared vision, and enabling others to act of their principals in rural and urban high schools.

Conclusions

Based on the five research questions posed in Chapter One and the analysis of the data, the following conclusions can be drawn as a result of this investigation:

1. (a) The resilience dimension of Organized was correlated (see Table 6) with the five leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart of high school principals. Thus, principals who are
more Organized are better able to challenge the process, inspire a shared vision, enable others to act, model the way and encourage the heart.

According to Conner’s model (1993), Organized resilient people:

- Find order in chaos and structure in ambiguity.
- Have the discipline to assess the available information.
- Choose a direction in which to proceed, and plan the steps accordingly.
- Create a workable detailed plan, systematically and in a sequence.

A number of studies have found one or more of these characteristic associated with resilience (Conner, 1993; Hagevick, 1998; Bernard, 1993). The leadership practice of challenging the process requires the principal to have the ability to create order during conditions of uncertainty. Accordingly, principals should be able to master change during uncertainty, and take action to lead their people through these unstable times. While principals must act decisively under uncertain conditions, they must also be cognizant of the fear and doubt that teachers and students feel when faced with the unknown (Kouzes & Posner, 1995, 2002). Wheatley (1992) stated that the things people fear most in organizations are fluctuations, disturbances and imbalances. Successful organizations take advantage of the opportunities or possibilities for renewal and enhancement. Principals who are in these organizations must be able to see when routines derailed creative planning and block necessary advancement (Kouzes & Posner, 2002).

The leadership practice of inspiring a shared vision helps principals to maintain a vision because there are a lot of distractions and ambiguity that cause teachers and students to misunderstand the goals and values of the school. The Kouzes and Posner (2002) research found that when leaders clearly articulated their vision for the organization, constituents indicated significantly higher levels of organizational productivity. In order to attract teachers and students from diverse backgrounds and interest, principals must discover what aspirations, goals, needs, and dreams they have in common, and this can only be realized by inspiring a shared vision.

It is important that principals should be able to recognize patterns when others see chaos in education. This will enable them to take advantage of unexploited opportunities. Therefore, a principal must motivate her or his teachers and students to understand, accept, and commit to the vision (Kouzes & Posner, 2002).
The leadership practice of enabling others to act offers steps that the principal can take to foster collaboration to create positive interactions among all their constituents (teachers, students, parents, community, school board and school district). With a trusting relationship and through face-to-face interactions, the principal connects teachers and students to the right sources of influence and information. By sharing information, he or she creates a climate of trust and collaboration that is critical to the success of the school. When teachers access and share information, they become more involved in the decision making process, which significantly improve the quality of their services (Kouzes & Posner, 2002).

The leadership practice of modeling the way implies that the principal takes every opportunity to show teachers, staff, students, parents and the community by their own example that they are deeply committed to the values and aspirations of the school. Therefore, it is important that the principal maintains direct contact with his or her teachers, students, staff, parents and the community. Face-to-face communication is the preferred channel to share information about the school. To keep teachers and students focused on the meaning and significance of the vision, the principal should implement things in small, planned increments (Kouzes & Posner, 1995, 2002).

The leadership practice of encouraging the heart implies that the principal gives recognition to those contributing to the success of the project, and encouraging teachers, staff and students by celebrating team accomplishment regularly. By recognizing such accomplishments, principals let their teachers know what they mean to the school. Hence, it is important that the principals should look for opportunities to celebrate accomplishments. Teachers, staff, and students often need encouragement and motivation to achieve the goals set by the school. Ultimately that would inspire them to perform better (Kouzes and Posner, 2002).

(b) The resilience dimension of Proactive correlated (see Table 6) with the five leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart.

According to Conner’s model (1993), Proactive people:

- Act decisively in the midst of uncertainty.
- Take risks and endure the discomfort involved.
- Seek challenges rather than avoid them.
- Invest energy rather than withdraw.
Thus, the researcher concluded from this investigation that principals who are more Proactive are better able to challenge the process, inspire a shared vision, enable teachers and students to act, model the way, and encourage the heart of its people to strengthen their leadership abilities.

(c) The resilient dimension of Focused was correlated (see Table 6) with inspiring a shared vision and modeling the way.

According to Conner’s model (1993), Focused people:

- Strongly committed to goals.
- Find meaning or purpose in life.
- Have a sense of purpose and priorities.
- Have clarity of purpose.
- Have a sense of direction in life.

Thus, the researcher concluded from this investigation that principals who are more Focused are better able to inspire a shared vision and model the way to strengthen their leadership abilities.

(d) The resilient dimension of Positive: The World was correlated (see Table 6) with inspiring a shared vision and enabling others to act.

According to Conner’s model (1993), Positive: The World resilient people:

- Focus on positive view of environment.
- See environment as complex and challenging.
- See opportunities and possibilities.
- Are optimistic

Thus, the researcher concluded from this investigation that principals who are more Positive: The World are better able to inspire a shared vision and enable others to act in to strengthen their leadership abilities.

(e) The resilient dimension of Flexible: Thoughts was correlated (see Table 6) with inspiring a shared vision, modeling the way and encouraging the heart.

According to Conner’s model (1993), Flexible: Thoughts resilient people:

- Cope with ambiguity comfortably.
- Are able and willing to look at situations from multiple points of view and suspend judgement.
• Accept paradoxes and contradictions.
• Are open-minded.
• Are creative in finding effective ways to achieve goals.

Thus, the researcher concluded from this investigation that principals who are more Flexible: Thoughts are better able to inspire a shared vision and enable others to act to strengthen their leadership abilities.

2. There was a significant difference (see Table 8) between the principals’ self-assessments and their teachers’ peer assessments of them on the leadership practice of enabling others to act. As indicated by the means scores (means score for principals, 4.2, mean score for teachers, 4.4), the teachers expected that principals should do more to enable others to act by helping each teacher, student or staff member in the school feel capable and powerful. They must actively involve their teachers and staff in planning and give them freedom of choice in decision-making. When teachers and staff jointly work together, they realize that they require information from each other in order to be successful. Therefore, teamwork is critical for school improvement.

The principal and his or her teachers must collaborate in order to develop employee commitment and skills. By working towards the achievement of cooperative goals, they will be able to ensure each other’s success (Kouzes & Posner, 2002). According to Kouzes and Posner (2002), their research study indicated that frequent interactions between people promote more positive feelings about each other. Thus, principals should strive to provide their teachers and students with opportunities to interact and work with each other. By building mutual and trusting relationships, they create a sense of agreement to nurture and develop their teachers and students in the school. When the principal is viewed as helpful and perceptive, the teachers, staff, students and parents will more likely be committed to the principal’s leadership and the school’s goals. (Kouzes and Posner, 2002).

From this investigation, the researcher concluded that from the teachers’ perspective high school principals don’t do as much as the principal think they do to enable others to act.

3. (a) Significant differences exist among the resilience dimensions of: Positive: The World and Proactive and the individual demographic of age (see Table 11a). A Positive: The World principal:
• Focuses on the positive view of environments.
- Sees the environment as complex and challenging.
- Sees opportunities and possibilities.
- Is optimistic.

The researcher concluded that principals of different ages have different views about the resilience dimensions of Positive: The World and Proactive. According to the descriptive data, the researcher concluded that principals under 50 years of age (mean score of 54.0) are more likely to apply the Positive: The World resilience dimension than those over 50 years of age (mean score of 51.38). While principals over 50 years of age (mean score of 62.75) are more likely to apply the resilience dimension of Proactive than those under 50 years of age (mean score of 61.17), in their leadership approach.

(b) Significant differences exist among the resilience dimensions of Focused and Flexible: Social and the individual demographic of gender (see Table 11b).

Focused principals are:
- Strongly committed to the goals.
- Find meaning or purpose.
- Have a sense of purpose and priorities.
- Have clarity of purpose.
- Have a sense of direction in life.

Flexible: Social principals are:
- Able to draw on resources of others to supplement their own flexibility.
- Recognize interdependency with others.
- Able to form and maintain close relationships.
- Recognize how others’ skills can complement their own.

The researcher concluded that female principals (mean score of 56.20) are more Focused than male principals (mean score 54.22) in their leadership approach. While male principals (mean score 60.78) are more Flexible: Social than female principals (mean score 59.80) in their leadership approach.

(c) Significant differences exist among the resilience dimensions of Positive: The World and Flexible: Social and the individual demographic of level of education (see Table 11c).

The researcher concluded that principals with master’s and bachelor’s education levels (mean score of 54.32) are more likely to apply the Positive: The World resilience dimension
than principals with specialists and doctoral levels of education (mean score of 48.67).
Likewise, principals who have master’s and bachelor’s education levels (mean score of 61.79)
are more likely to apply the Flexible: Social resilience dimension than principals with specialist
or doctoral level of education (mean score of 57.56), in their leadership approach.
(d) Significant differences exists among the resilience dimensions of Positive: The World,
Focused and Flexible: Thoughts and the individual demographic of teaching experience (see
Table 11d). Flexible: Thoughts principals:
- Cope with ambiguity comfortably.
- Able and willing to look at situations from multiple points of view and suspend
  judgment.
- Accept paradoxes and contradictions.
- Are open-minded.
- Creative in finding effective ways to achieve goals.

The researcher concluded that principals with 9 or more years of teaching experience are
more likely to apply the resilience dimensions of Positive: The World (mean score of 53.57),
Focused (means score of 56.0) and Flexible: Thoughts (mean score of 59.91) than principals
with [( Positive:TheWorld, mean score of 47.60) ( Focused, mean score of 50.0), ( Flexible:
Thoughts, mean score of 54.40)] with less than 9 years of teaching experience in their
leadership approach.
(e). Significant differences exist among the resilience dimensions of Focused and Proactive
and the individual demographic of administrative experience (see Table 11e) of high school
principals.

The researcher concluded that principals who have between 3 and 8 years of
administrative experience (mean score of 58.40) are more Focused in their leadership approach
than principals with 9 or more years of administrative experience (mean score of 53.0).
Furthermore, principals with 9 or more years of administrative experience (mean score of
63.44) are more Proactive in their leadership approach than principals with less than 9 years of
administrative experience (mean score of 59.60).
4. A significant difference exists (see Table 13) between the teachers’ perceptions of
leadership practices of challenging the process, inspiring a shared vision and enabling others to
act of their principals in rural and urban high schools. The descriptive statistics indicated that
the principals in urban high schools are more likely to apply the leadership practices of 
**challenging the process** (mean score of 4.2), **inspiring a shared vision** (means score of 4.15), 
and **enabling others to act** (mean score of 4.49) than principals in rural high schools (mean 
scores of 4.0, 4.1, and 4.4) in their leadership approach.

**Challenging the Process.** It is imperative that principals know the skills and capabilities of 
their teachers. In order to find the proper balance between opportunities and individual skills, 
they must be cognizant of the abilities of others and what they find personally challenging. 
When setting goals, the principal should not set them so high that the teachers will feel 
frustrated and discouraged. A gradual increase would build the necessary skill to reach each 
new level. By participating in challenging opportunities, people often bring forth skills and 
abilities that were otherwise being oblivious. If the principal expects the best results from his 
or her teachers, he or she should search for opportunities where teachers are able to give their 

**Inspiring a Shared Vision.** Kouzes and Posner (2002) stated that the vision sets the 
agenda and gives direction and purpose to the future. It is portrayed by an ideal and unique 
image of a common future. However, a vision is only effective when the principal has the 
ability to communicate that vision so that others could see what he or she wants them to see. In 
other words, a shared vision is possible only if followers find the purpose appealing, 
motivating and inspiring.

Envisioning the future is a process that begins with passion, feeling, concern or an 
inpiration. Through the process, the principal needs to focus on a meaningful theme, acts on 
his or her instincts and overtime more detail will become clearer, and eventually it will results 
in something that he or she can actually articulate. He or she will also be able to draw upon that 
very natural mental process of creating images. In fact, visions are images in one’s mind, 
expressions and representations. They will only work when the principal expresses those 
images in concrete terms to teachers, staff, students and parents.

Continuously, the principal must think about the future and become able to plan ahead of 
time. When the principal effectively communicates a vision, it becomes lively and usable. 
Kouzes and Posner (2002) found that leaders who effectively articulate their vision reported 
higher level of positive results such as: job satisfaction, motivation, commitment, loyalty, 
clarity about the organization, and organizational productivity.
Enabling Others to Act. Kouzes and Posner (2002) stated that leaders who enable others to act foster collaboration and build cooperative relationships with colleagues, because they know that they cannot do it alone. When principals foster collaboration, he or she create a climate of trust, facilitate positive interdependence and support face-to-face interactions. They actively involve teachers and staff in the planning and organization and give them freedom of choice in the decision-making. While strengthening them and helping them feel capable and powerful, they contemplate the needs and interests of them and let them feel as if they carry ownership and responsibility in the school. Principals who can strengthen their teachers can also enhance their performance. Therefore, it is important that principals create a climate where teachers are involved. They must work in an environment that builds their ability to perform a task and promotes self-confidence in their judgment. Kouzes and Posner (2002) identified four leadership essentials to strengthen others:

- Ensure self-leadership.
- Provide choice.
- Develop competence and confidence.
- Foster accountability.

By using these essentials, principals can significantly increase teachers’ belief in their own ability to make a difference (Kouzes & Posner, 2002). Often principals act as a coach and an educator, helping teachers to learn and develop their skills, and providing the institutional supports required for continuous learning. In essence, by leading their schools, principals transform their constituents into leaders themselves.

Based on this investigation, the researcher concluded that high school principals who have more of the resilience dimensions of Organized, Focused, Proactive, Positive: The World and Flexible: Thougths are better able to employ the leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart to become more effective high school principals. Resilient principals, with these leadership abilities, are more likely to believe that they have the strengths to make positive changes (Henderson & Milstein, 1996). They have the capacity to manage their resources as they deal with the challenge of change (Conner, 1993). Hence, they can set appropriate priorities and make reasonable choices in transforming the school into a more effective organization. This is important because it increases the likelihood of risk taking and commitment to the changes that
may occur. Henderson and Milstein (1996) recommended that a resilient principal must, before they initiate any educational changes, assess the current state of education, promoting changes and building commitment and evaluating efforts and celebrating the results.

Conner (1993) stated that the single most important factor in managing change successfully is the degree to which people demonstrate resilience. He maintained that resilience is the willingness and capacity of a leader to absorb high levels of change while demonstrating an insignificant dysfunctional performance. Thus, the assumption by followers is that resilient principals are better prepared to protect them and the school from the fast-changing world because they have the capacity to absorb high levels of change. Change is a difficult process but one way or another all schools have to face it. Major changes the Organized principal can initiate are:

- Developing of a vision and mission for the school.
- Restructuring for greater effectiveness and efficiency in education programs.
- New approaches and processes for enhancing learning and teaching; realigning directions, faculty and staff, and processes.
- Integrating new technologies into the core subjects.
- Shifting aspects of the culture to allow greater creativity, stability, and sustainability in the school (Lick & Kaufman, 2001).

Thus, the resilient principal should assist and support his or her faculty, staff, students, parents and the community to challenge the process by creating change to enable the school to be proactive and increase the potential for a successful education system (Lick & Kaufman, 2001). However, it is important that school principals who have a high level of the resilience dimension of Organized must understand the scope of change being undertaken. Before any change can take place, the principal must be cognizant of the capacity for change that encompasses ability and willingness. If one of these concepts is omitted, there will be a lack of capacity for change (Lick & Kaufman, 2001).
Implications and Discussions.

The results of this investigation have implications for practitioners in education responsible for developing and maintaining strategies to achieve the goal of principals effectively serving as school leaders.

Based on the literature review for this investigation, the Resilience Model developed by Daryl Conner and *The Leadership Challenge* by Kouzes and Posner were selected for this investigation because they provide practical suggestions to school principals on how to strengthen their leadership abilities. These research findings can serve as an impetus to encourage school principals to expand and integrate these models for educational leadership. These findings can serve as a basis for school principals to assess their leadership strengths and weaknesses and use the findings toward the improvement of leadership performance.

Principals as Agents of Change

According to Conner (1993), principals should continuously look for ways to help their teachers and students understand the dynamics of change and what they can do to manage the change process. By being more resilient -- better equipped to manage the change process -- principals and others increase their capacity to absorb and deal with change.

Kouzes and Posner (2002) maintained that school principals must be agents of change. The quest for change is an adventure that tests the skills and abilities of school leaders. Also, they should actually initiate change and assume the risk for a new enterprise. However, they should not initiate all changes but should also encourage and involve everyone in the school that responsibility for innovation and improvement is everyone’s business.

Resiliency as Organizational Advantage

The application of resilience dimensions can be utilized as a powerful competitive advantage for any educational institution facing major changes. Principals who accept the resilience model reflect greater change adaptability. Resilient principals who manage change successfully not only improve their school’s performance but also become more effective leaders. Principals who have the leadership abilities reflected in the resilience dimensions and the leadership practices will be better able to bring meaningful structure and discipline to a changing world.
Kouzes and Posner (2002) supported the approach of change management that was introduced by Daryl Conner in his book, *Managing at the Speed of Change*. Based on their research, a leader overcomes adversity when they accept the challenge of change. They are also persistence in achieving their goals. This implies that principals who, for example, display the resilience dimensions of Organized and Focused are better able to challenge the process and, consequently, have the ability and willingness to implement change to accomplish their goals. Indeed, they perform better at managing change. They show commitment and sacrifice when facing disruptive change, and are able to make something happen during times of uncertainty and urgency in schools.

To achieve lasting change, though, principals must believe that they can make something happen for the school by involving everyone in the change process. More importantly, they must stay sensitive to the external realities, in this global environment, and encourage faculty, staff and students to be open-minded to the world outside and the boundaries of the school. Therefore, principals should be ahead of change and not behind it trying to catch up (Kouzes and Posner, 2002).

**Suggestions from the Researcher**

**Competitive Advantage**

Principals must be able to create a climate in which faculty, staff, students and parents can absorb and deal with change. Through efforts involving existing change models, principal can show how the present challenges can be realized, giving their schools a competitive advantage. For example, the *Change Creation Model* (Lick & Kaufmann, 2000) is one proactive process to assist organizations succeed with major change. The Process of Change Creation below, as an example, can be utilized by principals in developing a process to bring about meaningful change in their schools.

1. Prepare the leadership team for major planning and change by defining the world and the school it would create for tomorrow.
2. Prepare the school for major planning and change. Otherwise, there will be mistrust and suspicion, which will have a negative impact on the process.
3. Develop an effective strategic plan that would place societal value as the basis for subsequent planning, developing, implementing and evaluations/continuous improvement.

4. Describe, in written form, each major change project to be undertaken for plan accomplishment.

5. Clarify the scope of the change project and its importance and implications to stakeholders (e.g., faculty, staff, students, parents, community, school board, school district office).

6. Communicate the change project and its importance and implications to stakeholders (e.g., faculty, staff, students, parents, community, school board, school district office).

7. Diagnose the school’s present status and capacity to accomplish the change project (e.g., school’s readiness for change, assimilation resources, cultural issues, and strength of sponsorship).

8. Create, using the universal change principle (learning must precede change), a detailed action plan for the implementation and long-term success of the change.

9. Execute, monitor, and refine (continuously improve) the implementation plan.

10. Assess and support regularly the progress and status of the change project to stakeholders, seek their input, and celebrate success milestones.

11. Evaluate the final results of the change project.

Developing Resiliency Dimensions

The results of this investigation have implications for (1) school principals to become more effective by improving their leadership capacity and (2) practitioners in education responsible for developing effective school leadership.

Based on the significant relationships among the resiliency dimensions of Positive: The World, Focused, Flexible: Thoughts, Organized, and Proactive and the leadership practices of challenging the process, inspiring a shared vision, enabling others to act, modeling the way and encouraging the heart, high school principals and other school leaders can become more effective by developing the seven resiliency dimensions to strengthen the five leadership practices.

Principals can develop the resiliency dimension of Organized by, for example:
• Finding order in chaos and structure in ambiguity.
• Having the discipline to assess the available information.
• Choosing a direction in which to proceed, and plan the steps accordingly.
• Creating a workable detailed plan, systematically and in a sequence.

Principals can develop the resiliency dimension of Flexible: Thoughts by, for example:
• Coping with ambiguity comfortably.
• Being able and willing to look at situations from multiple points of view and suspend judgment.
• Accepting paradoxes and contradictions.
• Being open-minded.
• Being creative in finding effective ways to achieve goals.

Principals can develop the resiliency dimension of Focus by, for example:
• Being strongly committed to the goals.
• Finding meaning or purpose.
• Generating a sense of purpose and priorities.
• Developing clarity of purpose.
• Discovering a sense of direction in life.

Principals can develop the resiliency dimension of Positive: The World by, for example:
• Focusing on the positive view of environments.
• Accepting the environment as complex and challenging.
• Seeing opportunities and possibilities.
• Being optimistic.

Principals can develop the resiliency dimension of Proactive by, for example:
• Acting decisively in the midst of uncertainty.
• Taking risks and endure the discomfort involved.
• Seeking challenges rather than avoid them.
• Investing energy rather than withdraw.
Leadership Preparation

The results of this investigation provide a wealth of additional information for the selection of training materials for enhancing in-service components in school leadership for school districts and for pre-service courses in educational leadership for universities charged with preparing school principals. Illustrations of appropriate types of training materials are provided in the bulleted items in the previous section, for example: Training materials for principal leadership training can be developed from the resiliency dimension of Proactive that relates to:

- Acting decisively in the midst of uncertainty.
- Taking risks and endure the discomfort involved.
- Seeking challenges rather than avoid them.
- Investing energy rather than withdraw.

**Brief Summary of the Results of the Investigation**

1. Are there significant relationships among resiliency dimensions and leadership practices of high school principals?
   - Significant relationships were found (see Table 7) among the resilience dimensions of Positive: The World, Focused, Flexible: Thoughts, Organized, and Proactive and the leadership practices of **challenging the process**, **inspiring a shared vision**, **enabling others to act**, **modeling the way** and **encouraging the heart** of high school principals.

2. Are there significant differences between principals’ self-assessments of their leadership practices, and their teachers’ peer assessments of them?
   - A significant difference (see Table 9) between the principals’ self-assessments and their teachers’ peer assessments of them on the leadership practice of **enabling others to act**.

3. Are there significant differences between principals’ self-assessments of their leadership practices, and their assistant principals’ peer assessments of them?
   - There were no significant differences (see Table 10) between the principals’ self-assessments and their assistant principals’ peer assessments of them on leadership
practices.

4. Are there significant differences among resiliency dimensions and the individual demographics of high school principals?

Significant differences (see Table 12) were found among the resilience dimensions of:

- Positive: The World and Proactive and the individual demographic of age.
- Focused and Flexible: Social and the individual demographic of gender.
- Positive: The World and Flexible: Social and the individual demographic of level of education.
- Positive: The World, Focused, and Flexible: Thoughts and the individual demographic of teaching experience.
- Focused and Proactive and the individual demographic of administrative experience of high school principals.

5. Are there significant differences between teachers’ perceptions of leadership practices of their principals in rural and urban high schools?

- Significant differences (see Table 15) were found between the teachers’ perceptions of the leadership practices of challenging the process, inspiring a shared vision, and enabling others to act of their principals in rural and urban high schools.

**Limitations**

1. This was the first study conducted on the relationships among the dimensions of resilience, leadership practices, and individual demographics of high school principals. In view of the small sample size, a similar follow-up study could be conducted on more schools and involving more school districts, and more school principals from schools and school districts.

2. The school districts were not randomly selected; therefore the study population may not be fully representative of the population.

3. The unique nature of the State of Florida’s socioeconomic, ethnic and diverse culture may limit generalization of the conclusions of this study to other populations. As a result, caution should be taken in applying the investigation’s conclusions to the populations of other states and countries.
4. There were limited responses from the schools in the districts because the principals, assistant principals and teachers are constantly bombarded with surveys from researchers, educational institutions and the district offices. Additionally, principals have several administrative, curriculum and extra curricular activities and, consequently, they are unable to attend to requests from researchers and educational institutions during school hours other than from their respective school districts. Most principals, assistant principals and teachers who participated in this study completed their surveys either before or after school or over the weekend. Some of the principals and one school district requested to be excused from the study because they were overloaded with commitments. Some of the principals indicated that they were new appointees with only a few days or weeks in the leadership role, and that an assessment of their leadership abilities would not be fitting at this early stage.

5. The research data were collected from a limited pool of schools in 6 school districts, so the results may not be generalizable but only valid for those districts.

**Recommendations for Further Study**

The following recommendations are made regarding the value of future research in this area.

1. More research is needed on resiliency in education because it is a critical component to successfully managing change. Resilient people are not only able to “bounce back” from change, but also come through even stronger and more capable than before; they are less likely to become victims of change. Resilient people more often accomplish their goals timely while not losing quality. In the face of uncertainty, particularly during budget cuts and restructuring, they tend to achieve their objectives and maintain their physical and emotional health.

2. The study can be modified to allow for a combination of both quantitative and qualitative approaches. The data could be collected through surveys, interviews, observations and focus groups, and the results obtained could help the researcher to answer several research questions such as, the impact resilient principals have on school performance or the quality of the judgments a resilient principal makes while addressing difficult issues.

3. A similar study could be done by determining the relationships among the dimensions of resilience, leadership practices, and individual demographics of elementary school principals.
4. School districts should more often engage principals in related research projects to enhance their professional development skills and strengthen their skills in effectively serving as school leaders.

5. School districts should consider the results of this study and conduct similar research on resiliency development to engage principals in effective organizational functioning to enhance their leadership abilities.

6. This study should be replicated to include superintendents or managers at the district offices. This would enable them to strengthen their leadership to improve public schools.

7. Finally, in view of the small body of literature available on the resiliency of adults in education, more research studies could be done in educational settings because successful change management is not merely an opportunity to improve organizational performance, but it also reflects a responsibility to apply what a person knows about his or her particular field.
APPENDIX A.

FLORIDA PRINCIPAL COMPETENCIES

1. PROACTIVE ORIENTATION is the inclination and readiness to initiate action and take responsibility for leading and enabling others to improve the circumstances being faced or anticipated.

The principal with a PROACTIVE ORIENTATION:

1.1 takes full responsibility for the work of the school
1.2 acquires and protects needed resources (time, talent, supplies)
1.3 believes that he or she makes a difference
1.4 provides support for teachers, staff, and parents as they take initiative for school improvement; takes action to prepare the school for change
1.5 focuses the attention and energy of stakeholders on the tasks to be done
1.6 cuts through bureaucratic red-tape and other barriers to school improvement
1.7 takes risks by initiating meetings of stakeholders, by suggesting new curriculum, by meeting with politicians regarding school laws and regulations
1.8 anticipates new organizations or systems problems and initiates action
1.9 uses personal and position power to protect the business of the school

*************** DIMENSION ***************

INITIATIVE: Active attempts to influence events and achieve goals, self-starting rather than passive acceptance. Taking action to achieve goals beyond what is necessarily called for; originating action.

2. DECISIVENESS is the readiness and confidence to make or share decisions in a timely manner, using appropriate levels of involvement so that actions may be taken and commitments made by self and others.

The principal who exhibits DECISIVENESS:
2.1 determines quickly how and by whom decisions should be made in accordance with the time available and the school’s vision and mission
2.2 recognizes the importance of sharing decisions and judgment-making with stakeholders as an integral part of organizational learning and development
2.3 confronts issues and disagreements, investigates and defines problems, and directs
the energies of self and others to productive resolutions
2.4 recognizes that decisions are made at several levels by different people
2.5 faces personnel problems as they occur, provides feedback on performance, and
   makes difficult personnel decisions when necessary
2.6 acts quickly to stop possible breaches of safety and/or interruptions in operations
2.7 exhibits self confidence and fearlessness
2.8 serve as the “final arbitrator” within the building for difficult discipline situations
2.9 decides to let others decide

**************************************************
** DIMENSION **************************************************

DECISIVENESS: Readiness to make decisions render judgements, take actions and commit oneself.

3. COMMITMENT TO VISION AND MISSION is a pledge to develop and act in accordance with the shared vision, mission and values of the school.

The principal who exhibits COMMITMENT TO VISION AND MISSION:

3.1 establishes a vision and a statement of mission for the school in collaboration with key stakeholders
3.2 personally holds a set of values which are in harmony with the vision and mission of the school; e.g., respect and caring for each individual, belief that everyone can succeed
3.3 takes responsibility for how well students, faculty, staff, parents and the community understand the school’s mission
3.4 is purposeful about linking the school’s mission to expected behavior
3.5 aligns the school’s vision and mission with larger system
3.6 identifies, models and reinforces behavior which is congruent with the mission and goals of the schools
3.7 assumes moral leadership for the school
3.8 expects commitment and support of the school’s mission and goals by the school’s stakeholders as well as by the district and state

**************************************************
** DIMENSION **************************************************

INTEGRITY: Maintaining social, ethical and organizational morals in job related activities.

4. INTERPERSONAL SENSITIVITY is the ability to discover, understand, verbalize accurately and respond empathetically to the perspectives, thoughts, ideas and feeling of others.

The principal who evidences INTERPERSONAL SENSITIVITY:
4.1 encourages other to describe their perceptions, thoughts, feelings and perspectives
4.2 listens attentively and accurately describes others’ behavior, expressed ideas, feelings, and perspectives
4.3 paraphrases, summarizes and checks own perceptions to test the accuracy of messages received
4.4 encourages individual expression, appreciates diversity, and avoids stereotyping
4.5 demonstrates awareness and sensitivity to the feelings, thoughts and expressions of others

**************************************** DIMENSION ****************************************
SENSITIVITY: Actions that indicate consideration for the feelings and needs of others.

5. INFORMATION SEARCH AND ANALYSIS is the gathering and analysis of data from multiple sources before arriving at an understanding of an event or problem.

The principal displays the competence of INFORMATION SEARCH & ANALYSIS when she or he:

5.1 creates and manages a systemic informational gathering process among the various stakeholders of the school community
5.2 insists that the best available data be analyzed and used in the decision making process
5.3 creates and explains the methods or processes used in the decision making process
5.4 delays making decisions until pertinent data are analyzed
5.5 keeps up-to-date, striving to gather new information from research and other sources which can then be used by the school
5.6 collects, interprets and responds to data received through formal and informal conversations and oral reports
5.7 makes sure that all information is “on the table”
5.8 accesses and interprets data from computer and management information system

**************************************** DIMENSION ****************************************
ANALYSIS: Relating and comparing data from different sources, identifying issues, screening relevant information and identifying relationships.

6. CONCEPT FORMATION is the ability to see patterns and relationships and form concepts, hypotheses and ideas from the information.

The principal evidences CONCEPT FORMATION when she or he:

6.1 processes data logically and intuitively to discover and / or create meaning
6.2 recognizes themes or patterns in events or data and uses them to interpret and / or discover meaning
### 6.3 presses self and others to define and understand issues so that problem solving techniques can be applied
### 6.4 practices reflecting thinking

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### 7. CONCEPTUAL FLEXIBILITY

- **7.1** views the situation being faced and the events leading up to it from multiple perspectives
- **7.2** values divergent thinking and considers conflicting or differing views in the process of identifying options for action
- **7.3** appreciates different perspectives, and ensures that alternative courses of action and their consequences are considered before decisions are made
- **7.4** attends to multiple perspectives in developing options
- **7.5** makes comparisons and assesses the apparent consequences of adopting options, identifying advantages and disadvantages of each.
- **7.6** searches for an recognizes casual consequences, develops hypothesis and predicts subsequent events
- **7.7** makes decisions based upon an analysis of options
- **7.8** demonstrates contingency planning skills

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### 8. MANAGEMENT INTERACTION

- **8.1** facilitates team and group membership
- **8.2** moderate group discussions and encourages consensus
- **8.3** intervenes, negotiates and resolves conflicts
- **8.4** facilitates interpersonal and inter group communication
- **8.5** creates a non-judgemental atmosphere in order to stimulate open communication
- **8.6** personally facilitates individual and group problem-solving

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<td>JUDGEMENT: Developing alternative courses of action and making decisions which are based on logical assumptions and which reflect factual information.</td>
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8.7 identifies and draws upon recognized leaders among the group members
8.8 uses knowledge about how adults learn in working with the stakeholders
8.9 promotes collegial behavior

**DIMENSION**

**GROUP LEADERSHIP:** Utilization of appropriate interpersonal styles and methods in guiding groups toward task accomplishment.

9. **IMPACT/ PERSUASIVENESS** is influencing and having an effect upon the school stakeholders by a variety of means-persuasive argument, setting an example or using expertise.

The principal demonstrates **IMPACT/PERSUASIVENESS** when she or he:

9.1 persists until ideas and goals are clear to all stakeholders
9.2 shows and builds enthusiasm for working on agreed upon goals of the school
9.3 builds support for ideas by linking these ideas to interests, desires and goals of others
9.4 presents arguments and data concerning the school and succeeds in winning support from stakeholders
9.5 uses personal presence to influence others
9.6 maintains visibility and accessibility

**DIMENSION**

**PERSUASIVENESS:** Utilizing appropriate interpersonal styles and methods of communication to gain agreement or acceptance of an idea, plan, or product from clientele.

10. **CONCEPTS FOR THE SCHOOL’S REPUTATION** is caring about the impressions created by self, the students, the faculty, the staff, and parents, and how these are communicated both inside and outside the school.

The principal who has **CONCERN FOR THE SCHOOL’S REPUTATION:**

10.1 maintains a safe, orderly and clean school and expects everyone to assume their responsibility for doing so
10.2 builds a school culture that provides the best possible teaching/ learning environment
10.3 encourages teachers, students, and staff to display their accomplishments
10.4 releases positive information on students’, staff’s parent’s and school’s progress to appropriate media
10.5 invites the media to the school to later report achievements
10.6 expects the adults in school to model respect, courtesy and good manners in dealing...
with one another, as well as with students and parents.
10.7 works with school improvements committee to develop a school marketing plan
10.8 controls the flow of negative information

**************************************************** DIMENSION****************************************************

**IMPACT:** Creating a good first impression, commanding attention and respect, and showing an air of confidence.

### 11. TACTICAL ADAPTABILITY

is the ability to adapt one’s interaction and behavior to fit situation.

The principal who has **TACTICAL ADAPTABILITY:**

11.1 adopts various role of listener, facilitator, and confronter as needed
11.2 finds ways to get around policies and procedures which interfere with the school’s goals
11.3 looks at problems as if there were no rules, then decides what to do to resolve the situation tactfully
11.4 understands how own behavior affects others and makes appropriate adjustments

**************************************************** DIMENSION****************************************************

**ADAPTABILITY:** Maintaining effectiveness in varying environments, tasks, responsibilities or with people.
**FLEXIBILITY:** Modifying behavior to reach a goal.
**INDIVIDUAL LEADERSHIP:** Utilizing appropriate interpersonal styles to guide individuals to task accomplishments.

### 12. ACHIEVEMENT ORIENTATION

is having to do things better that before by setting goals that encourage self and others to reach higher standards.

The principal who has an **ACHIEVEMENT ORIENTATION:**

12.1 sets standards and insists that everyone participate in reaching them
12.2 shows appreciation for individual and group efforts and accomplishments
12.3 presses the faculty and staff to be clear about the evidence that will be acceptable (amount, kind, etc.) for goal achievement
12.4 enjoys doing many things at once and draws personal energy from engaging in a dynamic school situation
12.5 identifies discrepancies between goals and the current status in order to stimulate achievement
12.6 publicly celebrated the learning and the achievement of all who are affiliated with the school
12.7 encourages moderate risk –taking by making people comfortable with trying new
approaches, making mistakes and learning from them
12.8 uses criteria for effective schools to assess the status of the school as one basis for school improvement

*************** DIMENSION **********************

WORK STANDARDS: Setting high goals and standards of performance for self, subordinates, others and organization. Dissatisfied with average performance.

13. MANAGEMENT CONTROL is the establishment of systematic processes to receive and provide feedback about the progress of work being done.

The principal who has MANAGEMENT CONTROL:

13.1 monitors the academic progress of students
13.2 has frequent contact with teachers
13.3 observes in classrooms frequently
13.4 monitors the effective use of instructional time on task
13.5 emphasizes the need for frequent evaluation and student progress reports
13.6 walks around campus purposefully to check the status of events
13.7 holds frequent conferences with staff about student progress
13.8 asks for feedback to see how well self is doing
13.9.1 responds to feedback to see how well self is doing
13.9.2 seeks feedback from parents regarding the school and responds by taking corrective or school improvement initiatives
13.9.3 reconsiders, at least annually, the shared vision of the school, its mission and the stated goals
13.9.4 schedules follow-up for all delegated and assigned activities

*************** DIMENSION **********************

CONTROL: Establishing procedures to monitor and/or regulate processes, tasks or activities and responsibilities. Taking action to monitor the results of delegated assignments or projects.

14. DEVELOPMENTAL ORIENTATION is holding high and positive expectations for the growth and development of all stakeholders through modeling self-development, coaching and providing learning opportunities.

A principal who has DEVELOPMENTAL ORIENTATION:

14.1 builds a school, community and culture that supports learning and growth for everyone including self
14.2 provides immediate and specific feedback data to individuals and groups, and uses feedback to generate new opportunities for learning
14.3 looks for new or innovative ideas, methods and programs to meet developmental needs
14.4 expects everyone connected with the school to be engaged in a learning program of some kind
14.5 provides learning opportunities for stakeholders along with resources.
14.6 recognizes that most learning occurs in a community of learners, and therefore, encourages communication and sharing of ideas and resources among students, parents, faculty and staff
14.7 encourages networking to support and follow-up training
14.8 coaches and monitors individuals who aspire to serve as school leaders
14.9 enjoys watching others grow and succeed
14.10 participates in professional development activities as a learner

*****************************************************************************
DIMENSION*****************************************************************************

DEVELOPMENT OF SUBORDINATES: Developing the skills and competencies of subordinates through training and development activities related to current and future jobs.

15. ORGANIZATIONAL ABILITY is the know-how (knowledge and skills) to design, plan and organize activities to achieve goals

The principal with ORGANIZATIONAL ABILITY:

15.1 develops action plans for goal achievement in collaboration with the school improvement team
15.2 recruits teachers whose goals align with the mission and goals of the school community
15.3 schedules and protects time for self and others, keeping deadlines in perspective
15.4 keeps self organized, establishes priorities and plans for contingencies
15.5 systematizes and schedules actions to avoid undue stress
15.6 uses technology to maintain records and information for quick reference
15.7 allocates resources (money, training, materials) in accordance with school goals

*****************************************************************************
DIMENSION*****************************************************************************

PLANNING AND ORGANIZING: Establishing a course of action for self and/or others to accomplish a specific goal. Planning proper assignment of personnel and appropriate allocation of resources.

16. DELEGATION is entrusting of jobs to be done, beyond routine assignments, to others, giving them authority and responsibility for accomplishment.

The principal who has DELEGATION COMPETENCE:
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<tr>
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<tbody>
<tr>
<td>16.1</td>
<td>determines the jobs and tasks that need to be done</td>
</tr>
<tr>
<td>16.2</td>
<td>assesses the expertise of self and others and, whenever possible considers the developmental needs and aspirations of others in relation to the jobs and tasks to be assigned</td>
</tr>
<tr>
<td>16.3</td>
<td>reassigns routine operations and functions to others, e.g. discipline, bookkeeping, when delegating new learning assignments</td>
</tr>
<tr>
<td>16.4</td>
<td>seeks outside help and assistance for tasks or jobs for which time and talents are not available within the school</td>
</tr>
<tr>
<td>16.5</td>
<td>gains understanding and acceptance for delegated task</td>
</tr>
<tr>
<td>16.6</td>
<td>specific responsibility and authority for delegated task</td>
</tr>
<tr>
<td>16.7</td>
<td>establishes standards for task accomplishment along with time frame and check points</td>
</tr>
<tr>
<td>16.8</td>
<td>maintains accessibility and provides guidance and support in relation to individual need</td>
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------------------------ **DIMENSION** ------------------------

DELEGATION: Utilizing subordinates effectively. Allocating decision making and other responsibilities to the appropriate subordinates.

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<tr>
<td><strong>17. SELF PRESENTATION</strong></td>
<td>is the ability to clearly present one’s ideas to others in an open, information and non-evaluative manner.</td>
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The principals has **SELF PRESENTATION** competence when she or he:

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<tr>
<td>17.1</td>
<td>communicates in open, honest and genuine way</td>
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<tr>
<td>17.2</td>
<td>shares beliefs, ideas and concepts using relevant descriptive language such as analogy, metaphor and/or anecdotal materials</td>
</tr>
<tr>
<td>17.3</td>
<td>checks to see that messages are received, and persists until ideas, beliefs and goals seem to be understood</td>
</tr>
<tr>
<td>17.4</td>
<td>models effective interpersonal communication skills</td>
</tr>
<tr>
<td>17.5</td>
<td>displays a sense of personal and professional efficacy</td>
</tr>
<tr>
<td>17.6</td>
<td>stimulates others to ask questions about their own issues</td>
</tr>
<tr>
<td>17.7</td>
<td>uses effective listening skills before responding to questions by others</td>
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<tr>
<td>17.8</td>
<td>uses visual or technical media to enhance understanding</td>
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</table>

------------------------ **DIMENSION** ------------------------

ORAL COMMUNICATION: Effective expression in individuals or group situations (including gestures and nonverbal communications).

LISTENING: Uses of information extracted from oral communication.

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<tbody>
<tr>
<td><strong>18. WRITTEN COMMUNICATION</strong></td>
<td>is the ability to write clearly and concisely using good grammar.</td>
</tr>
</tbody>
</table>
18.1 expresses ideas in writing clearly, simply, and in correct grammatical form
18.2 adjusts writing styles and vocabulary to the audience being addressed
18.3 checks own written messages for correctness – spelling, punctuation and syntax

****************************************** DIMENSION ******************************************

WRITTEN COMMUNICATION: Clear expression of ideas in writing and in good grammatical form.

19. ORGANIZATIONAL SENSITIVITY is a awareness of the effects of one’s behavior and decisions on all stakeholders both inside and outside the organization

The principal with ORGANIZATIONAL SENSITIVITY:

19.1 considers the overall consequences to the school’s culture before initiating changes
19.2 responds to inquiries and comments about the school and its personnel with tact and patience
19.3 keep individuals, both inside and outside the school, informed when data are relevant to them
19.4 considers the position, feelings and/or perspectives of other parts of the organization when planning, deciding and organizing
19.5 develops and maintains a school climate conducive to learning, open to discussion and change
19.6 builds coalitions and seeks, secures and recognizes allies
19.7 identifies and uses networks
19.8 maintains appropriate social distance so that messages can be received with relative objectivity
19.9 maintains an organizational perspectives and a sense of humor

****************************************** DIMENSION ******************************************

ORGANIZATIONAL SENSITIVITY: Perceiving the impact and the implications of decision on other components of the organizations.
APPENDIX B

Welcome!

Thank you for taking approximately 20 minutes to assist with this study. This short questionnaire is divided into three parts:

- Part I: Personal Resilience Questionnaire (75 short questions)
- Part II: Leadership Practice Inventory (30 short questions)
- Part III: Demographics (6 short questions)

It is hoped that these questions will serve you as well as our study in reflecting on leadership skills. Begin by clicking the button below.

Part I. Personal Resilience Questionnaire (PRQ)

The data collected from the PRQ were used to answer the research questions 1 and 4:

RQ 1. Are there significant relationships among resilience dimensions and leadership practices of high school principals?

RQ 4. Are there significant differences among resilience dimensions and the Individual demographics of high school principals?

The following items do not have right or wrong answers. Please respond to the following statements based on a six-point Likert scale. By clicking the button for the number that corresponds to what you believe to be true:

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Slightly Agree
5. Agree
6. Strongly Agree
### School Leadership Study

#### Part I: Personal Resilience Questionnaire

**Strongly Disagree = 1**
- Disagree = 2
- Slightly Disagree = 3
- Slightly Agree = 4
- Agree = 5
- Strongly Agree = 6

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>4</th>
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<tbody>
<tr>
<td>1. Task that don't have a simple or clear-cut solution are fun.</td>
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<td>2. I like myself.</td>
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<td>3. Stressful situations are no time for joking.</td>
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<td>4. I am committed to getting what I want out of life.</td>
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<td>5. If a day starts out badly, things will probably be bad all day.</td>
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<td>6. I am comfortable in a variety of social situations.</td>
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<tr>
<td>7. Questions that don't have a right answer are really frustrating.</td>
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<td>8. It's easy for me to become depressed and unexcited about things.</td>
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<td>9. I feel at ease fairly quickly with most people.</td>
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<tr>
<td>10. If I read, I tend to stick to favorite magazines or familiar authors.</td>
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</table>

#### School Leadership Study

#### Part I: Personal Resilience Questionnaire

**Strongly Disagree = 1**
- Disagree = 2
- Slightly Disagree = 3
- Slightly Agree = 4
- Agree = 5
- Strongly Agree = 6

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>3</th>
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</thead>
<tbody>
<tr>
<td>11. If you want to be happy, you will be happy.</td>
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</tr>
</tbody>
</table>
12. There are people in my life who sometimes turn to me for support and advice.

13. People find me cheerful and happy.

14. I prefer to stick to tried and true clothing styles.

15. I am willing to take a few risks to get what I want.

16. I have a lot of confidence in myself.

17. I usually wake up in the morning excited about what the day will bring.

18. I can solve any problems I am faced with.

19. I have one or more very close friends who I can tell my private thoughts to.

20. I use lists a lot to remind me of all the little things that need to be done.

**SCHOOL LEADERSHIP STUDY**

*Part I: Personal Resilience Questionnaire*

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree = 1</th>
<th>Disagree = 2</th>
<th>Slightly Disagree = 3</th>
<th>Slightly Agree = 4</th>
<th>Agree = 5</th>
<th>Strongly Agree = 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>When times are rough, I focus my attention on a brighter tomorrow.</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>22.</td>
<td>I am a creative person.</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>23.</td>
<td>One thing I am really good at is making sense out of confusing situations.</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>24.</td>
<td>I am happiest when I've established a predictable routing in my life.</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>25.</td>
<td>Other people see me as an optimist.</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>26.</td>
<td>I don't feel comfortable sharing my most private thoughts with anyone.</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
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<tr>
<td>27.</td>
<td>I can think down the road five years and picture what I will be doing.</td>
<td>C</td>
<td>C</td>
<td>C</td>
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</tbody>
</table>
28. I feel anxious when I 'm with people I don't know well. □ □ □ □ □ □

29. I try not to rely on others for anything; self - sufficiency is my goal. □ □ □ □ □ □

30. In my work and home, everything has a place and everything is in its place. □ □ □ □ □ □

SCHOOL LEADERSHIP STUDY
Part I: Personal Resilience Questionnaire

Strongly Disagree = 1
Disagree = 2
Slightly Disagree = 3
Slightly Agree = 4
Agree = 5
Strongly Agree = 6

31. I don't understand people who make jokes about serious issues. □ □ □ □ □ □

32. I am often reluctant to ask others for help in a difficult situation. □ □ □ □ □ □

33. I am always trying to learn new things or find ways to improve myself. □ □ □ □ □ □

34. My life is a mess right now and I don't know which direction to head. □ □ □ □ □ □

35. I hate to make schedules and then have to stick to them. □ □ □ □ □ □

36. I prefer things that are symmetrical - that is, completely balanced. □ □ □ □ □ □

37. My life has no direction or purpose. □ □ □ □ □ □

38. I feel alone in the world. □ □ □ □ □ □

39. I feel good about the things I have done with my life so far. □ □ □ □ □ □

40. I 'm good at coming up with clever solutions to fix machinery, resolve conflicts, or mend other things that aren't working right. □ □ □ □ □ □
<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree = 1</th>
<th>Disagree = 2</th>
<th>Slightly Disagree = 3</th>
<th>Slightly Agree = 4</th>
<th>Agree = 5</th>
<th>Strongly Agree = 6</th>
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<tr>
<td>41. I don't manage time well - it's always slipping away from me.</td>
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<td>42. If I had a big, messy stack of papers in front of me, I am confident</td>
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<td>43. I maintain my focus on achieving my goals even when there are</td>
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<td>44. It's possible for me to turn off troublesome thoughts; once I get</td>
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<td>45. I feel confused and indecisive when trying to make important</td>
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<td>46. When I'm going somewhere, I sometimes will take a different route or</td>
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<td>47. When I picture my &quot;ideal self,&quot; I'd have to say that the way I really</td>
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<td>48. When a crisis occurs in my life, I can keep my focus and get</td>
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<tr>
<td>49. When I am around other people, I am often the one who starts</td>
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<td>50. Sometimes one new piece of information will completely change how I</td>
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### SCHOOL LEADERSHIP STUDY

*Part 1: Personal Resilience Questionnaire*

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td><strong>Strongly Disagree = 1</strong></td>
<td></td>
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<tr>
<td><strong>Disagree = 2</strong></td>
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<tr>
<td><strong>Slightly Disagree = 3</strong></td>
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<td><strong>Slightly Agree = 4</strong></td>
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<tr>
<td><strong>Agree = 5</strong></td>
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<tr>
<td><strong>Strongly Agree = 6</strong></td>
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<tr>
<td>51. My friends would gladly help with my transportation or offer a place</td>
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<td>for me to stay if I ever needed it.</td>
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<td>52. I have lost out on opportunities because I couldn't make up my mind</td>
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<td>about what I wanted.</td>
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<tr>
<td>53. My achievements so far have been a result of hard work and discipline.</td>
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<td>54. The things I am doing in my life right now are an expression of my</td>
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<td>personal goals and aims.</td>
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<tr>
<td>55. I don't have a clear sense of what my skills and abilities are.</td>
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<tr>
<td>56. I prefer to try new restaurants and unusual dishes when I eat out.</td>
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<tr>
<td>57. I think more often about the things that can go wrong in the world</td>
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<td>that I do about the things that can go right.</td>
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<tr>
<td>58. You should always make a detailed plan before trying to overcome a</td>
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<td>complex problem.</td>
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<td>59. I'm not capable enough to do the things I like to do.</td>
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<tr>
<td>60. I am able to focus my attention on what I'm doing without getting</td>
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<td>sidetracked easily.</td>
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</table>
### Part I: Personal Resilience Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>61. Challenging myself to do something extremely difficult seems like a waste of energy.</td>
<td>Strongly Agree = 6, Slightly Agree = 4, Agree = 5, Slightly Disagree = 3, Disagree = 2, Strongly Disagree = 1</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>62. I am powerless to change the things in my life I don't like.</td>
<td></td>
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<tr>
<td>63. I have a system for organizing the clothes in my closet that I could explain to someone else.</td>
<td></td>
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<tr>
<td>64. Traveling to a country where I don't know the language really doesn't sound good to me.</td>
<td></td>
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<tr>
<td>65. When it comes to resisting temptation (for example, a dieter resisting a delicious, rich dessert), I have a great deal of willpower.</td>
<td></td>
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<tr>
<td>66. I prefer to know exactly what I'm supposed to do rather than figure it out as I go along.</td>
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<tr>
<td>67. I often jump from one project to another rather than finish one all the way through.</td>
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<tr>
<td>68. When everything is going well for me, I worry because I know that something bad is bound to happen.</td>
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<tr>
<td>69. Other people are better at thinking of creative ways to get things done that I am.</td>
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<tr>
<td>70. I am currently working on several projects that I am very committed to.</td>
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</table>
APPENDIX C

Part II. Leadership Practice Inventory (LPI) (Self)

The data collected from the LPI (Self) were used to answer the research questions 2 and 3:

RQ2 Are there significant differences between principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them?

RQ3 Are there significant differences between principals’ self-assessments of their leadership practices and their assistant principals’ peer assessments of them?

On the following pages are thirty descriptive statements about various leadership behavior and activities. Please read the statements carefully. Record your response by clicking the button that corresponds to the frequency you have selected. You are given choices:

1. If you rarely or very seldom do what is described in the statement, click "1."
2. If you do what is described once in a while, click "2."
3. If you sometimes do what is described, click "3."
4. If you do what is described fairly often, click "4."
5. If you do what is described very frequently or almost always, click "5."

In selecting the answer, be realistic about the extent to which you actually engage in each behavior. Do not answer in terms of how you like to see yourself or in terms of what you should be doing. Answer in terms of how you typically behave.

SCHOOL LEADERSHIP STUDY
Part II: Leadership Practice Inventory

If you rarely or very seldom do what is described in the statement, click "1".
If you do what is described once in a while, click "2".
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1. I seek out challenging opportunities that test my skills and abilities.
2. I describe to others the kind of future I would like for us to create together.

3. I involve others in planning the actions we will take.

4. I am clear about my own philosophy of leadership.

5. I take the time to celebrate accomplishments when project milestones are reached.

6. I stay up-to-date on the most recent developments affecting our organization.

7. I appeal to others to share my dream of the future as their own.

8. I treat others with dignity and respect.

9. I make certain that the projects I lead are broken down into manageable steps.

10. I make sure that people are recognized for their contributions to the success of our projects.

---

**SCHOOL LEADERSHIP STUDY**

*Part II: Leadership Practice Inventory*

If you rarely or very seldom do what is described in the statement, click "1".  If you do what is described once in a while, click "2".  If you sometimes do what is described, click "3".  If you do what is described fairly often, click "4".  If you do what is described very frequently or almost always, click "5".

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**SCHOOL LEADERSHIP STUDY**

*Part II: Leadership Practice Inventory*

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29. I make sure the work group sets clear goals makes plans, and establishes milestones for the projects I lead.

30. I make it a point to tell the rest of the organization about the good work done by my organization.

Part III. Subject Demographics

Age: ☐ 51 years or more ☐

Gender: ☐ Male ☐ Female

Marital status: Please Select

Level of Education: Please Select

Teaching Experience: Please Select

Administrators' Experience: Please Select

Thank You!

Your contribution to this effort is greatly appreciated!

For questions regarding this survey, please contact Albert J Isaacs, xxxxxxx
APPENDIX D

Leadership Practice Inventory (LPI) (Observer)

The data collected from the LPI (Observer) were used to answer research questions 2, 3 and 5:

RQ2. Are there significant differences between principals’ self-assessments of their leadership practices and their teachers’ peer assessments of them?

RQ3. Are there significant differences between principals’ self-assessments of their leadership practices and their assistant principals’ peer assessments of them?

RQ5. Are their significant differences between teachers’ perceptions of leadership practices of their principals in rural and urban high schools?

On the following pages are thirty descriptive statements about various leadership behavior and activities. Please read the statements carefully. Record your response by clicking the button that corresponds to the frequency you have selected. You are given choices:

6. If you rarely or very seldom do what is described in the statement, click "1."
7. If you do what is described once in a while, click "2."
8. If you sometimes do what is described, click "3."
9. If you do what is described fairly often, click "4."
10. If you do what is described very frequently or almost always, click "5."

In selecting the answer, be realistic about the extent to which you actually engage in each behavior. Do not answer in terms of how you like to see yourself or in terms of what you should be doing. Answer in terms of how you typically behave.
**SCHOOL LEADERSHIP STUDY**
*Part II: Leadership Practice Inventory*

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SCHOOL LEADERSHIP STUDY  
*Part II: Leadership Practice Inventory*

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APPENDIX E

June 23, 2003

To whom it may concern:

Albert Isaacs, as a representative of Florida State University and under the supervision of Dr. Dale Lick, has my permission to use the *Personal Resilience Questionnaire* in the research project he has proposed to study leadership in education settings. Only sample items from the scale may be included in any write up of the research.

Sincerely,

Linda L. Hoopes, Ph.D.
Research Director
ODR, Inc.
APPENDIX F

Human Subjects Approval

Florida State University

Office of the Vice President
For Research
Tallahassee, Florida 32306-2703
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM
Human Subjects Committee

Date: 3/6/2003

Albertus Isaacs
303 Pennell Circle Apt 1
Tallahassee FL 32310

Dept: Educational Leadership

From: David Quadagno, Chair

Re: Use of Human Subjects in Research
An Exploratory to Improve the Leadership performance of High School Principals

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be exempt per 45 CFR § 46.101(b) 2 and has been approved by an accelerated review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If the project has not been completed by 3/5/2004 you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. Also, the principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

Cc: Dale Lick
HSC No. 2003.073
No problem. Would you kindly append the information you have provided here with that requested on our website www.theleadershipchallenge.com and send it all.

Thanks.

Barry

>>> "Albert J. Isaacs" 02/02/03 20:34 PM >>>
Dr Posner

First of all thank you for "The Leadership Challenge" series, it is an outstanding empirical body of research. This model constitutes the essence of my research.

I am a Fulbright doctoral student in the Department of Educational Leadership and Policy Studies at Florida State University. The research study for my dissertation is entitled "An Investigation of the Attributes of School Principals in Relation to Resiliency and Leadership Practices."

The purpose of the study is to determine the relationships among the dimensions of resilience, leadership practices, and demographics of high school principals in the State of Florida to strengthen their leadership abilities. The target population is 68 school principals, 136 assistant principals and 340 teachers in 6 school districts (Rural and Urban) in the State of Florida.
Three instruments will be employed in this study. The Personal Resilience Questionnaire (PRQ) will obtain information on the demographics and the resiliency profile of the principals; the Leadership Practices Inventory (LPI – SELF) will be used as a self-evaluation instrument by the principals to measure their leadership actions and behaviors; and the Leadership Practices Inventory (LPI – OBSERVER) will be completed by the teachers and assistant principals to measure the leadership behaviors and activities of their Principal.

I would appreciate if you permit me to utilize the LPI(SELF & OBSERVER). My major professor Dr Dale W. Lick, who presented a review on your latest book, speak highly about your research.

Thank you,
Albert Isaacs,
Xxxx Pennell Circle, Apt x Tallahassee, FL xxxx
Fax, xxxxxxx
APPENDIX H

Sample Letter Requesting District Permission To Conduct Study

Dear Superintendent,

I am a FSU doctoral student. As you know, the granting of the doctoral degree requires the completion of a research study. Hence, I am asking your permission to conduct this study in the School District of xxxxxx County.

The research study is entitled “An Investigation of Attributes of School Principals in Relation to Resiliency and Leadership Practices.” Conducting this study requires surveying, via 3 online questionnaires, the principal, assistant principals and 5 teachers of each high school regarding the principals’ leadership actions and behaviors.

The name of the respondents will not appear on any of the results, and all the responses to questionnaires will be kept confidential. Only group findings will be reported.

The principals can benefit from the study because the results of the Leadership Practice Inventory questionnaire will serve as a basis for school principals to reassess their leadership strengths and weaknesses, and use the findings to become better school leaders. Additionally, results on the Personal Resilience Questionnaire would help the principal to determine her or his personal resilience and how it relates to managing change. By practicing these skills, the principals will become effective, and would be able to draw on the various strengths according to the demands of a given situation. This study will also add information for the selection of materials for enhancing in-service components in school leadership for school districts and for pre-service courses in educational leadership for universities charged with preparing school principals.

As an incentive, I will purchase one library book for the school, which has the highest response rate on the questionnaires altogether.

Please be assured that I will adhere to all of the guidelines that you set forth in granting me permission to conduct this research.

Dr. xxxxxx, the major professor for this study, can be contacted in the Department of Educational Leadership and Policy Studies, Florida State University, by telephone at xxxxxxxx, fax xxxxx or by email xxxxxxxxx about the results of the Personal Resilience Questionnaire or answers to questions about this research or my rights. A summary report of this research study will be sent upon request.
APPENDIX I

Sample Letter Requesting Permission from Principals to Conduct Study

Dear Principal

I am a doctoral student at Florida State University. As you know, the earning of the doctoral degree requires the completion of a research study. Hence, I am kindly asking your permission to conduct this study in your school.

The research study is entitled “An Investigation of Attributes of School Principals in Relation to Resilience and Leadership Practices.” Conducting this study would involve surveying, via 3 online well recognized and respected questionnaires of the principal, assistant principals and 5 teachers of each high school regarding the principal’s leadership actions and behaviors.

If you agree to participate in this research study, you will be asked to respond to two questionnaires that will request information on demographics, leadership practices and resilience. The total time commitment would be approximately 20 minutes. Your assistant principals and teachers will be asked to respond to a similar questionnaire concerning your leadership skills and practices as the school administrator. The total time commitment will be about 15 minutes. Names of participants in this study will not appear on any of the results, and all the responses to the questionnaire will be kept confidential to the extent allowed by law. To protect confidentiality, each person will be identified by a number for the purposes of correlating data and necessary follow-up. Only group findings will be reported. Participation is totally voluntary and you may stop participation at anytime. However, by participating in the study, you will provide information that will help generate results that will assist school principals reassess their leadership strengths and weaknesses and use the findings to become better school leaders. Additionally, results from the Personal Resilience Questionnaire provide you with your own personal resiliency scores and how these relate to managing change. As an incentive, I will purchase one reasonably priced library book of your choice for the school with the highest response rate.

Your consent for this project may be withdrawn at any time without prejudice, penalty or loss of benefits to which you are otherwise entitled. You may contact my major professor, Dr.xxxxx, College of Education, Florida State University by telephone (850) xxxxx or by email xxxxx or the Human Subjects Committee at Florida State University at Mail Code 2763, or 2035 E. Paul Dirac, Box 15, 100 Sliger Bldg., Innovation Park, Tallahassee, FL 32310 or answers to questions about this research. A summary report of this research study will be sent to you upon your request.

Thank you for your kind assistance.
Sample Letter Requesting Permission from Assistant Principals and Teachers to Conduct Study

Dear Assistant Principal and Teachers

I am a doctoral student at Florida State University. As you know, the earning of the doctoral degree requires the completion of a research study. Hence, I am kindly asking your permission to conduct this study in your school.

The research study is entitled “An Investigation of Attributes of School Principals in Relation to Resilience and Leadership Practices.” Conducting this study would involve surveying, via 3 online well recognized and respected questionnaires of the principal, assistant principals and 5 teachers of each high school regarding the principal’s leadership actions and behaviors.

If you agree to participate in this research study, you will be asked to respond to one questionnaire, the Leadership Practice Inventory that will request information on the principal’s leadership actions and behaviors. The total time commitment would be approximately 15 minutes. Names of participants in this study will not appear on any of the results, and all the responses to the questionnaire will be kept confidential to the extent allowed by law. To protect confidentiality, each person will be identified by a number for the purposes of correlating data and necessary follow-up. Only group findings will be reported. Participation is totally voluntary and you may stop participation at anytime. However, by participating in the study, you will provide information that will help generate results that will assist school principals reassess their leadership strengths and weaknesses and use the findings to become better school leaders. As an incentive, I will purchase one reasonably priced library book of your choice for the school with the highest response rate.

Your consent for this project may be withdrawn at any time without prejudice, penalty or loss of benefits to which you are otherwise entitled. You may contact my major professor, Dr. xxxxx, College of Education, Florida State University by telephone (850) xxxxx or by email xxxx lor the Human Subjects Committee at Florida State University at Mail Code 2763, or 2035 E. Paul Dirac, Box 15, 100 Sliger Bldg., Innovation Park, Tallahassee, FL 32310 or answers to questions about this research. A summary report of this research study will be sent to you upon your request.

Thank you for your kind assistance.

Sincerely yours,
REFERENCES


Dwyer, M.C.(2000). *An exploration of resiliency amongst college students investigating the relationships amongst a measure of resilience, life stressors, social resources, and overall adjustment to college during the first year*. Unpublished master of arts thesis, Truman State University, Kirksville, Missouri.


BIOGRAPHICAL SKETCH

Albert. J. Isaacs was born in Windhoek and matured in the town of Mariental, Namibia. He graduated from Dr Lemmer High School, Rehoboth and attended Teachers’ Colleges both in South Africa and Namibia. He received a Bachelor of Education degree in Educational Management and Administration from the University of Namibia (UNAM) and a Master of Arts degree in Educational Management and Supervision from Central Michigan University (USA).

In August 2003, he received the degree of Doctor of Philosophy in Educational Leadership/Administration from Florida State University (USA). He is a member of the American Educational Research Association (AERA).