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## THE RELATIONSHIP BETWEEN LONGEVITY AND A LEADER'S EMOTIONAL

#### INTELLIGENCE AND RESILIENCE

By

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Dissertation

presented in partial fulfillment of the requirements for the degree of

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**Educational Leadership** 

The Relationship Between Longevity and a Leader's Emotional Intelligence and Resilience

Chairperson: John Matt, EdD

The role of an educational leader is complex, challenging and, at times, fraught with adversity. Overcoming the many challenges and adversities, and flourishing as an educational leader, requires resilience and an instinct for survival. Understanding how to prevail in the face of adversity, by employing one's emotional strengths as well as vulnerabilities and how to increase one's ability to remain resilient, is essential for an educational leader to succeed in the face of adversity.

The purpose of this study was to research Montana educational leaders to discern whether emotional intelligence EI is necessary to remain resilient and successful in a leadership role despite adversity. This quantitative research was undertaken as a non-experimental, ex post facto or after-the-fact research. Participants for this study included sixty-one superintendents, principals, and assistant principals, from a population of 935 educational leaders, who held a leadership position in the State of Montana during the 2017-2018 school year.

A linear regression was used to examine the proportion of variance in years in a leadership position that can be explained by emotional intelligence and resilience. This analysis demonstrated that some EI competencies appear to have an effect on the longevity of an educational leader in a position. However, the effects vary between assistant principals, principals, and superintendents, not all competencies were equal. The coefficient of determination showed assistant principals and principals' years of service is more strongly influenced by all emotional intelligence competencies than is that of the superintendent.

Future studies should expand this research to include educational leaders nationwide for greater generalizability. It is also recommended that this research be replicated using raters to assess the participant's emotional intelligence.

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To my present and future grandchildren - May you always know you can do hard things.

Thank you for the sacrifices each of you made to help me achieve this goal. I love you forever.

#### **Chapter One**

The role of an educational leader is complex, challenging and, at times, fraught with adversity (Patterson & Patterson, 2004). Increasingly, "those in leadership roles have a tremendous responsibility to get it right" (Leithwood, Harris & Hopkins, 2008, p. 1). In recent years the job of an educational leader has been "expanded and, perhaps, overloaded" (Manna, 2015, p. 6), making the job ever more difficult. Doyle and Locke (2014) admonished, "at a time when schools need high-quality leaders more than ever, the grueling nature of the job makes it a tough sell, and principals tend to come and go" (p. 7).

Overcoming the many challenges and adversities, and flourishing as an educational leader, requires resilience and an instinct for survival. "For school leaders, developing a genuine sense of self, grounded in one's strengths and vulnerabilities, has become a primary concern" (Ackerman & Maslin-Ostrowski, 2004, p. 2). Unfortunately, "despite being well prepared in other ways, new principals sometimes proved weak in what leaders in one district described as "emotional intelligence" (Mendels, 2016, p. 19).

In a quickly changing and often volatile educational environment, leaders are often required to oversee unpopular or difficult changes. Managing these thorny reform efforts can expose an academic leader to emotional wounding. In overcoming this wounding, it is essential leaders expand their ability to remain resilient in order to not only endure, but flourish while conquering challenges. Bar-On (2006) claimed:

Emotional-social intelligence...is a multi-factorial array of interrelated emotional and social competencies, skills and facilitators that influence one's ability to recognize, understand and manage emotions, to relate with others, to adapt, to change and solve problems of a personal and interpersonal nature, and to efficiently cope with daily demands, challenges and pressures. (p. 1)

According to Beatty (2001), "human emotions per se have been consistently marginalized in educational leadership research" (p. 6). However, "Emotional Intelligence, the softer side of our intelligences, has considerable implications for the field of leadership" (Maulding, 2002, p. 5). Zorn and Boler (2007) added, "...some pioneers in the field of emotions and educational leadership are focusing on the social and organizational dimensions of emotions" (p. 8). Understanding how to prevail in the face of adversity, by employing one's emotional strengths as well as vulnerabilities and how to increase one's ability to remain resilient, is essential for an educational leader to succeed in the face of adversity.

#### **Problem Statement**

According to Ackerman and Maslin-Ostrowski (2004), the "…landscape of education leadership in the 21st century offers an astounding range of emotional challenges rarely acknowledged or appreciated. For school leaders, developing a genuine sense of self, grounded in one's strengths and vulnerabilities, has become a primary concern" (para. 2). Society places high demands on our educational system, which in turn places high expectations on educational leaders. "The effectiveness of principals is vital to the effectiveness of our nation's public schools" (Manna, 2015, p.5). A statement from the White House admonished:

America's education system has always been one of our greatest sources of strength and global economic competitiveness, as well as an engine of progress in science, technology and the arts. Our nation cannot expect to train our children for the high-skilled jobs of today, or for the opportunities of the future, without investments in a world-class education system. (Obama, 2012, para 1)

The path to creating this world-class education system is "...complex and diverse according to different situations. Society is dynamically complex and highly political, the change process, however well planned, is fraught with unpredictable and uncontrollable problems and opportunities which in turn can generate scores of ramifications" (Fullan, 1993, p. 77).

Much is required of educational leaders in their work to improve schools. According to a RAND Education (2012) study, most schools saw a clear decline in test scores when they lost a principal and then hired a new one the next year. Doyle and Lock (2014) and Grissom and Anderson (2012) told us high quality leaders are vitally important. Unfortunately, spiraling accountability standards, combined with limited authority over certain critical issues, create a more and more demanding and less attractive profession. The fact many school leaders are offered mediocre pay for a very demanding job (Finn Jr. & Northern, 2014) makes this career choice, "...a tough sell and principals tend to come and go" (Doyle & Lock, 2014, p. 3). However, "Whether we're trying to raise the bar for instruction or expand school options for parents, there's little that can be done to successfully improve schools without strong school leaders" (Lerum, 2016, p. 1).

The struggle to meet mandates from a wide variety of community stakeholders, each with varying interests, while working to improve education for all, can open a leader to damaging hardships that many find difficult to overcome. Doyle and Locke (2014) maintained, an educational leaders job is both high-pressure and grueling and often the leader's "...authority is...not commensurate with his or her responsibility" (p.6). Manna (2015) added, an educational leader's position "...appears to be bearing more and more weight as old responsibilities persist and, through incremental additions, new ones are layered on top of them" (p. 6). Events outside a leader's control can be the catalyst to an attack that has nothing to do with a leader's actual

competence. Doyle and Locke (2014) stated, "succeeding as a school principal has turned into a near impossible challenge. Leaders must deal with everything from overstretched budgets to mediocre teachers to unruly (and potentially dangerous) students, not to mention heavy pressure to boost academic results" (p. 4).

The questioning of a leader's decisions, motives or integrity can cause deep wounds on a very personal level. When this happens, the hurt feels personal, thus being challenging to overcome (Martin, 2007; Ackerman & Maslin-Ostrowski, 2004). According to Johnson Jr. and Kruse (2012) these events can leave lasting damage that cause leaders to be timid in their actions and decision making, to base their judgments' more on protecting themselves than on fearlessly making choices that will bring the most good. "For many educators, a kind of weariness or wariness has set in as expectations for performance—their own as well as their students'—sometimes far exceed well-intentioned effort. This dissonance in the education profession makes leadership a risky business" (Ackerman & Maslin-Ostrowski, 2004, para. 11).

As a result of this risk, many leaders choose to leave the profession all together after extreme hardship, thus diminishing an already sparse leadership pool. According to Mendels (2016), "School district officials have faced an urgent task in recent years: ensuring that all schools, not just a lucky few, benefit from surefooted leadership professionals" (p. 6). Because their role bears the hopes, aspirations and fears of those they serve, it is one of vulnerability. When adversity and wounding are inevitable, leaders are going to find it difficult to live up to the superhero status too often expected of them (Ackerman & Maslin-Ostrowski, 2004; Klitz, Danzig & Szecsy, 2004).

Fullan (1997) warned, "Unfortunately, as the school leader's responsibilities have multiplied, the same cannot be said for the pool of talented principals needed to lead today's

schools" (p. 36). Quite often districts find there are, "...too few high-quality candidates likely to apply for school leadership positions" (Doyle & Locke, 2014, p. 31). Research undertaken by Hill, DeRoche and Ottem (2016) found from 1987-88 to 2011-12, the average years of a public school principal's experience decreased from 10.0 years to 7.2 years. Goldring and Taie (2014) added, of principals observed in 2011–12, one in five had left their school by 2012–13. Grissom and Anderson (2012) found, "Among 215 superintendents studied beginning in 2006, 45% exited within 3 years" (p. 1).

Consistent with this research, Burns-Neilson (2002) completed a study for the Montana Office of Public Instruction entitled *Who Will Teach Montana's Children*. This research ranked superintendents and principals as being among the most difficult positions to fill in Montana schools. In light of this shortage, "States should…provide support to districts that struggle with retention, as well as think strategically about improving retention statewide" (Lerum, 2016, p. 5).

The Coalition for Teaching Quality (2015) admonished, "Policymakers must invest in strategies that develop and retain well-prepared individuals...while providing those individuals with leadership and growth opportunities that will adequately prepare them to be highly effective principals" (p. 7). Although those with high EI have been shown to be more effective leaders (Caruso & Salovey, 2008; Gardner & Stough, 2002; Goleman, 1995; Mayer, Goleman, Boyatzis, & McKee, 2002), according to Leithwood et al. (2008), little research has been conducted on the personality characteristics or of educational leaders. Leithwood et al. (2008) also admonished:

The most successful school leaders are open-minded and ready to learn from others.

They are also flexible rather than dogmatic in their thinking within a system of core values, persistent (e.g. in pursuit of high expectations of staff motivation, commitment, learning and achievement for all), resilient and optimistic. Such traits help explain why

successful leaders facing daunting conditions are often able to push forward when there is little reason to expect progress. (p. 14)

In face of these circumstances, and to assure communities have ample, dynamic leaders who are able to meet the challenges facing schools, educational leaders must have the tools necessary to ensure they are able to remain resilient in the face of hardship in order to develop, "...a mind-set that leaves the individual open to learn and grow from experiences" (Ackerman & Maslin-Ostrowski, 2004, para. 35).

#### **Purpose Statement**

The purpose of this study was to research Montana educational leaders to discern whether emotional intelligence EI is necessary to remain resilient and successful in a leadership role despite adversity. By studying these leaders this research hoped to determine whether a high level of EI would empower leaders to remain resilient and persistently overcome adversity. This information would provide leaders with information that can enable them to better realize their own continued achievement and lead their schools to success.

#### **Research Question**

According to Maulding, Leonard, Peters, Roberts, and Sparkman (2012), understanding EI and its relationship to overcoming adversity is valuable in building resiliency in leadership. This resiliency is expedient to effectively fulfilling a long term leadership role. To best understand emotional intelligence and how it is used, continued research is necessary. Therefore, the question that guided this research was: What is the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity?

#### **Definition of Terms**

The following definitions provide a collective understanding of significant words and ideas used in this research:

ability. "...a skill level" (Pritchard, 2012, p. 14).
 adversity. "...powerful obstacles and setbacks individuals face" (Stoltz, 1997, p. 27).
 assistant principal – assistant principal refers to individuals who serve under the title "assistant principal" and "vice-principal".

competency. "...the generic knowledge, skill, or attitude of a person, related to effective behavior as demonstrated through performance" (Rehman, Baker, Bakeri, & Majid, 1998, p. 100).

cognition. "...processes involved in how we perceive, interpret, and process information" ((Lindenmayer, Abraham, Amod, Buccelleto, Capodilupo, Fregenti, Isidora, Kahn, Kirstie, Kulsa, McGurke, Mohan, Ozog, & Parker, 2018, p. 2).

dispositional tendency. "...inclinations regarding the evaluation of one's perceptions of ability and success in achievement situations" (Magyar & Feltz, 2003, p. 178).

educational leaders. "...district and school leaders" (Leithwood, Anderson, Louis, & Wahlstrom, 2004, p. 51).

longevity. "...years of experience in the same school" (Swearingen, 2014, p. 4).

resilience. "your ability to adapt well and recover quickly after stress, adversity, trauma or tragedy" (Mayo Clinic, n.d., para 1).

resiliency. "the ability to adjust to varied situations and increase one's competence in the face of adverse conditions" (Gordon & Coscarelli,1996; Masten, Best, & Garmezy, 1990).

stress. "...a complex concept that encompasses stressors (i.e., conditions and events), appraisals of stressors, and strains, defined as a negative physiological, cognitive emotional or behavioral outcome" (Ben-Avi, Heller & Toker, 2018, p. 1).

emotional intelligence. "...emotional-social intelligence has included one or more of the following key components: (a) the ability to recognize, understand and express emotions and feelings; (b) the ability to understand how others feel and relate with them; (c) the ability to manage and control emotions; (d) the ability to manage change, adapt and solve problems of a personal and interpersonal nature; and (e) the ability to generate positive affect and be self-motivated" (Bar-On, 2006, p. 1).

transformational leadership. "...a style of leadership geared towards change and towards improving individual and collective performance" (Phaneuf, Bouidrias, Brunelle & Rousseau, 2016, p. 30).

trait. "...personality variables" (Barlett, & Anderson, 2011, p. 870).

#### **Delimitations**

This study was delimitated to Montana superintendents, principals, or assistant principals who held a leadership position in a Montana school during the 2017-2018 school year. Each of the participants met requirements for, and held, a current Montana Class 3 Administrative License. To obtain this license, participants completed a traditional administrative preparation program or completed a non-traditional administrative program with verification of 5 years of successful administrative experience.

#### Limitations

Because this was a correlational research study, completed ex post factorily, excluding all variables not associated with emotional intelligence and resilience was not possible. There are many reasons an educational leader is able to achieve success over a long period of time, EI and resilience bng only two of them. "A correlation coefficient tells us about the relationship between variables, but it does not tell us which variable predicted the relationship (Steinberg, 2011, p. 452). Having less than thirty participants in each group also lowers the confidence in research findings.

#### **Significance of the Study**

According to Burns-Neilson (2002), Montana has experienced a diminished leadership pool. The National Association of Secondary Principles told us:

While there can be successful teachers in failing schools, there are no effective schools without effective school leaders. As a result, school leadership is the key to closing achievement gaps and increasing student performance in all subject areas across all grade levels. (NASSP, n.d., para. 4)

In fact, Leithwood, Harris and Hopkins (2008) told us, "there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership" (p. 5).

Nationally, according to Goldring and Owens (2014) US Department of Education

Principal Staffing Survey, over 20 percent of principals left their schools and over 70 percent of

principals had less than five years at their current schools in 2012-13. Unfortunately, Clifford and Chiang (2016) told us, "new principals and experienced principals that are new to schools need between three and five years to have an impact on student achievement" (p. 2). Combining the need for longevity and continuity in educational leadership with the state of our rapidly changing educational system and considering the adversity which is often generated by society's high expectations for both education and its leaders; many Montana school districts could be at risk of not having the effective leadership needed. Therefore, it was important to determine whether high EI is correlated to an educational leader's overcoming adversity and remaining resilient in their position. Through this understanding, educational leaders will be better able to overcome barriers in their leadership and remain resilient and successful, thus retaining a strong, effective leadership pool.

## **Summary**

According to Mayer (2009), "People with high EI can solve a variety of emotion-related problems accurately and quickly" (para. 1). In today's world, education is changing quickly and expectations for success are high. Because educational leaders are often at the head of this change, they are frequently faced with ever more adversity. The Coalition for Teaching Quality (2015) maintained, "... existing pipelines are not positioned to meet the expanding and changing demands. Strengthening the teacher and principal pipelines is critical" (p. 1). This study was meant to research Montana educational leaders to determine whether a high level of EI is needed in order for leaders to persevere in their positions with a genuine sense of self, grounded in their individual strengths and vulnerabilities, and remain effective, strong leaders.

#### **Chapter Two**

For the purpose of this study, the existing literature pertaining to the variance between an educational leader's emotional intelligence (EI) and their ability to overcome adversity and remain resilient was examined. The specific intelligences of reasoning, problem solving, decision making, and interpersonal communication were scrutinized in order to determine their importance to overcoming adversity. This review of literature concentrated on evidence brought forth by experts, seminal authors and those whose research followed those authors. Topics analyzed focused on (1) the changing role of the educational leader, (2) the definition of emotional intelligence, (3) the importance of specific intelligences and their connection to a leader's success and, (4) the resilience and longevity of an educational leader.

Past research showed a relationship between an educational leader's emotional intelligence and their resilience, achievement, and longevity (Bardach, 2008; Cote, Lopes, Miners & Salovey, 2010). Goleman (1995) said EI has more potential than general intelligence for improving one's professional and personal life. Current educational literature often refers to change implementation, or school reform, as being a high priority for an educational leader (Easley II, 2016; Harris & Jones, 2015; Moore, 2009). Research on change implementation conducted during the 1970s and 80s identified the important role principals played in school-improvement efforts (Berman & McLaughlin, 1978; Fullan, 1985). Similarly, research on school effectiveness concluded that strong administrative leadership was credited among those factors within a school which made a difference in student learning (Edmonds, 1979; Rutter & Maughan, 2002; Schneider, 1985). Consequently, one of the main characteristics of effective schools is, "...they have strong administration" (Edmonds, 1979, p. 15). Moreover, "highly effective principals raise the achievement of a typical student in their school by between two and

seven months of learning in a single school year; ineffective principals lower achievement by the same amount" (Branch, Hanusheck & Rivkin, 2013, p. 1). Thus, improving a school leader's abilities is important.

In harmony with this information, RAND Education (2012) found an educational leader's "efforts to acquire the necessary skills to succeed in their roles as managers of human capital could have important implications for student achievement, especially in low-performing schools" (p. 3). One of the qualities necessary for improving student achievement, is that of emotional intelligence. In their review of literature, Leithwood, Harris, and Hopkins (2008) found seven key facets in the making of a successful school leader:

- School leadership is second only to classroom teaching as an influence on student learning.
- 2. Almost all successful leaders draw on the same repertoire of basic leadership practices.
- 3. The ways in which leaders apply these basic leadership practices not the practices themselves demonstrate responsiveness to, rather than dictation by, the contexts in which they work.
- School leaders improve teaching and learning indirectly and most powerfully through their influence on staff motivation, commitment and working conditions.
- School leadership has a greater influence on schools and students when it is widely distributed.
- 6. Some patterns of distribution are more effective than others.

7. A small handful of personal traits explain a high proportion of the variation in leadership effectiveness. (para. 1)

Cheng (1994) advised that a "...principal's role is to develop, shape and transform their staff's assumptions, values and beliefs about the school's purpose, instructional methods and rapport" (p. 309). The ability to effectively foster commitment in their staff and hold individuals accountable for their work is highly influenced by a leader's EI. "Teachers' social interactions, professionalism, and affective performances are critical to successful school performance.

Therefore, the strong relationship between principal's leadership and teacher performance reinforces the need of development of strong leaderships" (Cheng, 1994, p. 309). It has also been shown that, "...in settings where people perceive stronger distributed leadership, schools appear better able to improve their academic capacity" (Heck & Hallinger, 2012 p. 680). In improving academic capacity, a successful educational leader must have strong conflict resolution skills and be able to build alliances and inspire staff members (Parks, 1986). Each of these skills is highly influenced by emotional intelligence (Zeidner & Kloda, 2012).

A number of educational leader's duties, such as leadership development, teacher retention, and teacher coaching and evaluation, show a direct relationship to student achievement (Leithwood, Anderson, Louis & Wahlstrom, 2004). Furthermore, skilled teachers are less likely to leave a school district if they have confidence in their leader, and teachers typically take their cues from the school culture established by the leader (Lerum, 2016). By utilizing strong emotional intelligence, a leader is able to "mediate academic and social conditions present in the school" (Heck & Hallinger, 2009, p. 662). Research showed school culture reflects, and is formed by, how an educational leader chooses to handle the everyday business of school and

manage the expectations of staff members. In turn, the culture of the school is the foundation for any school reform and improvement effort (Baker & Cooper, 2005; Saphier & King, 1985).

Enhancing teacher's performance is vitally important for school leaders if their goal is to improve learning in their schools. "Leadership effects on learning are brought about indirectly through their impact on people" (Heck & Hallinger, 2009, p. 663). Because of this, according to Leithwood, Anderson, Louis, and Wahlstrom (2004), it is becoming increasingly important to improve school leadership practices in the areas of vision and goal setting in order to create high performance expectations and to build effective organizational communication. In fact, evidence suggested, the ability to set a direction for their staff accounts for the largest portion of a leader's impact:

This set of practices is aimed at helping one's colleagues develop shared understandings about the organization and its activities and goals that can under gird a sense of purpose or vision. People are motivated by goals which they find personally compelling, as well as challenging but achievable. Having such goals helps people make sense of their work and enables them to find a sense of identity for themselves within their work context. (Leithwood, Anderson, Louis, & Wahlstrom, 2004, p. 10)

In combination with goals, motivation, skills, beliefs, values and workplace conditions are key factors that impact an employee's performance. Accordingly, it is important a leader have the ability to build commitment, capacity and resilience within their staff to enable them to persist in applying their knowledge and skills to successfully educate students. Without the ability to regulate the emotions needed to model appropriate values and behaviors, a leader will have a difficult time building required skills in their staff (Brown, Bryant, & Reilly, 2006; Clavien & Diess, 2015). Leithwood, Harris, and Hopkins (2008) found there to be, "...strong

effects of teacher's emotions on their practices, and strong effects of leadership practices on those emotions" (p. 11).

Emotionally intelligent leaders are able to positively shape their school's environment through their choices, behavior and influence (Brown, Bryant, & Reilly, 2006). And, "a school culture influences the ways people think, feel, and act" (Petersen, 2002, p. 10). In turn, "school effectiveness findings indicate that pupil achievements and behavior can be influenced (for the better or worse) by the overall characteristics of the school environment" (Rutter & Maughan 2002, p. 470). According to Barth (2002):

The most important-and the most difficult-job of an instructional leader is to change the prevailing culture of a school. The school's culture dictates, in no uncertain terms, "the way we do things around here." A school's culture has far more influence on life and learning in the schoolhouse than almost any other factor. (p. 1)

Research suggested, successful implementation of administration duties helps create a positive learning environment within schools. Positive environments, in turn, can directly impact student achievement (Alsbury, 2008; Byrd, Drews, & Johnson, 2006; Petersen, 2002). "Principals, through their actions, can be powerful multipliers of effective teaching and leadership practices in schools. And those practices can contribute much to the success of the Nations's students" (Manna, 2015, p. 6). According to Browne-Ferrigno and Muth (2010) "...these actions and skills include: intelligence, perceptiveness, and flexibility; organizational and human relations skills; ability to establish rapport with students and teachers; and ability to work with and across teams or gain support from parents and community" (p. 21). Each of these skills requires high emotional intelligence and a sensitivity to the tone of the school climate. An expert leader will have the sensitivity to gauge the social context within which a problem is to be

solved. This knowledge allows the leader to execute a task differently depending on the circumstances they face and the people involved.

Leaders who are able to effectively coach and support their staff instructionally rely on small, daily interactions that focus on instructional content and leader skills and behaviors (Grissom, Loeb, & Master, 2013, p. 19). Educating today's students is stressful, often messy work. Teachers need a leader who is able to address their emotional needs, working morale, professionalism, and lessen their detachment from the school and students and feelings of over load (Cheng, 1994). The ability to adapt emotionally to a given circumstance is important because a leader's influence on the "...structural and sociocultural processes that define the school's capacity for academic improvement" (Hallinger & Heck, 2012, p. 95) has the potential to make a considerable difference. This influence can come when a leader is able to effectively use strategies that allow them to influence other's emotions and meet their needs.

Quite often politics play a part in influencing one's staff. Although politics are a reality in the role of an educational leader, "in findings regarding adequacy of preparation in politics...only 59% agreed that they were prepared adequately to engage in politics" (Petersen, Fusarelli & Kowalski, 2008, p.13). Leeper (1969) defined politics as, "...the power to influence change in opinion or conviction-and thus to change behavior" (p. 326). Influencing one's staff requires the ability to understand individual perspectives and to use that knowledge to foster collaboration and avoid conflict. Without an understanding of how to effectively influence one's staff, it can be difficult for a leader to promote successful changes.

Interacting collaboratively with staff members, one positive contact at a time, can have a greater effect on building a school's capacity and social culture than any one big independent action. "Leadership for learning is not the dramatic flourish or grand announcement of a new

innovation. Rather, it is the persistent focus on improving the conditions for learning and creating coherence in values and actions...day in and day out" (Hallinger, 2011, p. 137). Strong leaders are able to provide "...a link between individual teacher needs and organizational goals so that individuals within the school can work in harmony toward their vision of what the school should be" (Glickman, Gordon & Ross-Gordon, 2001, p. 9). In building this link, "instructionally effective schools are subject to the influence of their social context and make successful adaptations to their particular environments" (Hallinger & Murphy, 1986, p. 351). A leader is important, but s/he can only gain success through the cooperation of others. Leaders must support and develop their people in order to meet established goals.

Quite often school reform involves a shift in cultural or personal values. This shift in values is typically "...moderated by personal characteristics of the leaders" (Hallinger, 2011, p. 3). Covey (1991) counseled "real leadership power comes from an honorable character and from the exercise of certain power tools and principles" (p. 81). One of these power tools is the capacity to demonstrate how to effectively utilize emotions to better understand the needs of stakeholders. According to Fullan and Scott (2009), turnaround leaders, "...model the change-capable culture they want their institution to develop" (p. 101). Leithwood, Anderson, Louis, and Wahlstrom (2004) also told us strong leaders are able to, "...model best practices and beliefs considered fundamental to the organization" (p. 6).

Unfortunately, even when a leader's school improvement efforts meet with success, there is often an associated cost. When leaders "...focus on competence and better results under difficult circumstances, anxiety is endemic...tension is part and parcel of the edge of success—learning to live with and work with tension is key to success" (Fullan, 2003, p. 65). Leaders are often required to, "...navigate turbulent environments involving elected boards, faculty, staff,

community stakeholders, and fiscal constraints" (Tekniepe, 2015, p. 1). Political conflict and external pressures often combine to lower a leader's resilience (McCurdy & Hymes, 1992).

Emotional intelligence is central to an educational leader's ability to build healthy, cooperative relationships with their board members and community stakeholders. When strong relationships are not in place, there is little sense of mission for the schools. "Dissonance affects the morale and professionalism of those who staff the schools and causes lack of confidence in educational leadership in the community and, ultimately, it limits the education of children" (McCurdy & Hymes, 1992, p. 9). Strong EI skills might help leaders remain resilient in these positions and not get worn down by the pressures of the role.

## **Longevity In An Educational Position**

Too often, when educational leaders get worn down, they choose to move to another position or leave the profession all together. "Principals now average spending only two to three years at the same school at the same time" (The Coalition for Teaching Quality, 2015, p. 6). According to the School Leaders Network (2014), 25,000 principals leave their schools each year after spending less than five years in their school building. School Leaders Network (2014) also told us almost fifty percent of new principals leave after their third year in the profession.

These moves cause disruptions in management functions, as well as loss or disruption to school goals and visions. Fullan and Scott (2009) told us school turnarounds take five or more years. Each time an administrator leaves, the process is slowed or stopped. "Strong leadership is viewed as especially important for revitalization of failing schools. Success rates for principals that have been at their current school at least six years is roughly 50 percent higher" (Branch et al., 2013, p. 67). High leadership turnover is also damaging to a school's culture. New

instructional efforts, or other changes, require sustained and consistent effort to be effective. Practices advocated by one school leader may be very different from another leader's practices, which can endanger a school's continuity and stability (The Coalition for Teaching Quality, 2015, p. 6).

There are a number of reasons an educational leader chooses to leave their current position, but job related stress is a large contributor to turnover (Tekniepe, 2015). This stress can come from many sources. Administrators solve a myriad of stressful issues and problems on a daily basis. Often the wrongs of a school are "...attributed to incompetent, inconsiderate, and self-serving...administrators" (Glickman et al., 2001, p. 30). Concerns can come from students, parents and staff members. For superintendents, it can come from fiscal pressures. "Some superintendents may find that providing a satisfactory quality of education under unreasonably tight fiscal constraints is simply too much to endure" (Tekniepe, 2016, p. 9). Other superintendents feel significant pressure from their boards. These pressures can come in the form of "...personalities of board members, outside pressures on boards...changed or increased demands of boards or frequent turnover of boards" (McCurdy & Hymes, 1992, p. 9).

The need to meet all of these demands and maintain good relationships with all stakeholders is often overwhelming. Most school leaders found they "…need added training to help them lead their schools well" (Manna, 2015, p. 6). According to research, training in EI is found to benefit the strategic leadership of an individual (Hooijberg, Dodge, & Hunt, 1997). "An assumption can be made that superintendents who are neither fully prepared nor well trained are prone to experience difficulties in their leadership role" (Byrd et al., 2006, p. 6). Without needed training, "the least-effective principals are least likely to remain in their current position and most likely to leave the public schools entirely" (Branch et al., 2013, p. 68).

Often Montana educational leaders work in rural, isolated school districts. Unfortunately, according to Petersen et al., (2008), "two out of three novices in this study entered practice in districts where they were unlikely to have administrative support staff other than school principals" (p. 13). This situation often leaves an administrator without emotional support or guidance. Without help in acquiring the emotional coping skills needed to persevere, many leaders choose to simply move on. Guidance in acquiring, and effectively applying, the knowledge, attitudes and social and emotional skills required to "...understand and manage their emotions, feel and show empathy for others, establish positive goals, develop and maintain positive relationships and make responsible decisions" (Hanson-Peterson, Kitil, & Schonert-Reichl, 2017, p. 7), can make a difference in a leader's success. These findings suggested stronger EI skills can help an educational leader remain resilient and successful in their position. This can, in turn, help schools generate needed reforms and remain successful in the coming years.

#### **Emotional Intelligence**

Mayer and Salovey (1997) described emotional intelligence as, "...the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual intelligence" (p. 3). Boyatzis and Sala (2004) believed that, to be classified as an intelligence, the concept should be: "(1) related to neural-endocrine functioning, (2) differentiated as to the type of neural circuitry and endocrine system involved, (3) related to life and job outcomes, (4) sufficiently different from other personality constructs that the concept adds value to understanding the human personality and behavior" (p. 4).

Mayer, Caruso, and Salovey (1999) surmised there were three components of an ability that determine a specific kind of intelligence "(1) it should reflect a "mental performance rather than preferred ways of behaving, (2) tests of it should show positive correlation with other forms of intelligence; and (3) the measures should increase with experience and age" (p. 269-270). Mayer, Caruso and Salovey (2004) argued that emotional intelligence is best considered an ability similar to cognitive intelligence. Hunter (1986) and Goldstein et al. (2002) advised that understanding emotional intelligence is important because traditional cognitive abilities leave many job predictors unexplained.

Emotional intelligence has also been conceptualized as a trait (Neubauer & Freudenthaier, 2005; Petrides & Furnham, 2001), similar to personality characteristics such as extraversion or conscientiousness. However, according to LeDoux (1996):

The human brain contains about 10 million neurons that are wired together in enormously complex ways. Although the electrical sparks within and chemical exchanges between these cells accomplish some amazing and perplexing things, the creation of our emotions stands out as one of the most amazing and perplexing feats. (p.22)

Zorana, Brackett, and Mayer (2007) told us intelligence is typically associated with one's academic and professional success. Conversely, creativity is associated with the degree to which a person engages in innovative practices. Tests are designed to examine both a person's intelligence and creativity, the difference being, when testing intelligence one is required to converge on a single answer. Settling on this answer requires the ability to reason validly about a domain of information.

### Link between Emotional Intelligence and Life and Job Functions

According to Salovey and Grewal (2005), "emotional intelligence consists of the interaction between emotion and cognition that leads to adaptive functioning" (p. 282). Higher EI has been associated with higher levels of attending to health and appearance and positive interactions with friends and family. Lower EI has been associated with higher reported use of drugs and alcohol, and more deviant behavior (Brackett, Lerner, Rivers, Salovey, & Shiffman, 2006; Mayer et al., 1999; Trinidad & Johnson, 2002). Accordingly, Bastian, Burns, and Nettelbeck (2005) found a correlation between EI and life skills showing, "higher EI was associated with higher life satisfaction, problem-solving and coping ability and with lower anxiety" (p. 1143).

In order to utilize EI to promote job satisfaction, Boyatzis (2009) and Mayer and Salovey (1997) advised that emotional, social and cognitive intelligences require the ability to recognize, understand, use and analyze information and situations that lead to or cause effective or superior performance. In so doing, a person must be able to accurately perceive, appraise, and express emotion. According to Salovey, Bedell, Detwieler, and Mayer (1999), EI is useful only if it accounts for variance in conceptually related life criteria that are not already explained by intelligence, personality and other well-established psychological theories.

Thus, "emotions convey knowledge about a person's relationships with the world" (Mayer & Salovey, 1997, p. 9). Before one can accurately synthesize emotions to promote emotional and intellectual intelligence, it is necessary to have an understanding of these emotions. "Subjectively, there are few psychological phenomena that compare with emotion. Emotions punctuate almost all the significant events in our lives" (Smith & Lazarus, 1990, p. 609). According to Fredrickson (2001), emotions typically begin with a person's valuation of an

event. "Whether conscious or unconscious, this valuation triggers subjective events, cognitive processing, physiological changes, and changes in facial expression" (p. 218). Smith and Lazarus (1990) also stated, "each core relational theme has its own universal biological emotional outcome, which is invariant as long as the individual continues to appraise what is happening in a given way" (p. 624). Our appraisal of emotional events can and should change as we increase in EI, allowing us to make better decisions in times of stress.

#### **How Emotions Work**

Smith and Lazarus (1990) told us we draw upon a vastly complicated, and only partially reliable, collection of prompts when interpreting the significance of an event. Individual interpretations of an event determine personal significance and give rise to a particular emotional state. "If a person appraises his or her relationship to the environment in a particular way, then a specific emotion that is tied to the appraisal always results" (Smith & Lazarus, 1990, p. 624). Thus, our emotions prompt us to react to an encounter in a given way; we cry when sad, smile when happy, run when afraid and so forth. "As many of our emotional responses are stimulated by the emotions of other individuals, our understanding of our own emotions is related to our ability to understand the emotions of others" (Wong & Law, 2002, p. 247).

However, humans have the ability to curb these tendencies by employing coping strategies. In order to encourage emotional and intellectual growth, Mayer and Salovey (1997) told us, humans have the aptitude to retrieve and/or create emotions and then create understanding to regulate the emotions. Boyatzis (2009) stated, "...in so doing, a person must be able to accurately perceive, appraise and express emotion" (p. 751). "Emotional achievement represents the learning a person has attained about emotion or emotion-related information, and

emotional competence exists when one has reached a required level of achievement" (Mayer & Salovey, 1997, p. 15). Specifically, it is "...assumed that (1) some degree of attention to feelings is needed for a clear understanding of emotions and, consequently, (2) the capacity to repair negative moods and emotions would not be possible without some level of emotional clarity" (Rey, Extremera &, Pena, 2011, p. 2).

Emotional abilities can be thought of as falling along a continuum, beginning with relatively lower level emotions which carry out isolated, fundamental psychological functions, progressing to more developmentally complex emotions which help promote personal self-management and goals. The ability to perceive emotions accurately is critical to lower level, fundamental skills. Higher level skills include the capacity to manage emotions properly once the emotion is perceived. Austin's (2003) conclusions suggested that an underlying emotion-processing factor contributes to emotional repair. This repair is vital to resilience.

## **History of Emotional Intelligence**

Work to understand how our emotions function, and how they affect our lives, began in 1920 when Thorndike proposed the existence of social intelligence, a theory very similar to emotional intelligence. Thorndike (1920) defined his theory as, "...the ability to understand and manage men and women, boys and girls...to act wisely in human relations" (p. 228). Similarly, Moss and Hunt (1927) defined social intelligence as the "...ability to get along with others" (p. 108). Later, Thorndike and Stein (1937) studied responses to the George Washington Social Insight Test and other measures of social intelligence from that time. They found, "whether there is any unitary trait corresponding to social intelligence remains to be demonstrated" (p.

284). Thorndike's categorization of the George Washington Social Insight test prompted the further development of instruments to assess each of his three designated types of intelligence.

Cronbach (1960) concluded that after years of irregular investigation, social intelligence hadn't yet been fully measured. Despite Cronbach's skepticism, other researchers continued to investigate social intelligence. Gardner's (1983) Theory of Multiple Intelligences included interpersonal understanding (understanding other people) and intrapersonal (understanding the self) intelligence. Cantor and Kihlstrom (1987) placed social intelligence at the center of their personality theory, defining it as "...concepts, memories and rules – in short the knowledge that individuals bring to bear in solving personal life tasks" (p. 9). The further research of Schneider, Ackerman and Kanfer (1996) found social intelligence to be multidimensional in nature.

Mayer and Salovey's (1997) research made the case that social intelligence is related to the more universal concept of emotional intelligence. They presented a theory of emotional intelligence comprised of a distinct group of abilities separate from traditional verbal, propositional/spatial-performance dimensions of intelligence. According to Mayer (1993), the construct of their theory overlapped with the intrapersonal portion of Gardner's (1983) construct, because Mayer and Salovey also found many intellectual problems contain emotional information.

The construct developed by Mayer and Salovey (1997), comprised a group of abilities that are distinct from the traditional verbal-propositional/spatial-performance dimensions of intelligence. Through their work they developed a framework of emotional abilities they believed composed emotional intelligence. This framework highlighted the importance of connecting, "emotions with intelligence (in order to ensure) the meanings of the two terms...were preserved" (p. 3). Because Mayer and Salovey felt the core of emotional

intelligence was the ability to change moods, the cornerstone of their framework was the ability to monitor and regulate one's emotions to achieve special ends. This ability related construct incorporated multiple emotional abilities. Mayer and Salovey (1997) described EI as, "...the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189).

Mayer and Salovey's (1997) four-branch theoretical model of EI is, arguably, the most widely utilized model of EI. The four-branch model arranged emotional skills in a rough hierarchy of four branches. Mayer et al. (2008), told us:

These branches refer to a treelike diagram. Emotions in this diagram include "the abilities to (a) perceive emotions in oneself and others accurately, (b) use emotions to facilitate thinking, (c) understand emotions, emotional language, and the signals conveyed by emotions, and (d) manage emotions so as to attain specific goals. (p. 506)

According to Mayer and Salovey (1997), each of these branches described a set of skills which make up overall emotional intelligence. Each branch has its own developmental path to help us understand emotional language and signals conveyed by emotions, attain an understanding of our emotions, allow us to achieve specific goals, and utilize emotions to facilitate thinking.

The first branch of Mayer and Salovey's framework is perceiving, appraising and expressing one's own emotions. Mayer and Salovey argued perceiving emotions may represent the most fundamental portion of emotional intelligence, as all other emotional information is processed through one's perceptions. By reading and identifying the emotions in other's physical states, feelings and thoughts, faces in artwork and pictures, voices, language and cultural artifacts, etc., individuals are able to decipher their own emotions. They are then able to

accurately express their own emotions and their needs related to those feelings. They are able to then discriminate between accurate and inaccurate expressions of feelings.

The second branch of emotional intelligence is the ability to harness emotions to facilitate various cognitive activities, such as thinking and problem solving. This process begins with prioritizing thinking by directing attention to important information. Mayer and Salovey argued that emotions can be used as aides to judgment. For example, changes in mood can change one's perspective from optimistic to pessimistic, thus changing one's viewpoint. As we experience different emotional states, we are encouraged to use different problem-solving approaches.

The third branch is the ability to understand and utilize emotional knowledge.

Emotionally intelligent individuals are able to accurately label emotions and recognize relations among these emotions. They are then able to interpret the meanings and slight variations these emotions express, regarding relationships, to better understand complex feelings. This third branch also includes the ability to identify and describe how emotions change and evolve over time.

The fourth branch is the ability to synthesize all of the prior information to reflect and regulate emotion to promote emotional and intellectual growth. One of the prime aspects of this branch is the ability to stay open to both pleasant and unpleasant feelings and then to reflectively choose to engage or detach from these emotions based on one's perceptions of its informativeness or utility. Essential in this quest is the ability to reflectively monitor one's emotions in relation to others. By doing so, "the emotionally intelligent person can harness emotions, even negative ones, and manage them to achieve intended goals" (Salovey & Grewal, 2005, p. 281).

Bar-On (1997) argued for a different theory which stressed the importance of the non-cognitive factors of emotional intelligence. Like Mayor and Salovey, Bar-On felt by using our emotions intelligently, we are better able to cope with situations, solve problems, and make better decisions. This theory aimed to be a cross section of interrelated emotional and social competencies. Bar-On described EI as, "...an array of non-cognitive capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures" (Bar-On, 1997, p. 14). Using this definition, Bar-On created the Emotional Quotient Inventory (EQ-i) assessment. This test assesses both intra-personal and personal intelligence, adaptability, stress management, general mood scale, and several subscales.

Goleman (1998) built yet another theory by integrating prior research. Goleman believed emotional intelligence was a learned capability and this capability is often manifested in exceptional job performance. The theory established 25 competencies organized into five domains of emotional intelligence:

- (a) Self-Awareness included emotional control, accurate self-assessment and self-confidence.
- (b) Self-regulation included self-control, trustworthiness, conscientiousness, adaptability, and innovation.
- (c) The motivation cluster included drive, commitment, initiative, and optimism.
- (d) The empathy cluster included understanding others, developing others, service orientation, leveraging diversity, and political awareness.
- (e) The social skills cluster included influence, communication, conflict management, leadership, change catalyst, building bonds, collaboration and cooperation, and teamcapabilities. (Boyatzis, Goleman, & Rhee, 1999, p. 5)

Goleman felt that frequently demonstrating the competencies in all clusters was linked to increased profit to a company. After administering the Emotional Competence Inventory to nearly six hundred corporate managers and professionals, Boyatzis, Goleman and Rhee (1999) worked to streamline Goleman's original theory. The revision consolidated the original theory to twenty competencies, organized into four domains: Self-Awareness, Self-Management, Social Awareness, and Relationship Management.

Each of these theories of EI has influenced Leadership Theory. Successful leadership requires sustained effort, the ability to manage a wide variety of time demands and stress, and the ability to self-regulate emotions. Research showed a strong relationship between EI and better managerial competencies and leadership effectiveness (Gardner & Stough, 2002; Rosete & Ciarrochi, 2005; Wong & Law, 2002).

Goleman (1998) noted, "the most effective leaders are alike in one crucial way; they all have a high degree of what has come to be known as emotional intelligence" (p. 94). This may be because they have acquired the ability to "...recognize how an individual and those around the individual are feeling...and the capacity to perceive and to express feelings" (Mayer & Salovey, 1997, p. 19). Brackett, Lerner, Rivers, Salovey and Shiffman (2006) found, "individuals who score higher in EI may have a more accurate perception of their emotional abilities" (p. 12). Based on these findings, "most executives have accepted that emotional intelligence is as critical as IQ to an individual's effectiveness" (Druskat & Wolff, 2001, p. 81).

Educational leadership can be fraught with challenges. In understanding how a leader will react to these challenges, "what better place to begin than with a consideration of how the persons are equipped to handle the challenges, opportunities, and problems of living? This is, indeed, what emotions are all about" (Smith & Lazarus, 1990, p. 638). Being equipped to handle

life's challenges requires one to understand the significance of their various emotional states in regard to the person-environment relationship. In overcoming adversity and promoting success for our schools, "analytic skills allow the leader to cognitively process information that helps identify the needs of the group and its members" (Wolff, Druskat, & Pescosolido, 2002, p. 518). The ability to understand our emotions can guide our attention, our decision making and our behavior responses. This clarity is a significant predictor of life satisfaction (Extremera, Ferandez-Berrocal, 2005; Petrides, Frederickson, & Furnham, 2004; Saklofske, Austin, & Minski, 2003)

The emotional competencies of perceiving, understanding, and managing and harnessing emotions effectively in the self and others are all traits found in models of emotional intelligence (Mayor et al., 2008; Mayer & Salovey, 1993). These traits allow leaders to better adapt to a multitude of job demands. The ability to recognize emotional cues and apply knowledge of emotional complexities is closely linked to the power to regulate emotions effectively and appropriately harness emotions to create a positive outcome (Schutte & Malouff, 2011). Self-awareness is the first step to recognizing emotional cues and the foundation upon which other pieces of EI are based on. Bass (1985), Hogan, Curphy, and Hogan (1994), Sosik and Megerian (1999), suggested self-awareness may provide individuals with greater perceived control over interpersonal events and consequences in their life. Thus, leaders who are self-aware are found to be more confident, have better self-efficacy and provide better orientation for followers. Each of these characteristics plays a part in the resilience and strength of an educational leader.

In establishing one's leadership role, Cote et al. (2010) affirmed, "...emotional intelligence improved predictions of leadership emergence" (p. 15). In this emergence, "...the ability of the leader to take on different perspectives was a particularly important and appreciated

ability" (Wolff, Druskat & Pescosolido, 2002, p. 519). According to Ciarrochi, Caputi, and Chan (2000), Matthews, Roberts, and Zeidner (2002), and Van Rooy and Viswesvaran (2002), emotionally intelligent individuals have applied various emotion management strategies in the past, observed their different impact on emotions, and learned which strategies are the most effective. These same authors also found emotionally intelligent individuals generally select strategies that are considered effective. Côté et al. (2010) and Mayer et al. (1999) found through trial-and-error, leaders may have accumulated extensive practice in applying strategies and perfected their implementation. "By selecting and implementing the most effective strategies, emotionally intelligent individuals should achieve a pronounced influence on others' emotions, and emerge as leaders" (Côte et al., 2010, p. 301).

Research told us the ability to clearly and intelligently process and effectively manage emotional information is necessary to successfully navigate the social world. This skill enables one to express socially appropriate emotions and behave in socially acceptable ways (Brackett et al., 2006; Gross, 1998). LeDoux (1996) stated:

Individuals do not cause their emotions to occur and have little control over which emotions they experience, because the "connections from the emotional systems to the cognitive systems are stronger than connections from the cognitive systems to the emotional systems [of the brain]. (p. 19)

"However, once emotions occur and are recognized by the cognitive systems of the brain, the ability to guard against distracting emotions and to build on enhancing emotions facilitates individual task performance as well as team performance" (Lam & Kirby, 2002, p. 140).

By utilizing these abilities, studies indicated persons with high EI scores make better managers, (Brackett & Salovey, 2006; Gardner & Stough, 2002; Goleman, 1998; Jain & Sinha,

2005; Hollenbeck, De Rue & Guzzo, 2004; Rosete & Ciarrochi, 2005; Van Rooy & Viswesvaran, 2004). According to Goleman (2003), one reason for this is managers with higher EI are able to build superior team efficiency and their subordinates are less stressed. Mayer and Cobb (2000) and Livingstone and Day (2005) also maintained, emotionally intelligent people are found to get along better with coworkers.

The ability to work well with others and build strong teams is found to contribute to a positive organizational climate. Hollenbeck et al. (2004) postulated, "...as emotional stability is identical to the emotional competencies of conscientiousness, reliability and integrity, it may be these factors that permit the resolution of conflicts" (p. 138). Barling, Kelloway, and Slater (2000), Crede and Harms (2010), Gardner and Stough (2002), George (2000), Goleman (1998), Goleman, Boyatzis, and Mckee (2002), Hollenbeck et al. (2004), Mayer, Salovey and Caruso (2004), Prati, Ammeter, Buckley, Douglas, and Ferris (2003), and Wong and Law (2002) found the ability to identify the emotions of others was the best predictor of a wide variety of idealized leadership. These skills are brought to the forefront through the ability to manage stress, consider the emotional needs of one's followers, provide encouragement, display conviction and commitment to the organization, and through the ability to generate pride, loyalty, confidence, encourage the production of new ideas, and instill a vision.

In their summary of key findings of a review of literature, Leithwood, Day, Harris, Hopkins, and Sammons (2006) found the most successful leaders are open minded and ready to learn from others, flexible in their thinking within their system of core values, unrelenting in their pursuit of excellence, committed, and optimistic. These traits allow high performing leaders to positively influence and motivate their staff and build commitment to achieving common goals.

According to Gannon and Ranzijn (2004, Gignac (2006), and Petrides, Kokkinaki, and Pita (2007), EI also correlates positively with life satisfaction; whereas IQ shows no relationship. High EI traits allow strong educational leaders to push forward when there is little reason to expect progress. High IQ alone would not provide the same ability (Leithwood, Day, Harris, Hopkins & Sammons, 2006). According to Leithwood et al. (2008), most successful school leaders utilize the same leadership habits; the way they employ these practices, not the practices themselves, determine how well they work. The ability to synthesize emotional information and make informed decisions is important to leadership success.

Effective use of EI helps a leader understand how to build collaboration within a group and is central to the leadership role, especially during times of adversity. EI has shown to be "related to effective interactions among individuals because it helps individuals monitor their own and others' behaviors" (Rode et al., 2007, p. 404). Equipped with the ability to perceive others' emotions and to understand the distinctions among them, emotionally intelligent individuals may gain considerable information about other group members' attitudes, goals, and interests. This knowledge can allow leaders to influence other group members by identifying, understanding, and addressing their unstated needs (George, 2000; Wolff et al., 2002).

An organization's culture is cultivated, in large part, from its leadership. A strong educational leader is able to view the development of assumptions and values within their school as ever changing. Studies indicated EI is closely associated with transformation leadership, especially in the areas of "…idealized influence, inspirational motivation, idealized consideration, and contingent reward" (Barling et al., 2000, p. 4). "Leaders create the mechanisms for cultural development and the reinforcement of norms and behaviors expressed within the boundaries of the culture" (Bass & Avolio, 2007, p.543). In studying extraordinary

leaders in education, Kirby, King and Paradise (1992) found many aspects of transformational leadership to be crucial to educational leadership.

Prati et al. (2003) told us, "The emotionally intelligent team leader provides a transformational influence over the team" (p. 34). A body of EI-Leadership research supported the hypothesis that EI is linked to the transformational leadership style (Barling et al. 2000; Gardner & Stough, 2002; Palmer et al., 2001). Because a school leader can improve teaching and learning "…indirectly and most powerfully through their influence on staff motivation, commitment and working conditions" (Leithwood et al. 2008, p. 1). It therefore stands to reason that strong EI can promote leadership resilience and influence.

The role of a school leader requires the ability to deal dynamically with infinite, complex occurrences, often at an exceedingly fast pace. The ability to regulate one's emotions and to synthesize pertinent information allows a leader to effectively cope with these innumerable situations. "Leaders with large behavioral repertoires and a high degree of behavioral differentiation tend to be highly effective and, other things being equal, to have more effective organizations" (Hooijberg et al., 1997, p. 403). Palmer et al. (2001) additionally found that leaders who consider themselves able to motivate and inspire subordinates to work towards a common goal report they are also able to monitor and manage emotions within themselves and others.

According to Petrides et al. (2007), emotional self-efficacy can be the link to predicting one's behavior, attitudes, and achievement. In agreement with this supposition, Ashkanasy and Daus (2005) stated, "emotional intelligence is another tool that psychologists and scholars of organizational behavior can use in their efforts to understand and predict behavior" (p. 449).

Mills (2009) added, implementing a leadership style that is reflective of emotional intelligence may support great levels of leadership effectiveness.

Conversely, "one must look at the various components of EI. Not all components are related to the same performance outcomes" (Feyerherm & Rice, 2002, p. 359). Rode, Arthaud-Day, Baldwin, Bommer, Mooney, Near, and Rubin (2007), found EI to be, "...significantly related to performance only in contexts with explicitly strong emotive content. In other words, the type of performance does matter" (p. 412). Feyerherm and Rice (2002) also advised, "there is more complexity associated with the relationship of team performance and team and leader emotional intelligence than meets the eye" (p. 359).

# **Effects of Emotional Intelligence Abilities**

In order to be an effective leader, one must be able to utilize a wide array of EI abilities to meet and improve work-related tasks, as well as to improve the quality of one's work-related life and the work-related life of those they lead. Interpersonal skills, which can promote positive social interactions, are a significant part of life quality. On the contrary, lack of EI abilities and alexithymia, have been found to be negatively correlated with work satisfaction (Dawda & Hart, 2000; Parker, Bagby & Tayler, 2001; Saklofske et al., 2003; Schutte et al., 2000).

Alexithymia, "...the inability to recognize emotions and their subtleties and textures...throws a monkey wrench into a person's ability to know their own self-experience or understand the intricacies of what others feel and think" (Serani, 2014, para. 2). In contrast, Farhoodia, and Rostami (2010), Fernandez, and Paez (2006), Hamidia, Abdolmadafia, Petrides (2011), and Velasco, Campos, Saklofske et al. (2003) found EI to be negatively related to narcissism, machiavellianism, and psycopathy. Perceiving others emotions is considered to be

important to social interaction because emotions convey information about people's thoughts and intentions as well as their coordinating social interactions. Therefore, the lack of emotional intelligence and difficulty identifying and describing emotions predicts, "…increases in anxiety and decreases in positive mood" (Ciarrochi & Scott, 2006, p. 239). Conversely, Fredrickson (2001) and Quinn, Chak, and Spreitzer (2012) determined, the ability to regulate emotions relates positively to mental health, social adjustment, adaption and coping with stress, and mood repair.

Being able to regulate one's mood was also found to be closely linked to life satisfaction. (Ciarrochi, Bajgar, & Chan, 2001; Dawda & Hart, 2000; Palmer, Donaldson, & Stough, 2002; Saklofske et al, 2003; Schutte et al., 2000). A large body of work found a positive correlation between emotional intelligence and higher levels of positive affect; as well as lower levels of negative affect and greater life satisfaction (Austin, Egan, & Saklofske, 2005; Brackett & Mayer, 2003; Brackett, Mayer, & Warner, 2004; Gannon and Ranzijn, 2004; Malouff, & Simunek, 2002; Saklofske, Austin, & Minski, 2003; Schutte, Hollander, Schutte & Malouff, 2011; Wing, Byrne, & Schutte, 2006). Positive effect has been described as:

The extent to which a person feels enthusiastic, active, and alert. High positive affect is a state of high energy, full concentration, and pleasurable engagement, whereas low positive affect is characterized by sadness and lethargy. Negative affect is a general dimension of subjective distress and unpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness, with low negative affect being a state of calm. (Watson & Clark, 1988, p. 1063)

Fredrickson (2001) found that, "emotions such as joy, interest, pride, and contentment share the ability to broaden people's momentary thought-action repertoire and build their enduring personal resources" (p. 220). Isen (2001) found that positive affect fosters clear

headed, well-organized, open-minded, flexible problem solving and thinking. Furthermore, positive effect is shown to encourage people to approach or continue working on an issue and reduce stress (Watson & Clark, 1988; Petrides, 2010).

Conceptually, those with higher levels of EI were able to utilize their emotion regulation mechanisms efficiently to generate positive emotions, in addition to supporting emotional and intellectual growth (Wong & Law, 2002). Well-being and the ability to quickly and accurately decode one's emotions was also closely linked to life satisfaction (Edgar, McRorie, & Sneddon, 2012). Furthermore, perceived well-being and EI were found to be related to confidence in achieving goals (Petrides, 2010) and play an important part in long-term achievement (Agnolia, Baldaro, Mancini, Pozzoli, Russo, & Surcinelli, 2012; Petrides, 2010; Petrides et al., 2004; Sanchez-Ruiz, Mavroveli, & Poulis, 2012;). Specifically, Petrides (2011) told us the belief-importance theory suggests EI is "...shown to provide individuals with the propensity to perceive if, and how strongly, an individual believes they have the ability to meet their goals and when they doubt this ability" (p. 1).

Adding to these findings, it was well established that positive effect from EI has a supportive influence on emotion regulation (Laborde, Achtzehn, Allen, Herbert, & Lautenbach, 2014; Mikolajczak, Balon, Kotsou, & Ruosi, 2011). In order to regulate one's emotions, one must first perceive those emotions. Salovey and Mayer (2001) found people with higher EI are thought to possess a greater capacity to perceive, which then facilitates greater positive affect. According to Van Rooy and Viswesvaran (2002), the ability to accurately perceive and identify emotion in oneself and others allows us to assimilate our emotions and facilitate thought. "An openness to thought connects with intellectual curiosity and a better ability to regulate negative emotions" (Sanchez-Ruiz, Mayroveli, & Poullis, 2012, para. 24). This then enables people to

guide their thinking and leads to positive job outcomes, such as job satisfaction, organizational commitment, and lower turnover intention. Wong and Law (2002) asserted that positive affective emotions should "...make employees more committed to the organization and less likely to leave their jobs" (p. 5).

Studies showed there to be multiple health, both physical and mental, benefits derived from EI (Petrides, Philip, Schermer, & Veselka, 2007; Schutte, Bhullar, Malouff, Rooke, & Thorstnsson, 2007; Van Rooy & Viswesvaran, 2002). EI can aide increased health in multiple ways, one being its predictive value in subjective well-being and social support (Austin, Egan, & Saklofske, 2005; Gallagher & Vella-Brodrick, 2008). This subjective well-being, in turn, can influence healthy behaviors. Individuals with higher EI typically have "...positive interactions with health information providers and are more able to resist peer pressure in connection with risky health behaviors" (Austin et al., 2005, p. 556). Lower EI, on the other hand, is found to correlate with higher consumption of alcohol, illegal drug use and involvement in deviant behavior (Brackett & Mayer 2003). Higher EI has also been found to be associated with "the willingness to seek professional and non-professional help for personal-emotional problems, depression and suicidal ideation" (Austin et al., 2005, p. 549).

Significant positive associations have been established with EI, empathy, mood regulation and interpersonal relationships (Mayer et al., 1999). The ability to self-monitor and regulate one's mood has a positive effect on interpersonal relationships; which are, in turn, shown to have a positive impact on both physical and mental health. Petrides and Furnham (2001) and Schutte et al. (2007) have found significant positive correlations with empathic perspective taking, self-monitoring, openness, agreeableness, and conscientiousness.

Conversely, the inability to regulate and manage emotions and to experience or share emotions

was strongly predictive of depression and other behaviors suggesting social maladaptation (Goldenberg, Mantler, & Matheson, 2006; Lopes, Brackett, Nezlek, Salovey, Sellin, & Shutz, 2004).

Accordingly, Petrides and Furnham (2002) and Schutte et al. (2002), found those with higher EI also tend to have a stronger ability for mood repair after a negative mood induction, as well as higher self- esteem. Laborde et al. (2014) went on to state there is a positive relationship to self-confidence and EI and the variance in cortisol secretion and performance under pressure, and a lower increase of heart rate during a stressful event (Petrides, Frederickson, & Furnham, 2004; Shipley, Jackson, & Segrest, 2004). In regard to emotion regulation, literature suggested people with high EI are better able to deal with emotionally difficult situations (Armstrong, Critchley, & Galligan, 2011; Saklofske, Andrews, Austin, & Rohr, 2007; Schutte, Hollander, Malouff, & Simunek, 2002). Gohm, Corser, and Dalsky (2005) also told us, "EI may help people feel able to deal with difficult events...increased feelings of control and competence should lead, in turn, to more active, effective coping, and to better mental and physical health outcomes" (p. 11). Thus, emotional intelligence was positively associated with work experience, which is often carried out under pressure.

As individuals are better able to recognize and manage emotions in themselves and others, they are also more prone to improve their self-esteem and social support (Ciarrochi, Bajgar, & Chan, 2001). High self-esteem and social support, in turn, leads to an increase in life satisfaction. The "...mediating effect of social support suggests individuals with higher emotional abilities can recognize and manage emotions in others and are thus more apt to enhance their social support, which also contributes to an increase in their life satisfaction"

(Kong, Jingjing, & Xuqun, 2012, p. 1042). "In humans...there appear to be strong needs to explore, achieve, and gain mastery over the environment, as well as to maintain contact and form social bonds with others" (Smith & Lazarus, 1990, p. 613). Furthermore, the ability to manage emotions in others is significant because, "cognitive complexity, social intelligence, and behavioral complexity of strategic leaders positively affects the essence of strategic leadership" (Hooijberg, Dodge, & Hunt, 1997, p. 539).

The capacity to quickly and accurately read others' emotions is found to be critical to a leader's ability to build social support. The affect size between EI and social support are significantly correlated and both variables are related to lower stress and stronger mental health (Austin, 2003; Edgar, Matthews, & Zeidner, 2016). It follows then, strong social support is found to bolster resilience in the face of adversity (Salovey et al., 1999). EI and social support are subsequently linked to workplace well-being and overall life satisfaction (Donaldson-Feilder & Bond, 2004). A body of studies have furthermore shown EI to be a significant positive predictor of subjective well-being and satisfaction with life, which also affects satisfaction with work life (Austin et al., 2004; Bar-On, 2006; Ciarrochi & Scott, 2006; Ciarrochi et al., 2000; Gannon & Ranzijn, 2004; Gignac, 2006; Palmer, Donaldson, & Stough, 2002; Saklofske et al., 2003; Salovey et al., 1999).

Overall, these findings support Salovey et al.'s (1999) theory that emotional self-awareness, expression and self-management buffer the effects of aversive events, and suggest that emotional self-control also plays a role. Armstrong, Critchley, and Galligan (2011) told us the life event-distress relationship was weaker for participants with higher levels of emotional self-awareness, emotional expression, emotional self-control, and especially, emotional self-managements. However, managing one's emotions and exerting self-control requires physical

energy. Each of us has a limited amount of energy each day to expend meeting our goals. Though, Baumseter et al. (2002), found people require less energy to exert the same amount of self-control if they practice self-control regularly. Positive emotions characteristically encourage energetic activation in a person. This energetic activation can speed recovery after a negative or stressful situation. And, like practicing self-control, practice utilizing EI to promote positive emotions and, thus energetic activation, creates coping resources and broadens one's repertoires of thoughts and actions.

On the other hand, tense activation can lead people to react in unhealthy, inappropriate ways when met with negative or stressful situations (Frederickson & Branigan, 2005; Quinn, Chak, & Spreitzer, 2012). Research also showed, while higher levels of EI were found to be associated with a variety of positive outcomes, including subjective well-being and life satisfaction. Austin et al. (2004), Brackett, Mayer, and Warner (2004), Extremera et al. (2005), Gohm et al., (2005), Martins, Morin and Ramalho (2010), Mikolajczak et al. (2011), Schutte et al. (2002), Schutte, et al. (2007), Schutte and Malouff (2011), and Smith, Ciarrochi and Heaven (2007) established the reverse to be true with an association of low EI and perceived stress.

Results from Bond and Bunce (2000), Donaldson-Feilder and Bond (2004), and Zeidner, Matthews, and Roberts (2012) added to these findings with their work; establishing that higher EI promoted well-being and stronger performance. Bastian, Burns, and Nettelbeck (2005) found higher EI was associated with higher life satisfaction, problem-solving and coping ability, and with lower anxiety. Bar-On (1997) asserted high EI allows one to effectively manage personal, social and environmental change by coping rationally and flexibly with problematic situations and remaining optimistic, positive and self-motivated. Bastian et al. (2005) added, "emotional intelligence might enable a person to become aware of relationships between mood and

performance and to direct their efforts into activities best suited for certain emotional states" (Para. 18).

Another important aspect of EI was the ability to use emotions to facilitate thought processes (Bar-On, 1997; Mayer, 2001; Mayer & Salovey, 1997). As hurdles in leadership arise, and they frequently do, understanding the emotions that correspond with these hurdles can relieve stress and help one work toward positive solutions. Noorbakhsh, Besharat, and Zar (2010) found that strategies which improve EI improve problem-focused coping and positive emotional-focused coping. "Individuals who are emotionally intelligent accurately perceive and appraise their emotional states, know how and when to express their feelings, and can effectively regulate their mood states" (Salovey et al., 1999, p. 160). On the contrary, Salovey (2001) found that the inability to regulate negative emotions seems to make one vulnerable to stress. Thus, understanding one's emotions and how to manage and repair these emotions, can be valuable in a stressful work life.

Emotional repair was found to be the most important predictor of emotional well-being in Thompson, Croyl, Pepper, and Waltz's, (2007) study. Compatible with this information, Wong and Law (2002) found, "Employees with high levels of EI are those who can make use of the antecedent- and-response-focused emotional regulation effectively, and master their interactions with others in a more effective manner" (p. 248). According to Salovey et al. (1999) and Boyatzis and Sala (2004), emotionally intelligent individuals are able to significantly increase their empathy and self-awareness scores, which can also increase social support and reduce stress. Ciarrochi, Deane, Heaven, and Scott (2002), Zeidner and Matthews (2016), Van Rooy and Viswesvaran (2002) added, people with high social and emotional competence are better able to build a network of social support to overcome feelings of hopelessness, depression and

anxiety, and increase their social support. Positive coping abilities can lead to stronger psychological health.

The inability to regulate negative emotions, or even the belief that one doesn't have the ability to regulate these emotions, was found to make one more vulnerable to stress. This stress can often lead to poor health issues. Gross (1998) put forth, coping with negative emotions requires "...adaptive behavior and physiological response tendencies that are called forth directly by evolutionarily significant situations" (p. 272). Bar-On (1997) defined emotional intelligence as "...an array of non-cognitive capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p. 14). Therefore, if emotions are response tendencies and may be moderated, they can then also be regulated and managed.

Martins et al. (2010), Salovey (2001), Schutte et al. (2007), and Van Rooy and Viswesvaran (2004), found being able to intelligently express one's emotions and effectively deal with stressful situations can be central to maintaining good health. Goldman, Kraemer, and Salovey (1996) findings suggested, "a person's general manner of evaluating or appraising mood is an important moderator of the relationship between distress and symptom and illness reporting" (p. 14).

In recent years, a body of research has continued to substantiate the relationship between emotional intelligence and mental and physical health. Zeidner et al. (2012), stated, "EI conceptually and empirically relate to a wide array of health outcomes, a striking variety of dysfunctional behaviors, and myriad indices of quality of life, well-being, and stress" (p. 18). Schutte et al. (2007) and Van Rooy and Viswesvaran (2002) indicated that, overall, there are significant relationships between emotional intelligence and mental health, psychosomatic health, and physical health. Salovey et al. (2005) suggested that lower stress reactivity

associated high EI may be a potential mechanism linking emotional competence and functioning with health outcomes. EI was also shown to act as a catalyst of positive, proactive health practices. Zeidner et al. (2012) told us, "...the high capacity for self-insight and self-regulation in high EI individuals should prevent their involvement in risky behaviors, including maladaptive coping. Instead, high EI should promote a more positive lifestyle that increases longevity and physical well-being" (p. 6).

When humans experience pleasant emotions, moods or attitudes, they are said to experience positive affect. "Although positive affect is transient, the personal resources accrued across moments of positivity are durable. As these resources accumulate, they function as reserves that can be drawn on to manage future threats and increase odds of survival" (Fredrickson & Losada, 2005, para. 7). In our quickly changing world, the ability to adapt emotionally to a given circumstance is important to leaders. Positive affect encourages people to connect with their world and involve themselves in activities that support them in adapting to ever changing circumstances (Palmer et al., 2002). Thus, positive affect helps leaders remain resilient.

Encouragingly, humans can grow and flourish as a result of negative experiences or negative affect. However, to do so one must first understand how to regulate emotions caused by these experiences. "Appropriate negativity may play an important role within the complex dynamics of human flourishing. Without appropriate negativity, behavior patterns calcify" (Fredrickson & Losada, 2005, para. 33). Emotionally intelligent individuals are found to experience their emotions more clearly. This clarity was, "...found to predict the likelihood of individuals rebounding from induced negative mood and the tendency to show a decline in ruminative thought following a distressing event" (Palmer, Donaldson, & Stough, 2002, p. 7).

When there is a clear understanding of one's emotions we are better able to self-regulate, make positive choices, and prosper.

# **Methods to Increase Emotional Intelligence**

Research linking emotion regulation to positive mood maintenance established the substantial benefit of emotional self-management (Ciarrochi et al., 2000) and active rather than passive coping behaviors in times of stress (Salovey et al., 1999). Therefore, it is important a leader gains needed EI to effectively manage their emotions. A recent body of research showed that greater clarity, lower stress, subjective well-being, and emotion regulation are associated with mindfulness (Austin et al., 2005; Baer, Allen, & Smith, 2004; Bonner & Schwartz, 1998; Brackett & Mayer, 2003; Brackett et al., 2004; Brown & Ryan, 2003; Brown and Ryan 2009; Frewen et al., 2010; Schutte et al., 2002; Van Rooy & Viswesvaran, 2004; Wing et al., 2006).

Mindfulness is "...a regular or sustained consciousness of ongoing events and experiences" (Brown & Ryan, 2003, p. 822). Baer et al. (2004) added that mindfulness is, "...generally defined to include focusing one's attention in a nonjudgmental or accepting way on the experience occurring in the present moment" (p. 191). Another core characteristic of mindfulness is described as open or receptive awareness and attention (Deikman, 1982; Martin, 1997). When discussing the importance of mindfulness in paying attention to and effectively synthesizing psychological state, Brown and Ryan (2003) stated, "mindfulness involves receptive attention to psychological states... associated with clarity. In less mindful states, emotions may occur outside of awareness or drive behavior before one clearly acknowledges them" (p. 823). Therefore, mindfulness can act to regulate one's emotions and help one make informed, positive choices.

Mindfulness' tradition is focused on a nonjudgemental or accepting way of experiencing the present moment. This experience can then create beneficial effects on self-regulated activity and emotional well-being (Brown & Ryan, 2003). The tradition additionally suggests that mindfulness can, "...reduce suffering and develop positive qualities, such as awareness, insight, wisdom, compassion and equanimity. This practice may also result in improved self-observation skills, which can lead to better recognition of sensations, cognitions, emotional states and improved ability" (Baer et al., 2004, p. 191). Through awareness and practice, people can gain the ability to change and strengthen their set of EI competencies. Furthermore, Bao, Kong and Xue (2015) found, "people with high levels of mindfulness were more likely to make use of their emotions to motivate themselves to enhance performance" (p. 2). This is important because strong EI competencies distinguish outstanding performers (Boyatzis, 2009).

Saklofske, Andrews, Austin, and Rohr (2007) also found exercise to be "positively correlated to interpersonal, intrapersonal relations, and mood regulations" (p. 946). Recent findings of Boyatzis and Sala (2004), Law, Song, and Wong (2004), Lopes, Gall, Grewal, Kadis, and Salovey (2006), Van Rooy and Viswesvaran (2002), and Wong and Law (2002) suggest EI can increase attitude job/life satisfaction and success, predicted success as a leader, better performance in client services and interpersonal facilitation, and better performers than counterparts. Martinez-Pons (2000), Mayer et al. (2008), Quinn et al. (2012), Van Rooy and Viswesvaran (2002), and Watson and Clark (1988) added, employees respond more positively to work requirements through emotion regulation ability; which can help employees sustain higher energy, stronger motivation, fuller concentration, strategy usage, self-evaluation and find more pleasurable engagement. All of which are desired states when leading an organization.

Leaders must take care to not only develop strong EI abilities, but to use those abilities in an ethical manner. It is possible to be "...seen as emotionally intelligent or competent, yet potentially behave unethically" (Segon & Booth, 2014, p. 11). Each EI competency needs to be accompanied by an ethical element if a leader is to be effective. As an example, the framework of Boyatzis, Goleman, Rhee, and Sala (2002) include competencies that could meet the criteria for having an ethical element. Segon and Booth (2014) cautioned, "without capacities of ethical awareness and orientation, the manager could not examine the environment and assess who will be affected and how they will be affected by a decision or action" (p. 10).

EI competencies can and should be learned and improved, which can then lead to improved performance in many aspects of life (Goleman, 1995; Boyatzis, Stubbs, & Taylor, 2002; Pedler, 2006). According to Quinn et al. (2012) not every person is required to be strong in every competency in order to be successful. We can compensate for a deficiency in one area by being strong in a combination of competencies in another area. In improving one's EI abilities, it is important to identify which competencies are lacking and work to gain the conceptual, behavioral, and attitudinal knowledge that can increase one's ability to remain resilient in the face of adversity.

### **Evaluation of Emotional Intelligence Assessment Practices**

Numerous measures of EI have been developed in hope people have the capability to increase EI competencies needed to promote success in relationships and at the workplace.

According to Matthews, Roberts, and Zeidner (2007), measures of EI are "...potentially, as important to psychological assessments as tests of IQ" (p. 189). Measurements of EI fall under

two main categories and, according to Saklofske et al. (2003), the most fitting means of measuring EI can be a subject of contention.

Those who believe EI to be a cognitive ability believe EI should be measured using an ability based measurement. This measurement is thought to reflect a person's actual level of EI development. The ability model tests EI as the maximum performance of a set of competencies which show empirical relationships to intelligence (Schutte, Malouff, & Thorsteinsson, 2013). These competencies are assessed using objective tests with right or wrong answers (Matthews et al., 2007; Mayer, Caruso, Salovey & Sitarenios, 2003). Those that believe EI is a dispositional tendency believe EI should be measured with a mixed-method, self-report questionnaire. The mixed-method, self-report questionnaire is based on the belief that people know how well they understand and deal with emotions. Mixed method measurements of EI are generally measured through self-judgements and require a person to have thorough insight into their mental state, based on precise feedback concerning the accuracy of their emotional abilities.

The two models of EI are thought to be only weakly related. The mixed method model contrasts from the ability model in that it deems information processes, and performance components key; as opposed to the ability model which places the emphasis on a set of competencies that may be assessed using objective tests with right or wrong answers. Because of these differences, the relationship between EI paradigms such as coping, successful social interactions, and work success, depend upon whether EI is measured using ability EI or mixed EI measurements (e.g., Barchard, 2003). Petrides and Furnham (2000a, 2001) argued that trait (self-report) and ability (emotional task-based) EI should be regarded as separate.

### **Ability Measures**

Ability measures of EI identify individual differences and abilities in four separate processes. For example, some people are able to quickly and accurately understand and then utilize their feelings to deescalate a stressful situation. Others are able to read people's facial expressions to quickly infer the emotions they are feeling. People's abilities in these four areas can be formally operationalized as a group of problems to be solved and answers can be evaluated against a criterion of correctness. Mayer and Salovey (1997) told us that measures of emotional intelligence must assess actual abilities, as opposed to self-report of constructs such as optimism and motivation. They also specified that EI cannot be validated by self-report measures. There are several ability-based scales used to assess emotional integrative complexity (Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990), emotional perception (Smith, Archer, & Costanzo, 1991) and emotional identification and understanding (Geher, Brown, & Warner, 2001). Additionally, Salovey, Goldman, Mayer, Palfai, and Turvey (1995) developed the Trait Meta-Mood Scale to assess stable individual differences in attention given to moods and emotions.

According to Larsen (2006), the most widely used measurement of ability EI is the Mayer–Salovey–Caruso Emotional Intelligence Test (MSCT). This maximal performance test is modeled after traditional cognitive intelligence tests and, according to Mayer and Salovey (1997), is designed to measure EI as a mental ability. This ability is the facility to reason in respect to emotions and the facility to use emotions to assist in cognition. The MSCT and its forerunner, the Multi-Factor Emotional Intelligence Scale (MS), have been moderately correlated with verbal intelligence, the Big Five personality traits, and self-reported empathy (Brackett et al., 2004; Ciarrochi et al., 2000; Mayer et al., 1999; Salovey, 2001). The MSCT and MS are found to be related to a number of criteria pertaining to the world outside and surrounding the

individual, such as daily activities and owned possessions (Brackett et al., 2004 and Mayer, Carlsmith, & Chabot, 1998).

Mayer and Salovey first demonstrated how EI could be measured in 1990, but they admitted this early test incorporated aspects of the mixed model. Mayer and Salovey continued to refine their model and accompanying assessments. In 1997 they presented the first edition of the MSCT test, designed to measure the four abilities. Since that time they have worked to continue to refine this test.

The MSCT uses pictures, which people look at and determine how much of a specific emotion, or blend of emotions, is conveyed, thus, measuring perception of emotion. In addition to measuring each of the four ability branches, this assessment also measures two subscales of emotions. To measure emotional facilitation, people are asked to judge how different moods can facilitate diverse types of thought. They are also asked to describe emotional sensations and their equivalent to other sensory modalities. Understanding emotions is measured by asking people which emotions merge to shape more complicated emotions and how these emotions evolve over time. The final measure assesses emotion management by requiring people to select effective ways to deal with their own and other's emotions in theoretical situations. "People high in emotional intelligence are expected to progress more quickly through the abilities designated and master more of them" (Mayer & Salovey, 1997, p. 10).

Many questions have arisen pertaining to the validity of this test over the years. According to Fiori et al. (2014), the "...four branches seem to be better suited to discriminate individuals at the low end of the EI trait" (para. 23). Concerns about structural fidelity arose from the Rossen, Algina, and Kranzler (2007) study, which maintains the MSCT 2.0 does not measure all the constructs it was intended to measure. However, Mayer, Caruso, and Salovey

(2012) contend, "overall, the new findings...make the case that the MSCT correlates meaningfully with a variety of ability based criteria of EI" (p. 407). Daya and Carrol (2004) advised, "evidence that the MSCT is a valid measure of EI can also be established by showing that it does not correlate with theoretically unrelated constructs (p. 1445).

Proponents of EI claim EI to be an important predictor of all areas of workplace performance, especially for managers. Daya and Carrol (2004) found the Emotional Perception scale of MSCT did predict individual performance on work related tasks. According to Mayer et al. (2004), people that score highly on the Emotional Perception scale are better able to identify how colleagues are feeling, which then supports strong interpersonal interactions. From this information, Daya and Carrol (2004) speculated that managers who are skilled at perceiving emotions are also able to empathize with employees who scored highly on job-related criteria. Managers thus ranked these employees as last to be laid off. Daya and Carrol (2004) also found those high in EI were more inclined to view their colleagues more positively.

Maul (2012) set out to find whether the MSCT is a true measure of the Mayor-Salovey ability model of EI. His findings indicated there were problems with the "...construct underrepresentation and construct-irrelevant variance" (p. 399). He also found, because of the consensus-based scoring as noted above, it was difficult to determine clear results in variations of EI. Smieja, Orzechowski, and Stolarski (2014) found the MSCT to be problematic because it is not free from cultural specificity. However, Maul (2012) found evidence from this test can help clarify the relationship between performance on test content and performance in situations encompassed in the ability model. Despite its shortfalls, the MSCT has provided a substantial amount of scholarly work and the information from this work is pertinent to our current understanding of EI.

MacCann and Roberts (2008) found it unusual, as a test of cognition, for the MSCT to use multiple-choice rather than "rate-the-extent" scales and to use a scoring rubric based on the consensus of a population rather than emotions theory. This unusual use causes questions, such as, whether relationships are due to the multiple-choice response format of Understanding or whether the Understanding construct is genuinely more closely related to intelligence. To address this concern, MacCann and Roberts (2008) developed the STEM (the Situational Test of Emotional Management), which is administered with both multiple-choice and rate-the-extent formats. The intent of this test was to determine whether an empirical measurement of a multiple-choice response design results in stronger relationships with cognitive abilities. To address the concern of consensus scoring, MacCann and Roberts (2008) developed the STEU (the Situational Test of Emotional Understanding) items. These items are compared to Roseman and Smith's (2001) appraisal theory of emotions and are either correct or incorrect.

If the label *emotional intelligence* suggests EI is one of many factors of intelligence related to the processing of emotional stimuli, as MacCann and Roberts (2008) suggested, then there should be four logical relationships that exhibit evidence of the validity of an EI test:

First, EI tests should relate positively to intelligence tests, demonstrating the positive manifold that exists among tests of intelligence. Second, EI tests should relate more strongly to other EI tests which test of other types of intelligence Third, EI tests should relate to variables or outcomes. Lastly, EI test scores should correlate with personality only in the range that other tests of intelligence tend to. (p. 541)

These four criteria guide the evaluation of the validity substantiation for the STEU and STEM EI tests. MacCann and Roberts (2008) study showed standards based methods of building a test are possible and different response formats influence the properties of test scores. There was limited

evidence of the validity of the STEU and STEM and more work needs to be done before their test is considered reliable. These tests might be best used as a comparative addition to the MSCT test.

Based on the Salovey and Mayer (1997) theory of EI, Smieja, Orzechowski, and Stolarski (2014) developed another measure of EI after finding other tests to be problematic in one way or another. "Our aim was to develop a valid and reliable instrument tapping multidimensional construct of EI, based on narratives and experiences from an adequate cultural context" (Smieja et al., 2014, para. 3). The TIE test, which was created as a performance-based scale covering the complete array of emotional abilities, was planned to be brief and simple to administer to both individuals and groups.

There were three assumptions guiding the development of this instrument: (1) to measure the actual abilities of people instead of their own perceptions about themselves, (2) to create an ecologically valid test, using other than the zero-one basis for scoring. In so doing, test takers are given the chance to rank response choices according to their decreasing suitability, and (3) scoring criteria was based on the judgment of experts instead of statistical distribution of population results. According to Smieja et al. (2014), "the most frequent test responses must be regarded as less appropriate than ones that are infrequent but produced by highly emotionally intelligent persons" (para. 4).

Smieja et al. (2014) tested the psychometric properties and factorial structure of the TIE with more than 4000 participants from various populations. Their test hypothesis was, most properties would match the theoretical hypothesis of Mayer and Salovey's (1997) four-branch organization of EI. In most cases this hypothesis proved to be correct. The internal consistencies were also comparable with the MSCT. However, the TIE's subscale reliabilities

were smaller, which is consistent with many EI tests. Accurately labeling different emotional states is often problematic with ability models of EI. Nevertheless, Smieja et al. (2014) found conclusions from the TIE are generally consistent with the fundamental hypothesis and empirical data relating to the organization of EI as a set of four abilities.

### **Mixed Method Assessments**

In a departure from measurements of the ability-model of EI, Bar-On (1997a) developed a measurement compatible with mixed-model abilities of EI. This self-report instrument was meant to measure an "...array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (Bar-On, 1997a, p. 14). The EQ-i is a 133-item self-report inventory which provides information on the composite factors found in the mixed model of EI. This measurement tested a cross section of interconnected emotions and social competencies, skills and facilitators to establish how clearly individuals understand and express themselves, relate to others and cope with daily demands, challenges and pressures.

The EQ-i was the first measurement of this type to be peer reviewed and published by a psychological test publisher (Bar-On, 1997b). Along with the 133 self-report short sentences, the test utilized a 5-point response scale with a textual response format. This scale ranges from very seldom or not true of me to very often true of me or true of me (Bar-On, 1997b). Raw scores were tabulated and then converted into standard scores. Bar-On (1997a) argued that the higher the scores, the more positive the prediction for effective functioning in meeting daily demands and challenges. Conversely, the lower the scores the less likely to meet daily demands and challenges.

The EQ-i was developed to measure a combination of traits and abilities in order to predict psychological well-being. This combination of traits and abilities is not "...intended to be a specific measure of competencies associated with workplace success" (Brown, Bryant, & Reilly, 2006, p. 345). Much of the information on the validity of the EQ-i appeared as data in the technical manual (Bar-On, 1997b). This report and other studies showed the EQ-i correlates strongly with a number of personality measures, including euroticism on the Big Five, anxiety on the 16PF, depression with the BDI, and alexythymia (Dawda & Hart, 2000; Newsome, Catano, & Day, 2000; Parker et al., 2001). The EQ-i also discriminated between certain groups, such as successful and unsuccessful Air Force recruiters (Handley, 1997, as cited in Bar-On, 1997a), and academically successful and unsuccessful students (Swart, 1996, as cited in Bar-On, 1997a). Finally, the EQ-i appeared unrelated to fluid intelligence (Bar-On, 1997a; Derksen, Katzko & Kramer, 2002).

There was conjecture the EQ-i shares large amounts of variance with existing personality scales (Davies, Roberts & Stankov, 1998). For example, the EQ-i substantially overlaps with measures of anxiety which is a general indicator of social and emotional functioning (Bar-On, 1997a, 2004). These findings led some researchers to believe the EQ-i may be best characterized as a form of personality inventory and not a measure of EI (Mayer et al., 2001; McCrea & Terracciano, 2005). Mayer and Cobb (2000) maintained mixed measures have "...an 'all things bright and beautiful quality to these descriptions that makes them both hard to criticize in the abstract, but also rather suspicious as a description of the emotionally intelligent character" (p. 177). This might make them dubious as descriptors of an emotionally intelligent person.

There was also some doubt about the predictive validity of the self-report measure of EI.

The self-perception of individuals is often inaccurate, which can cause low correlations between

one's actual EI and their measurement scores. Therefore, "...with respect to EI, it is likely that ability and self-report models will yield different representations of the same person (Brackett & Mayer, 2003, p.1147). It was also difficult to differentiate between personality traits and EI using self-report measures (Bastian et al., 2005; Mayer et al., 2001; Newsome et al., 2000; Petrides & Furnham, 2001). Nevertheless, the findings from Palmer et al. (2002) put forth "well conceptualized and developed self-report measures of EI can account for the variance in life criteria over and above other well-established constructs" (p. 1098).

The SRT is a brief self-report scale that was based on Schutte et al. (1998) work. This study originally employed a set of 62 items, drawn from a synthesis of the EI model of the Salovey and Mayer (1990) study, and later amalgamated into to only 33 items. The synthesis resulted in a four-factor solution which supports the theory that EI is a comparatively homogenous construct. Petrides and Furnham (2000b) felt unconvinced about both the brief scale and the factor analysis conducted by Schutte, et al. (1998) and so undertook research for clarification. As a result of their study, Petrides and Furnham (2000b) developed a four-factor structure with the labels Optimism/Mood Regulation, Appraisal of Emotions, Social Skills, and Utilization of Emotions. The work of Saklofske et al. (2003) agreed with Petride and Furham's four-factor structure, as well as their conceptual framework. Despite this agreement however, both Petrides and Furnham (2000b) and Saklofske et al. (2003) felt the need for further study on the validity of the measurement. As with the EQ-i, researchers found it difficult to differentiate between personality traits and EI using the self-report measure of the SRT (Bastian et al, 2005; Mayer et al. 2001; Newsome et al., 2000; Petrides & Furnham, 2000a). Researchers found many of the same issues to be present in the SRT as the EQ-i. As a warning, Goldenberg et al. (2006) cautioned:

Although self-report measures are less cost and labor intensive, findings based on these measures must be tempered by concerns about the nature of the constructs they are tapping into and the possibility that relations to self-report outcomes may be confounded by method variance. (p. 43)

Goleman (1998) presented a model of EI comprised of twenty-five competencies, arrayed in five clusters. These clusters organized several competencies into larger categories, which should be related and have a developmental relationship. These clusters can be measured through statistical analysis and were thought to tell us how "...human organisms demonstrate desired competencies in various settings" (Boyatzis, Goleman, & Rhee, 1999, p. 9). Goleman's model was built on a great deal of prior research and was first tested using an assessment developed by Boyatzis called the Self-Assessment Questionnaire. Reliability and construct validation for this original test had been established from the work of other questionnaire measures and numerous longitudinal studies and was designed and validated primarily for managers and executives. Boyatzis, Goleman, and Rhee (1999) reworked this original questionnaire; adding new questions covering a broad range of competencies for many occupations and real life situations, as well as changing other non-cognitive capabilities. From that time there have been several revisions of this new scale, "...on the basis of factor, cluster and reliability, analyses of the data on the first version of the ECI, a number of competency scales were considered and reclassified" (Boyatzis, Goleman, & Rhee 1999, p.7).

In Goleman's (1998) testing, using the ECI preliminary factory analysis, EI was categorized into 22 competencies, grouped into the three main clusters of:

1. Self-awareness, which included Emotional Self-awareness, Accurate Self-assessment, and Conscientiousness.

- 2. Self-management, which included Self-confidence, Adaptability, Achievement Orientation, Initiative, Change Catalyst, and Self-Control.
- 3. Social Skills, which included Empathy, Service Orientation, Developing Others, Communication, Organizational Awareness, Building Bonds, Collaboration,

Trustworthiness, Leadership, Influence, and Team Capability.

According to Boyatzis, Goleman, and Rhee (1999), "one of the major benefits of the conceptualization of Emotional Intelligence is the potential for establishing causal connections among the various levels of a person's psyche" (p. 15). The ECI achieved that potential. The current edition of this test, the ESCI, used Boyatzis (2009) work and included only 12 competencies, grouped into four clusters and added the Relationship Management cluster. Boyatzis (2009) proposed this work offered a theoretical organization of personality and linked this organization to a theory of action and job performance.

Different testing approaches almost always produce different results. When developing test constructs, fundamental psychometric consideration between measures of typical and maximum performance were often not taken into deliberation (Petrides & Furnham, 2001). Because different testing approaches almost always produce different results, differing instruments can have significant theoretical implications. Therefore, the instrument one chooses for research should be considered carefully.

### **Standard Criteria**

The developers of EI measures have used different definitions of the EI construct, which has resulted in different types and numbers of dimensions for the various measures. Whether one chooses the ability model or the mixed model, tests for EI should meet standard

criteria/predictive validity, reliability, criterion/predictive validity and construct validity (Anastasi & Urbina, 1997). Generalizability and fairness should also be considered (Matthews et al. 2007). Because of the different definitions and measures of EI, there were also different dimensions of these measurements, as well a different response formats. To address these issues, The American Education Research Association continued to set specific testing requirements which authenticate the usefulness of a measure in specific populations and for specific purposes (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, & Joint Committee on Standards for Educational and Psychological Testing, 2014).

In assessing the overlap between the ability-model and mixed-model measures, Mayer and Cobb (2000) found the MSCT and EQ-i to share a .36 correlation and a 13 percent variance. Brackett and Mayer (2003) found these tests to have a .21 correlation, sharing 4 percent of their variance. "The low relationship between different EI measures raises serious concerns about whether they are all measuring the same construct... EI measures have failed to converge on a common construct" (Conte, 2005, p. 437). Investigation into this dilemma supports the theory that trait EI and ability EI appear to be different constructs (Petrides & Furnham, 2000, 2001; Saklofske, Austin, & Minsk, 2003).

Self-report measures appeared to assess existing personality traits or characteristics, or perhaps emotional competencies, but they did not appear to assess intelligence (Conte, 2005; Newsome, Catano, & Day, 2000). On the other hand, Conte (2005) was in agreement with O'Connor, Jr. (2003) in maintaining the MSCT ability model does measure cognitive intelligence. For these reasons, Conte (2005) postulated that self-report measures will be utilized less in the future.

### **Conclusion**

Several authors' have shown EI to make a difference in an educational leader's capacity to successfully endure hardship and continue to thrive in their leadership role. According to Mayer and Salovey (1997), EI gives a leader the "...ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (p. 87). Brackett et al. (2006) also told us, "using emotion involves the ability to harness feelings that assist in certain cognitive enterprises, such as reasoning, problem solving, decision making, and interpersonal communication" (p. 73). These abilities can help a leader come to terms with adversity and remain resilient in a leadership role.

Covey (1990) stated:

The principles of effectiveness are deeply scripted within us, in our conscience and in our quiet reflection on life experience. To recognize and develop them and to use them in meeting our deepest concerns, we need to think differently, to shift our paradigms to a new, deeper, "inside-out" level. (p. 64)

Kouzes and Posner (2011) added, "The mastery of the art of leadership comes with the mastery of the self, and so developing leadership is a process of developing the self" (para. 2). EI is shown to guide one in developing the accurate paradigms and correct principles required to become a leader who can successfully remain resilient through times of adversity (Brackett et al., 2006; Covey, 1990; Kouzes & Posner, 2011).

### **Chapter Three**

## **Research Design and Procedures**

This quantitative research was undertaken as a non-experimental, ex post facto or after-the-fact research, "...in which the investigation starts after the fact has occurred without interference from the researcher" (Salkind, 2010). The question we sought to answer in this study was the following: What is the relationship between an educational leadership position's longevity and a leader's emotional intelligence and resilience in the face of adversity?

The Emotional and Social Competence Inventory (ESCI), using Boyatzis' (2009) work on the theoretical organization of personality, was employed to determine each leader's EI. The Adversity Response Profile (ARP) instrument (Stoltz, 2001) (Appendix A), developed to determine adversity response, was utilized to gauge the leader's ability to overcome adversity. The number of years an educational leader had worked in their current position determined their longevity. These years were self-reported.

### **Research Question and Hypothesis(es)**

The research question is as follows: What is the relationship between an educational leadership position's longevity and a leader's emotional intelligence and resilience in the face of adversity?

The research hypothesis is as follows: There is a relationship between an educational leader's longevity in a position and their emotional intelligence and resilience in the face of adversity.

# **Null Hypothesis**

There is no statistically significant relationship between emotional intelligence and resilience in the face of adversity and an individual's longevity in an educational leadership position. Statistically speaking, the longevity of educational leaders with low emotional intelligence and resilience in the face of adversity would be equal to that of those with high emotional intelligence and resilience in the face of adversity.

## Sample, Population, and Participants

Cozby and Bates (2012) described a population as being "...composed of all individuals of interest to the researcher" (p. 143). Therefore, the population for this study comprised of 935 superintendents, principals, and assistant principals holding an educational leadership position and a level 3 certification, in the State of Montana during the 2017–2018 school year. As determined by means of the Raosoft sample size calculator, the target survey sample was 96, with a confidence level of 88%. A stratified volunteer sample was drawn from this population. Stratification is the process of dividing "...a population into parts known as strata, particularly for the purpose of obtaining a sample" (Everitt, 2002, p. 363). Thus, the population was stratified into groups of 30 superintendents, 30 principals, and 30 assistant principals; volunteer samples were drawn from each stratum. This research targeted the population with a minimum sample of 30, as per the Central Limit Theorem proposed by Hajek, which states "...statistics in the sampling indicators /t/ have the same distributions as certain rank statistics" (Hawkins & Chien-Pai, 1997, p. 27). Since participation was voluntary, sample errors could have occurred due to a disparity in the number or characteristics of the respondents.

To obtain participants, the researcher sent an email requesting participation in this educational research to each of the 935 educational leaders in the State of Montana; 72 initially agreed to participate in the study. Thereafter, the ESCI and ARP instruments were sent to all 72 potential participants. Twenty-four superintendents, 21 principals, and 11 assistant principals completed the ESCI survey, and 26 superintendents, 24 principals, and 11 assistant principals completed the ARP *Qualtrics* survey. Not all participants chose to take both surveys; some only took the ESCI survey, while some only took the ARP survey.

Assistant principals that participated in this study included eight males and three females. The age of these participants ranged from 30–59 and the median age was 41. The principals that participated in this study included 14 males and 10 females. The principals' age ranged from 30–59 and their median age was 49. The superintendents that participated in this study included 19 males and seven females. The superintendents' age ranged from 28–65 and the median age was 43.

The assistant principals who participated years in their current leadership position ranged from three to five years; the median duration served as an assistant principal was 4.3 years. The principals' who participated years in their current leadership position ranged from two to five years; the median duration served was 4.3 years. The superintendents' who participated years serving in their current leadership position ranged from two to five years; the median duration served was 4.5 years.

### **Study Variables**

The independent variables were "...not affected or changed by other variables" (Allen, 2017, para. 1); for this study, these were *emotional intelligence* and *resilience*. The dependent

variable, which "...depends upon the presence or absence of an independent variable...the object of the research" (Allen, 2017, para. 2), was an educational leader's years of longevity in a leadership role. The predictor variables were emotional intelligence and resilience in the face of adversity. These variables were measured at the interval level. The criterion variable was a leader's years of longevity in his/her current position. Its predictor was a correlation at the interval, or a continuous scale, level.

### **Data Collection Procedures**

The data representing EI and resilience consisted of original source data, obtained through the administration of the ESCI to individual participants. The Korn Ferry group owns and manages the ESCI instrument. The ESCI used Boyatzis' (2009) work on the theoretical organization of personality, linked to a theory of action and job performance. To gather emotional intelligence data using the ESCI inventory, the researcher emailed a survey link to each participant along with directions for taking the survey. When all surveys were complete, a representative from the Korn Ferry group sent the researcher the compiled data. The statistical analysis was then completed on this data using the *SPSS* predictive analysis program.

The ARP instrument, developed to determine an individual's resilience, was employed to gauge the leader's ability to overcome adversity and remain resilient. The instrument used a Likert scale, completed by the individual participants.

To gather resilience data, the researcher developed a survey using the ARP instrument and the *Qualtrics* survey platform. The *Qualtrics* survey link was sent to each participant for them to complete the survey. After all surveys were completed, the researcher compiled

gathered data using the *Qualtrics* platform and performed statistical analysis on the data, using the *SPSS* predictive analysis program.

Years of longevity in a leader's current position, as provided by participants, was used to test the dependent variable. Participants reported their years of longevity through the ESCI instrument.

## **Reliability and Internal Validity**

Both instruments were tested by the researcher, using *IBM SPSS Statistics*, for reliability and internal validity. According to Cozby and Bates (2012), an "...outcome is considered significant when there is a .05 or less probability of obtaining the results" (p. 266). Calculations from the SPSS report stated the ARP instrument received a score of .814; the Korn Ferry group (2011) stated the ESCI received a score of .861 (p. 13), indicating an acceptable level of validity. The ESCI instrument thus is considered a valid test of emotional intelligence, while the ARP instrument is considered a valid test of resiliency.

### **Data Analysis**

The research question posed in the study was answered through the analysis of sets of data on EI and resilience and leadership longevity. The researcher used a simple linear regression analysis, where the "...predictors are not only correlated with the criterion, but they also are correlated with the other predictors" (Steinberg, 2011, p. 491). Pallant (2010) stated, "multiple regression is based on correlation, but allows a more sophisticated exploration of the interrelationship among a set of variables" (p. 148). *IBM SPSS Statistics* was used to run the research data for simple linear regression analyses. Data from both the ESCI and the ARP instruments were obtained using a Likert scale. A Pearson's r correlation coefficient was used to

"...measure the strength of the relationship between two variables" (Hauke, & Kossowski, 2011, p. 88).

## A priori Assumptions

The strength of the predictors was tested through the  $R^2$  value, using Pearson's statistical analysis. According to Cohen (1988), a "...correlation greater than .30 is medium and one of .40 is large. This translates into a medium  $R^2$  of .10, and a large  $R^2$  of about .15" (as cited in Steinberg, 2010, p. 493).

Experimental importance was defined as receiving a .500 R<sup>2</sup> value, which portrayed that 50% of the variance in a leader's longevity was explained by the independent variable. Experimental consistency was set at an alpha level of .05. The assumption of normality was satisfied by a randomly selected sample size of 58 participants. To collect data for this study, the independent variables were tested using an ordinal scale; a ratio scale was used for the dependent variables. Stratified random sampling was employed. Observations and measurements were independent of one another. It was assumed that the distribution of samples was normally distributed and samples were obtained from populations of equal variances (Pallant, 2010).

### **Assumptions of Correlations**

Measurements for this study were undertaken at the ordinal level, using the ESCI Emotional Intelligence instrument and a *Qualtrics* survey to measure participants' Adversity Response Profile. Each participant provided scores on both the dependent and independent variables. Observations of the dependent and independent variables were undertaken independent of each other. Data were inspected for normal distribution using a scatterplot. Furthermore, using the scatterplot as well as VIF scores, data were checked for linearity and

homoscedasticity. All data were checked to ensure nothing was missing and there were no unusual numbers.

# **Summary**

Understanding how to remain resilient in the face of adversity, by employing one's emotional intelligences, as well as vulnerabilities, is important for an educational leader's success in the face of adversity. This study sought to determine whether there is a relationship between an educational leader's longevity in a position and their emotional intelligence and resilience in the face of adversity.

Montana educational leaders participating in the study completed independent surveys to determine their emotional intelligence and ability to remain resilient during crises. Data from surveys were analyzed to determine the relationship between longevity in an educational leadership position and the emotional intelligence and resilience of a leader.

## **Chapter Four: Analysis**

Emotional Intelligence behavior competencies have been defined as the underlying abilities that lead to or cause effective performance (Boyatzis, 1982; McClelland, 1973; Spencer & Spencer, 1983). These EI competencies have been found to predict exceptional leadership performance (Boyatzis, 2009; Druskat, Mount, & Sala, 2005). The overarching purpose of this quantitative study was to investigate the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity. This chapter presents a detailed synopsis of the research data and statistical analysis utilized, organized as three main sections: (a) Background, (b) Findings, and (c) Summary.

### **Background**

Participants were the superintendents, principals, or assistant principals holding educational leadership positions in the State of Montana during the 2017–2018 school year. Fifty-eight leaders participated in the ESCI survey; stratified into 11 assistant principals, 24 principals, and 26 superintendents. Sixty-one educational leaders participated in the Adversity Response Profile *Qualtrics* survey; stratified into 11 assistant principals, 25 principals, and 25 superintendents.

Twenty-six superintendents, 24 principals, and 11 assistant principals completed the ARP *Qualtrics* survey. Not all participants chose to take both surveys; some took both the ESCI and ARP surveys, while others only completed the ARP survey.

Eight male assistant principals and three females participated in this study. The age of these respondents ranged from 30–59 and the median age was 41. Fourteen male and 10 female principals participated in the study. The principals' age ranged from 30–59 and their median age

was 49. Nineteen male and seven female superintendents participated in the study. The superintendents' age ranged from 28–65 and the median age was 43.

The years, of assistant principals who participated, serving their current leadership position ranged from three to five years; the median duration served as an assistant principal was 4.3 years. The years, of principals who participated, serving in their current leadership position ranged from two to five years; the median duration served was 4.3 years. The years, of superintendents who participated, serving in their current leadership position ranged from two to five years; the median duration served was 4.5 years

The data representing EI competencies were gathered through the administration of the Emotional and Social Competence Inventory (ESCI) to individual participants. The ESCI is a 68-item test assessing 11 EI competencies: positive outlook, organizational awareness, inspirational leadership, influence, empathy, self-control, self-awareness, conflict management, coach and mentor, adaptability, and achievement orientation. Responses to these questions spanned six categories: never, rarely, sometimes, often, constantly, don't know. This research only used the data from the participant's self-assessment.

The data representing resilience were gathered through administration of the Adversity Response Profile, a *Qualtrics* survey platform. The ARP instrument used a Likert scale for measurement. Twenty questions comprised an overall score assessing the participant's response to four core dimensions: control, ownership, reach and endurance. Years of longevity in a leader's current position, as provided by participants, was used to measure the dependent variable.

Each instrument had been tested by the researcher, using *IBM SPSS Statistics*, for reliability and internal validity. Gathered data showed Chronbach scores of .723 and .814,

indicating an acceptable level of validity. Moreover, both tests had been documented to show acceptable test-retest reliability, suggesting a potential for higher level of confidence in the overall research validity pertaining to the study (Grandy, 2009; L & T Direct & the McClelland Center for Research and Innovation Hay Group, 2011). The research instruments used were designed specifically to measure both the criterion and dependent variables of interest (Avolio & Bass, 2004; Boyatzis, Goleman, & Rhee, 1999; Goleman, 1998; Stoltz, 2001).

## **Findings**

Linear regression was used to examine the proportion of variance in the dependent variable that could be explained by emotional intelligence and resilience. Experimental importance was defined as .500 R<sup>2</sup> value, which tells us that 50% of the variance in a leader's longevity can be explained by the independent variable. Alpha was set at .05. Linear regression analyses determined the effect size of the observation. As was stated by Cohen (1988), "...a correlation greater than .30 is medium and one of .40 is large" (as cited in Steinberg, 2010, p. 493).

To evaluate the reliability of the scales, Cronbach's alpha test was used to measure internal consistency. According to Tavakol and Dennick (2011), "...internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test" (p.1). This measurement is expressed as a number between 0 and 1. Chronbach (1970) stated that scores of .70 or higher indicate an acceptable level of reliability. Analysis from the KornFerry group (2011), the administrators of the ESCI instrument, stated the following competencies received individual scores; this further indicates an acceptable level of validity, as is shown in Table 1.

Table 1
Chronbachs Alpha Scores

Competency	a
Positive Outlook	.86
Organizational Awareness	.86
Inspirational Leadership	.89
Influence	.84
Empathy	.86
Emotional Self-Control	.91
Emotional Self-Awareness	.83
Conflict Management	.79
Coach and Mentor	.92
Adaptability	.85
Achievement Orientation	.86
Adversity Response	.81

Table 2 shows the standard error of estimate calculations, which according to Holcomb (2017), determines the amount of dispersion for the prediction equation. The standard error of the estimate was assessed to establish the variability and dispersion of each regression model. As a precautionary note, according to Norušis (2005), with the small samples of n = 11, 21, and 24, the standard error of the estimate might have been inordinately small.

The standard error of the estimate calculations portray the largest variability, or dispersion, for assistant principal population to be included in inspirational leadership competency. The least variability in the assistant principal population is shown for the coach and mentor competencies. Analysis for the population of principals shows a larger dispersion and

lesser uniformity than the assistant principal and superintendents' data analysis. The adaptability competency, which shows more uniformity, is the exception; thus, it is closer to the population mean. Analysis for the superintendent population shows calculations for all competencies to have low variabilities, except for the dispersion of conflict management competency.

Table 2
Standard Error of the Estimate

Competency	Assistant Principal	Principal	Superintendent	Total	Mean
Positive Outlook	0.83	1.13	0.86	2.82	0.94
Organizational Awareness	0.87	1.13	0.87	2.88	0.96
Inspirational Leadership	2.27	1.12	0.87	4.26	1.41
Influence	0.87	1.12	0.86	2.86	0.95
Empathy	0.77	1.13	0.87	2.78	0.93
Emotional Self-Control	0.80	1.14	0.81	2.75	0.92
Emotional Self-Awareness	0.79	1.11	0.88	2.79	0.93
Conflict Management	0.76	1.22	1.06	3.05	1.02
Coach and Mentor	0.68	1.13	0.87	2.68	0.89
Adaptability	0.87	0.32	0.87	2.06	0.69
Achievement Orientation	0.84	1.12	0.88	2.83	0.95

In Table 3, the simple linear regression calculations show the prediction of years in an educational leadership position based on the leader's emotional intelligence traits. According to Cohen (1998), statistical hypothesis inference testing shows "... the degree to which the

phenomenon is present in the population" (p. 9). For this study, experimental consistency was set at alpha .05~a~priori. Accordingly, the ability to coach and mentor was shown to have a statistically significant relationship to the number of years in an assistant principal's position. There were no statistically significance relationships identified between the years in a principal position and any of the related competencies. There was a statistically significant relationship between positive outlook and self-control for the number of years in a superintendent's position. There were no statistically significant relationships between the other eight competencies and longevity in an educational leadership position. These remaining eight competencies failed to reach the a~priori threshold of p < .05; therefore, this research failed to reject the null hypothesis for these competencies.

Table 3

Regression Table

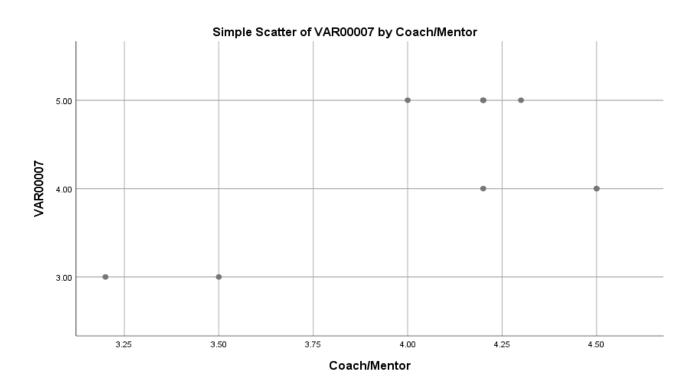
Regression Tuble			
Competency	Assistant Principal	Principal	Superintendent
Positive Outlook	(F(1, 8) = .95, p = .36)	(F(1, 21) = 1.11, p = .30	(F(1, 24) = .05, p = .04)*
Organizational Awareness	(F(1, 8) = .03, p = .87)	(F(1, 21) =32, p = .58)	(F(1, 24) =15, p = .70)
Inspirational Leadership	(F(1, 8) = .39, p = .42)	(F(1, 21) = .76, p = .40)	(F(1, 24) =68, p = .42)
Influence	(F(1, 8) = .06, p = .82)	(F(1, 21) = .65, p = .43)	(F(1, 24) =68, p = .42)
Empathy	(F(1, 8) = 2.35, p = .16)	(F(1, 21) = .12, p = .73)	(F(1, 24) = .16, p = .97)
Self-Control	(F(1, 8) = 1.45, p = .26)	(F(1, 21) = .00, p = .10)	(F(1, 24) = .44, p = .05)*
Self-Awareness	(F(1, 8) = 1.70, p = .23)	(F(1, 21) = 1.20, p = .29)	(F(1, 24) = .04, p = .84)
Conflict Management	(F(1, 8) = 2.50, p = .15)	(F(1, 21) = .68, p = .42)	(F(1, 22) = .2.2, p = .15)
Coach and Mentor	(F(1, 8) = .04, p = .05)*	(F(1, 21) = .39, p = .54)	(F(1, 24) = .22, p = .65)
Adaptability	(F(1, 8) = .15, p = .71)	(F(1, 21) = .1.93, p = .18)	(F(1, 24) = .17, p = .68)
Achievement Orientation	(F(1, 8) = .57, p = .47)	(F(1, 21) = .76, p = .39)	(F(1, 24) = .09, p = .76)

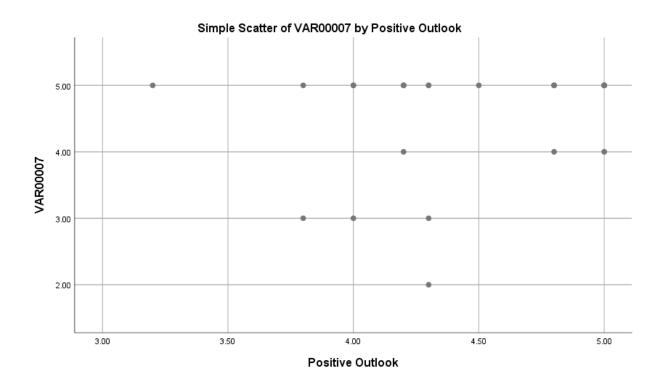
Note: \*p < .05

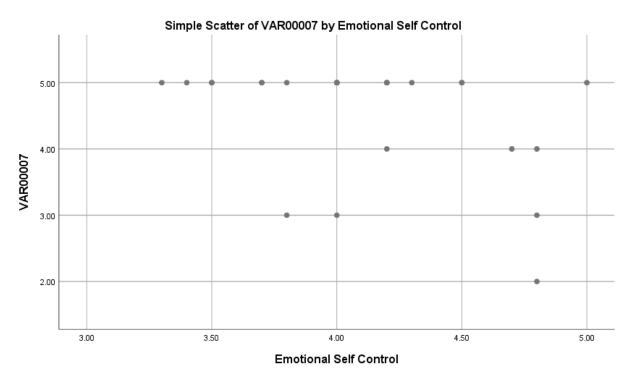
While examining the scatterplots within and across variables, the following linear relationships were found. Outliers were present in each of these relationships.

- Assistant principals—organizational awareness, inspirational leadership, influence, empathy, and coach and mentor.
- Principal—self-awareness, adaptability, and conflict management.
- Superintendent—influence, emotional control, conflict management, achievement orientation, self-awareness, and coach and mentor.

Furthermore, coaching and mentoring, positive outlook, and emotional self-control were shown to have a statistically significant relationship for assistant principals and superintendents.







In Table 4, regression calculations show the variance in years of an educational leader's longevity, explained by their emotional intelligence competencies. "R Square, known as the

coefficient of determination, indicates the proportion of variance of the dependent variable (years in a leadership position) that can be explained by variation that also occurs in the independent variable" (Holcomb, 2017, p.117). Accordingly, with a .43 predicted variance, an educational leader's years of service is most greatly influenced by their ability to coach and mentor their staff. With such ability explaining 40% of the predicted variability in their years of service, this strand of EI is especially important for assistant principals. The ability to adapt to a given situation is a principal's most important EI with an 8.4% predicted variance, followed by emotional self-awareness, with a 5.4% variance. According to this data, superintendents benefit the most from the ability to manage conflict, with a 9.1% variance, and maintain a positive outlook, with a 4.4% variance.

Table 4

R Square Value

Competency	Assistant Principal	Principal	Superintendent	Total	Mean
Positive Outlook	0.11	0.02	0.04	0.17	0.05
Organizational Awareness	0.00	0.02	0.01	0.02	0.01
Inspirational Leadership	0.05	0.04	0.03	0.11	0.04
Influence	0.01	0.03	0.04	0.07	0.02
Empathy	0.23	0.01	0.01	0.24	0.08
Emotional Self-Control	0.15	0.00	0.01	0.16	0.05
Emotional Self-Awareness	0.18	0.05	0.00	0.23	0.08
Conflict Management	0.24	0.03	0.09	0.36	0.12
Coach and Mentor	0.40	0.02	0.01	0.43	0.14
Adaptability	0.02	0.08	0.01	0.11	0.04

Achievement Orientation 0.07 0.04 0.00 0.11 0.04

Overall, assistant principals' and principals' years of service is more strongly influenced by all EI competencies than that of the superintendents. This may be so since assistant principals and principals often work more closely with staff and students than superintendents do.

Table 5 shows the effect size calculations from the unstandardized coefficients in the simple linear regression. These calculations were carried out in SPSS, using a linear regression. The unstandardized coefficients predict years in a leadership position, based on the leader's emotional intelligence competencies. The participants' predicted years in a leadership position are equal to years in a leadership position + the competency interval.

The assistant principals' years in a leadership position were most greatly affected by coaching and mentoring, conflict management, and empathy, with gains of 1.24, 1.08, and 1.07 years for each competency interval respectively. Principals showed the largest effects from influence, positive outlook, and organizational awareness. However, these effects were much smaller than that of the assistant principals', with gains of only .39, .37, and .32 years respectively. This could be owed to the disparity in sample sizes. The superintendents' greatest effects came from inspirational leadership and influence. These were much less significant than the assistant principals' effects, of only .34, and .29 years. The greatest effects for the mean of the three leadership strata were coach and mentor, positive outlook, and empathy, with .36, .30, and .33 variance respectively.

Inspirational leadership showed the least effect on assistant principals with a decrease of -.102 years for each interval measured. Principals were least affected by achievement orientation, with a decrease of -.53 years for each interval measured. Superintendents were least affected by conflict management and emotional self-control with a decrease of -.73 years for each interval of

awareness. Emotional self-awareness showed the least affect of the mean, with a decrease of - .58 years for each interval of awareness.

Table 5
Unstandardized Coefficient Effect Size

Competency	Assistant Principal	Principal	Superintenden t	Total	Mean
Positive Outlook	2.48 + .42	2.89 + .37	4.76 +11	10.13 + .90	3.38 + .30
Organizational Awareness	3.70 + .14	2.75 + .32	3.81 + .16	10.26 + .62	3.42 + .21
Inspirational Leadership	5.19 +-1.02	5.87 +41	3.38 + .34	14.44 + .62	4.81 + .21
Influence	3.67 + .16	2.63 + .39	3.38 + .29	9.68 +27	3.23 +09
Empathy	07 + 1.07	5.07 +22	5.08 + .14	10.08 + .99	3.36 + .33
Emotional Self- Control	1.68 + .62	4.20 +01	7.53 +73	13.41 +12	4.47 +04
Emotional Self- Awareness	6.65 +62	5.65 +39	4.75 +06	17.05 + -1.74	5.68 +58
Conflict Management	28 + 1.08	6.26 +50	7.24 +73	13.22 +15	4.41 +05
Coach and Mentor	.77 + 1.24	5.42 +30	3.90 + .15	10.09 + 1.09	3.36 + .36
Adaptability	3.24 + .26	3.83 + .09	5.19 +16	12.26 + .19	4.09 + .06
Achievement Orientation	2.34 + .47	6.62 +53	4.03 + .11	12.99 + .05	4.33 +.02

Table 6 shows the analysis for adversity response. The standard error of the estimate for adversity response shows a wide variability, with superintendents having the least dispersion.

The simple linear regression analysis shows that there is no statistically significant relationship between adversity response and years of service in an educational leadership position; it failed to reach the *a priori* threshold of p < .05. Therefore, this research failed to reject the null hypothesis for adversity response.  $R^2$  calculations showed that less than 2% variability in years of service can be explained by an educational leader's adversity response. The principals' years in a leadership position showed the largest effect from adversity response, with a .07 yearly increase.

Table 6

Adversity Response

Analysis	Assistant Principal	Principal	Superintendent
Standard Error of the Estimate	6.04	6.91	4.21
Regression	(F(1, 11) = .11, p < .75)	(F(1, 25) = .46, p < .50)	(F(1, 25) = .46, p < .50)
R Square Value	0.01	0.02	0.00

### **Summary**

This chapter presented the data analysis of the ESCI and ARP quantitative surveys. Analysis data were presented in tables 1 through 5. These demonstrated that some EI competencies appear to have an effect on the longevity of an educational leader in a position; however, the effects vary among assistant principals, principals, and superintendents. While there was a statistically significant relationship between three competencies and the longevity of an educational leader, eight competencies failed to reach the *a priori* threshold of p < .05. Therefore, this research failed to reject the  $H_1$  null hypothesis for these competencies. No statistically significant relationship was found between adversity response and the longevity of

an educational leader. The adversity response competency failed to reach the *a priori* threshold of p < .05; therefore, this research failed to reject the  $H_1$  null hypothesis for adversity response. The coefficient of determination analysis showed the assistant principals' and principals' years' of service is more strongly influenced by all emotional intelligence competencies than the superintendent's years of service.

## **Chapter Five: Conclusions**

This chapter presents the conclusions of the research study, linked to the literature review, and a discussion on the highlights of findings trying to determine the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity. Clifford and Chiang (2016) stated, "new principals and experienced principals that are new to schools need between three and five years to have an impact on student achievement" (p. 2). As a factor impacting the longevity in an educational leadership role, "…emotional intelligence, the softer side of our intelligences, has considerable implications for the field of leadership" (Maulding, 2002, p.5).

As indicated in the data analysis in Chapter Four, the ability to coach and mentor is shown to have a statistically significant relationship to longevity and resilience for assistant principals. Moreover, there existed some linearity and consequent effect for inspirational leadership, influence, empathy, and coach and mentor; this supports Rode's (2007) findings where EI was shown to be "related to effective interactions among individuals because it helps individuals monitor their own and others' behaviors" (Rode et al., 2007, p.404).

There is no statistical significance between any of the competencies and the principals' years of leadership. However, some linearity was found to support a small effect from self-awareness, adaptability, and conflict management. This supports the findings from Salovey et al.'s (1999) theory that emotional self-awareness, self-control expression, and self-management buffer the effects of aversive events. Furthermore, Armstrong, Critchley and Galligan (2011) have stated that the life event-distress relationship was weaker for participants with higher levels of emotional self-awareness, emotional expression, emotional self-control, and, especially, emotional self-management.

There was a statistically significant relationship between positive outlook and self-control for superintendents. This finding concurs with the large body of work that found a positive correlation between emotional intelligence and the higher levels of positive affect, and lower levels of negative affect and greater life satisfaction (Austin, Egan, & Saklofske, 2005; Austin, Minski, & Saklofske, 2003; Brackett & Mayer, 2003; Brackett, Mayer, & Warner, 2004; Byrne, & Schutte, & Wing 2006; Gannon and Ranzijn, 2004; Hollander, Malouff & Schutte, 2011, & Malouff, Schutte, & Simunek, 2002). Moreover, significant positive associations have been established with EI, empathy, mood regulation, self-monitoring, and interpersonal relationships (Mayer et al., 1999; Petrides & Furnham, 2002; Schutte et al., 2007).

Analysis from the coefficient of determination showed that an educational leader's length of service is heavily influenced by their ability to coach and mentor their staff. Since such ability explains 40% of the variability in their years of service, this strand of EI is especially important for assistant principals. Additionally, the effect size analysis indicates the importance of coaching and mentoring, added conflict management, and empathy as being important to an educational leader's resilience and longevity in a position. These competencies can work hand-in-hand in a leadership position, which is supported by research showing a strong relationship between EI and better managerial competencies and leadership effectiveness (Gardner & Stough, 2002; Rosete & Ciarrochi, 2005; Wong & Law, 2002). Furthermore, this is in agreement with Cheng (1994), who advised that "a principal's role is to develop, shape and transform their staff's assumptions, values, and beliefs about the school's purpose, instructional methods, and rapport" (p.309).

The ability to adapt to a given situation is a principal's most important emotional competency, followed by emotional self-awareness. Mayer and Salovey (1997) have stressed the

importance of "...recognizing how an individual and those around the individual are feeling...and the capacity to perceive and to express feelings" (p.19). Influence, positive outlook, and organizational awareness have further showed a small effect on the principals' position, which was in accordance with Cheng's (1994) findings. Hooijberg, Dodge, and Hunt (1997) additionally advised that "the cognitive complexity, social intelligence, and behavioral complexity of strategic leaders positively affects the essence of strategic leadership" (p. 539). According to Bastian et al. (2005), this information is important since "emotional intelligence might enable a person to become aware of relationships between mood and performance and to direct their efforts into activities best suited for certain emotional states."

The coefficient of determination indicated that a superintendent will benefit most from the ability to manage conflict, and maintain a positive outlook. A superintendent's greatest effects are derived from inspirational leadership and influence. By utilizing these abilities, studies have indicated that persons with high EI scores make better managers and are better able to build superior team efficiency (Brackett & Salovey, 2006; Gardner & Stough, 2002; Goleman, 1998; Hollenbeck, De Rue & Guzzo, 2004; Jain & Sinha, 2005; Rosete & Ciarrochi, 2005; Van Rooy & Viswesvaran, 2004). Moreover, maintaining a positive outlook is important, since as Leithwood et al. (2008) advised:

The most successful school leaders are open-minded and ready to learn from others. They are also flexible rather than dogmatic in their thinking within a system of core values, persistent (e.g. in pursuit of high expectations of staff motivation, commitment, learning and achievement for all), resilient and optimistic. Such traits help explain why successful leaders facing daunting conditions are often able to push forward when there is little reason to expect progress. (p.14)

The greatest effects for the mean of the three leadership stratas were coach and mentor, positive outlook, and empathy. However, Feyerherm, and Rice (2002) posited, "...one must look at the various components. Not all components are related to the same performance outcomes" (p.359). Correspondingly, Rode, Arthaud-Day, Baldwin, Bommer, Mooney, Near, and Rubin (2007) found emotional intelligence to be "...significantly related to performance only in contexts with explicitly strong emotive content. In other words, the type of performance does matter" (p.412). This study found that not all competencies had an effect on longevity in a leadership position; however, as Feyerherm and Rice (2002) admonished, "there is more complexity associated with the relationship of team performance and team and leader emotional intelligence than meets the eye" (p.359).

## **Findings**

The role of an educational leader can be, at once, exciting, fulfilling, challenging, and demanding. Managing one's emotions, in the effort to overcome obstacles and remain successful in the long-term in an educational leadership position requires diligence and care. There are several factors influencing the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity. While findings from this study have failed to yield results linking all emotional competencies to the former body of research, several competencies do appear to have an effect on the longevity in an educational leadership position.

Assistant principals especially benefit from the competencies of coaching and mentoring, conflict management, empathy, organizational awareness, inspirational leadership, and influence. Principals benefit most from the ability to adapt, to influence their staff and resolve conflicts, and

to have a positive outlook. Superintendents benefit most from the ability to manage conflict, coach and mentor, inspirational leadership and influence, and the ability to maintain a positive outlook and be achievement oriented.

#### **Recommendations for Future Study**

Research shows a strong relationship between better managerial competencies and leadership effectiveness (Gardner & Stough, 2002; Rosete & Ciarrochi, 2005; Wong & Law, 2002). Particularly, the competencies found to have the greatest effect and to encourage inspiring, resilient educational leadership, are the abilities to coach and mentor, manage conflict, and remain self-aware and positive. "By selecting and implementing the most effective strategies, emotionally intelligent individuals should achieve a pronounced influence on others' emotions, and emerge as leaders" (Côte et al., 2010, p.301). Due to this, additional training on coaching and mentoring, and conflict resolution skills would be especially beneficial to leaders. Such training could also positively influence a leader's ability to remain self-aware and positive.

The limitations of this study include the small participant size. To address this limitation, it would be beneficial to expand this research to include all educational leaders nation-wide. Furthermore, it would be beneficial to study retired and former educational leaders. There are numerous retired and former educators in Montana and this could increase study participants. The researcher would also know these leader's exact years of longevity. This knowledge could be beneficial for understanding the correlation between an educator's years in an educational leadership position and their emotional intelligence and resilience. Therefore, it is recommended that this research be replicated with a nation-wide study and that it include the study of retired

and former educational leaders. These replicated studies would encourage larger sample sizes and greater generalizability.

Another significant limitation of this study was that participants completed surveys as a self-assessment. According to Atwater and Yammarino (1992), "...self-ratings tend to be inflated" (p.1). Thus, the data used may have gaps or blind-spots between the participant's self-assessment and participant's emotional intelligence as perceived by others. A body of research has found that higher levels of agreement between managerial "self" and "other" behavioral ratings are associated with managerial effectiveness and performance (Atwater & Yammarino, 1992; Church, 1997; Sala, 2001; Van Velsor, Leslie, & Taylor, 1993). Therefore, it is recommended that this research be replicated using raters to assess the participant's emotional intelligence.

## **Recommendations for Practitioners/Others**

This study provides educational leaders with the information and tools that can be used to develop strategies to increase their longevity in a position. Additionally, it provides school boards with information to guide them in offering training and support to educational leaders. The guiding question of this study pertained to the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity. Findings support the position that emotional intelligence and resiliency are important factors for longevity in an educational leadership position. However, certain emotional competencies are more effective than others in promoting this longevity. The Coalition for Teaching Quality (2015) admonished that "policymakers must invest in strategies that develop

and retain well-prepared individuals" (p.7). Thus, it is important that educational leaders and their boards focus professional development on the most effective competencies.

The importance of ability regarding leadership skills is a thoroughly researched theory associated with conflict management (Zammuner, Sbrascini, & Veerzeletti, 2013), problem solving, and self-awareness (Anand & Udayasuriyan, 2010). In accordance with this research, the study findings suggest that an educational leader's professional development and training should include coaching and mentoring and conflict resolution skill development to further promote the leader's emotional intelligence and resilience. Furthermore, the findings suggest that professional development and training should be specific to the particular type of educational leader. This study has also provided the basis for future research studies to focus on the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity.

#### References

- Ackerman R. H. & Maslin-Ostrowski, P. (2004). The wounded educational leader, 61(7), 1-6.

  Retrieved from www.ascd.org/publications/educatonal-leadership/apr04/vol61/num07/The-Wounded-Leader.aspx.
- Agnolia, S., Baldaro, B., Mancini, G., Pozzoli, T., Russo, P., & Surcinelli, P. (2012). The interaction between emotional intelligence and cognitive ability in predicting scholastic performance in school-aged children. *Personality and Individual Differences*, 53(5), 660-665.
- Allen, M. (2017). The sage encyclopedia of communication research methods. *Sage Research Methods*. Retrieved from <a href="http://methods.sagepub.com/reference/the-sage-encyclopedia-of-communication-research-methods/i15382.xml?fromsearch=true">http://methods.sagepub.com/reference/the-sage-encyclopedia-of-communication-research-methods/i15382.xml?fromsearch=true</a>
- Alsbury, T. L. (2008). School board member and superintendent turnover and the influence on student achievement: An application of the dissatisfaction theory. *Leadership and Policy in Schools*, 7(2), 202-229.
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, & Joint Committee on Standards for Educational and Psychological Testing. (2014). Standards for educational and psychological testing. Washington, DC: AERA.
- Anand, R. & Udayasuriyan, G. (2010). Emotional intelligence and its relationship with leadership practices. International Journal of Business and Management. 5(10). 65.
- Anastasi, A. & Urbina, S. (1997). Psychological testing. 7th Edition, New York, NY: Prentice Hall. Armstrong, A., Critchley, C. R., & Galligan, R. F. (2011). Emotional intelligence

- and psychological resilience to negative life events. *Personality and Individual Differences*, 51, 331–336.
- Ashkanasy, N. M. & Daus, C. S. (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. *Journal of Organizational Behavior*, 26(4), 441-452.
- Atwater, L. E. & Yammarino, F. J. (1992). Does self-other agreement on leadership perceptions moderate the validity of leadership and performance predictions? Personnel Psychology, 45, 141-164.
- Austin, E. J. (2003). An investigation of the relationship between trait emotional intelligence and emotional task performance. *Personality and Individual Differences*, (36), 1855-1864.
- Austin, E. J., Egan, V., & Saklofske, D. H. (2005). Personality, well-bng and health correlates of trait emotional intelligence. *Personality and Individual Differences*, 38(3), 547-558.
- Baer, R. A., Allen, K. B., & Smith, G. T. (2004). Assessment of mindfulness by self-report: The Kentucky inventory of mindfulness skills. *Assessment*, 11(3), 191-206.
- Baker, B. & Cooper, B. (2005). Do principals with stronger academic backgrounds hire better teachers? Policy implications for improving high-poverty schools. *Educational Administration Quarterly*, 41(3), 413-448.
- Bardach, R. H., (2008). Leading schools with emotional intelligence: A study of the degree of association between middle school principal emotional intelligence and school success. (Unpublished doctoral dissertation). Capella University.
- Barlett, C. P. & Anderson, C. A. (2011). Direct and indirect relations between the big 5 personality traits and aggressive and violent behavior. Personality and Individual Differences, 52, 870-875.

- Barling, J., Kelloway, K. E., & Slater, F. (2000). Transformational leadership and emotional intelligence: An exploratory study. *Leadership and Organizational Development Journal*, 21(3), 157-161.
- Bao, X., Kong, F., & Xue, S. (2015). Dispositional mindfulness and perced stress: The role of emotional intelligence. Journal *of Personality and Individual Differences*, 78, 48-52.
- Bar-On, R. (1997a). The Bar-On Emotional Quotient Inventory (EQ-i): A test of emotional intelligence. Toronto, Canada: Multi-Health Systems.
- Bar-On, R. (1997b). The Bar-On Emotional Quotient Inventory (EQ-i): Technical manual.

  Toronto, Canada; Multi-Health Systems.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18, 13-25.
- Barth, R. S. (2002). The Culture Builder. Educational Leadership, 59(8), 6-11.
- Bass, B. M. (1985). Leadership and performance beyond expectations. New York, NY: The Free Press.
- Bass, B. M. & Avolio, B. J. (2007). Transformational leadership and organizational culture. *International Journal of Public Administration*, 17(3-4), 541-554.
- Bastian, V. A., Burns, N. R., & Nettelbeck, T. (2005). Emotional intelligence predicts life skills, but not as well as personality and cognitive abilities. *Personality and Individual Differences*, 39(6), 1135-1145.
- Beatty, B. R. (2001). The emotions of educational leadership: breaking the silence. *International Journal of Leadership in Education: Theory and Practice*, 3(4), 331-357.

- Ben-Avi, N., Heller, D., & Toker, S. (2018). If stress is good for me, it's probably good for you too; Stress mindset and judgment of others. *Journal of Experimental Social Psychology*. 74, 98-110.
- Berman, P. & McLaughlin, M. W. (1978). Federal programs supporting educational change, vol.

  VII: Implementing and sustaining innovations. *Prepared for the U.S. Office of Education Department of Health, Education and Welfare*, Santa Monica, CA: RAND.
- Bond, F. W. & Bunce, D. (2000). Mediators of change in emotion focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology*, 5(1), 156-163.
- Boyatzis, R.E. (1982). The competent manager: A model for effective performance. New York, NY. Wiley.
- Boyatzis, R.E. (2009). Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development*, 28(9), 749-770.
- Boyatzis, R. E., Goleman, D., & Rhee, K. (1999). Clustering competence in emotional intelligence: Insights from the emotional competency inventory. *Consortium for Research on Emotional Intelligence in Organizations*. Retrieved from <a href="http://www.consortium.org/pdf/eci\_acticle.pdf">http://www.consortium.org/pdf/eci\_acticle.pdf</a>.
- Boyatzis, R. E., Stubbs, E. C., & Taylor, S. N. (2002). Learning cognitive and emotional intelligence competencies through graduate management education. *Academy of Management, Learning & Education*, 1(2), 150-162.
- Boyatzis, R. E. & Sala, F. (2004). Assessing Emotional Intelligence Competencies. Glenn Geher (Eds.). *The Measurement of Emotional Intelligence*, Hauppauge, NY: Nova Science Publishers.

- Brackett, M. A. & Mayer, J. D. (2003). Convergent, discriminant, and incremental validity of competing measures of emotional intelligence. *Personality and Social Psychology Bulletin*, 29(9), 1147-1158.
- Brackett, M. A., Lerner, N., Rivers, S. E., Salovey, P., & Shiffman, S. (2006). Relating emotional abilities to social functioning: A comparison of self-report and performance measures of emotional intelligence. *Personality and Social Psychology*, 91(4), 780-795.
- Brackett, M. A., Mayer, J. D., & Warner, R. M., (2004). Emotional intelligence and its relation to everyday behavior. *Personality and Individual Differences*, (36), 1387-1402.
- Brackett, M. A. & Salovey, P. (2006). Measuring emotional intelligence with the Mayer-Salovey-Caruso emotional intelligence test (MSCT). *Psicotherma*, 18, 34-41.
- Branch, G. F., Hanusheck, E. A., & Rivkin, S. G. (2013). School Leaders Matter: Measuring the impact of effective principals. *Educationnext.org*, *Winter*. Retrieved from <a href="http://hanushek.stanford.edu/sites/default/files/publications/Branch%2BHanushek%2BRivkin%202013%20EdNext%2013%281%29\_0.pdf">http://hanushek.stanford.edu/sites/default/files/publications/Branch%2BHanushek%2BRivkin%202013%20EdNext%2013%281%29\_0.pdf</a>
- Brown, W. F., Bryant, S. E., & Reilly, M. D. (2006). Does emotional intelligence-as measured by the EQ-i-influence transformational leadership and/or desirable outcomes? *Leadership* and *Organizational Development Journal*, 27(5), 330-351.
- Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848.
- Browne-Ferrigno, T. & Muth, R. (2010). Recruitment and retention of quality principals:

  Essential for successful schools. *CAPEA Education Leadership and Administration*,

  DEStech Publication, Inc., 20, 19-45.

- Burns-Neilson, D. (2002). Who will teach Montana's children; 2002 follow up study. *Montana Board of Public Education*.
- Byrd, J., Drews, C., & Johnson, J. (2006). Factors impacting superintendent Turnover: Lessons from the field. *Annual Meeting of the University Council of Educational Administration* (UCEA). Reports Research; Speeches/Meeting Papers, 1-24.
- Cantor, N. & Kihlstrom, J. F. (1987). Personality and social intelligence. Englewood Cliffs, NJ:

  Prentice Hall.
- Cheng, Y. C. (1994). Principal's leadership as a critical factor for school performance: Evidence from multi-levels of primary schools. *School Effectiveness and School Improvement*, 5(3), 299-317.
- Chronbach, L.J. (1970). We should measure change or should we. *Psychological Bulletin*, 74(1), 68-80.
- Church, A. H. (1997). Managerial self-awareness in high-performing individuals in organizations. Journal of Applied Psychology, 82 (2), 281-292.
- Ciarrochi, J. V., Caputi, P., & Chan, A.Y. C. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28, 539-561.
- Ciarrochi, J. V., Bajgar, J., & Chan, A.Y. C. (2001). Measuring emotional intelligence in adolescents. *Personality and Individual Difference*, (31), 1105-1119.
- Ciarrochi, J. V., Dean, F. P., Heaven, P. C. L., & Scott, G. (2002). Relations between social and emotional competence and mental health: a construct validation study. *Personality and Individual Differences*, 35, 1947-1963.
- Ciarrochi, J. V. & Scott, G. (2006). The link between emotional competence and well-bng: A longitudinal study. *British Journal of Guidance & Counseling*, 34(2), 231-243.

- Clavien, P. A. & Deiss, J. (2015). Ten tips for choosing an academic chair. *Nature*. 519(3), 286.
- Clifford, M. & Chiang, E. (2016). The great American principal turnover and how districts can stop the churn. *Real Clear Education*. Retrieved from:

  Http://www.realcleareducation.com/articles/2016/08/25/the\_great\_american\_principal\_turnover\_1303.html.
- Coalition for Teaching Quality. (2015). Building a strong and divers teacher and principal recruitment pipeline. *Coalition for Teaching Quality*. Retrieved from <a href="http://nces.ed.gov/programs/digest/d14/tables/dt14\_208.20.asp?current=yes.2www.act.or">http://nces.ed.gov/programs/digest/d14/tables/dt14\_208.20.asp?current=yes.2www.act.or</a>
  <a href="http://nces.ed.gov/programs/digest/d14/tables/dt14\_208.20.asp?current=yes.2www.act.or">http://nces.ed.gov/programs/digest/d14/tables/dt14\_208.20.asp?current=yes.2www.act.or</a>
  <a href="http://nces.ed.gov/programs/digest/d14/tables/dt14\_208.20.asp?current=yes.2www.act.or">http://nces.ed.gov/programs/digest/d14/tables/dt14\_208.20.asp?current=yes.2www.act.or</a>
- Conte, J. M. (2005). A review and critique of emotional intelligence measures. *Journal of Organizational Behavior*, 26(4), 433-440.
- Cote, S., Lopes, P. N., Miners, C. T. H., & Salovey, P. (2010). Correlation to emotional intelligence and leadership emergence in small groups. *Leaders*, 21(3), 496-508.
- Covey, S. R. (1991). Principle-centered leadership. New York. NY: Free Press.
- Cozby, P. C. & Bates, S. C. (2012). Methods in behavioral research. New York, NY: McGraw-Hill.
- Crede, M. & Harms, P. D. (2010). Emotional intelligence and transformational and transactional leadership: A meta-analysis. *Leadership Institute Faculty Publications*, University of Nebraska-Lincoln. Retrieved from http://digitalcommons.unl.edu/leadershipfacpub/14.
- Cohen. J. (1990). Things I have learned (so far). American Psychologist, 45, 1304–1312.
- Cohen, J. (1994). The earth is round d (p<.05). American Psychologist, 49, 997-1003.
- Cronbach, L. J. (1960). Essentials of psychological testing. Science, 131(3408), 1209-1210.

- Davies, M., Roberts, R. D., & Stankov, L. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology: Personality Processes and Individual Differences*, 75(4), 989-1015.
- Daya, A. L. & Carrol, S. A. (2004). Using an ability based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviors.

  \*Personality and Individual Differences\*, 36, 1443–1458.
- Dawda, D. & Hart, S. D. (2000). Assessing emotional intelligence: reliability and validity of the bar-on emotional quotient inventory in university students. *Personality and Individual Differences*, 28, 797-812.
- Deikman, A. J. (1982). The observing self: Mysticism and psychotherapy. Boston, MA: Beacon Press.
- Derkensen, J., Katzko, M., & Kramer, I. (2002). Does a self-report mesure for emotional intelligence assess something different than general intelligence. *Personality and Individual Differences*, 32(1), 37-48.
- Donaldson-Feilder, E. J. & Bond, F. (2004). The relative importance of psychological acceptance and emotional intelligence to workplace well-bng. *British Journal of Guidance & Counseling*, 32(2), 187-203.
- Doyle, D. & Locke, G. (2014). Lacking leaders: The challenges of principal recruitment selection, and placement. Washington, D.C.: Thomas B. Fordham Institute.
- Druskat, V. U. & Wolff, S. B. (2001). Building the emotional intelligence of groups. *Harvard Business Review*. Retrieved from http://faculty.washington.edu/jwhelan/Articles/Druskat%20and%20Wolff%20copy.pdf.

- Druskat, V. U., Mount, G., & Sala, F. (2005). Linking emotional intelligence and performance at work: Current research evidence with individuals and groups. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Edgar, C., McRorie, M., & Sneddon, I. (2012). Emotional intelligence, personality and the decoding of non-verbal expressions of emotion. *Personality and Individual Differences*, 52, 295-300.
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, 37(1), 15-18, 20-24.
- Everitt, B. S. (2002). The cambridge dictionary of statistics. New York, NY: Cambridge University Press.
- Extremera, N. & Ferandez-Berrocal, P. (2005). Percved emotional intelligence and life satisfaction: predictive and incremental validity using the trait meta-mood scale.

  \*Personality and Individual Differences, (39)5, 937-948
- Feyerherm, A. E. & Rice, C. L. (2002). Emotional intelligence and team performance: The good, the bad and the ugly. *The International Journal of Organizational Analysis*, 10(4), 343-362.
- Finn, Jr., C. E & Norther, A. M. (2014). Lacking leaders: The challenges of principal recruitment, selection, and placement. *Thomas Fordham Institute*. Retrieved from <a href="https://edexcellence.net/articles/lacking-leaders-the-challenges-of-principal-recruitment-selection-and-placement">https://edexcellence.net/articles/lacking-leaders-the-challenges-of-principal-recruitment-selection-and-placement</a>.
- Fiori, A., Antonietti, J. P., Hansenne, M., Luminet, O., Mikolajczak, M., & Rossier, J. (2014).

  What is the ability emotional intelligence test (MSCT) good for? An evaluation using

- item response theory. *PLOS ONE*, 9(6), Retrieved from https://doi.org/10.1371/journal.pone.0098827.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: the broadenand-build theory of positive emotions. *American Psychology*, 56(3), 218-226.
- Fredrickson, B. L. & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychological Association*, 60(7), 678-686.
- Frewen, P. A., Densmore, M., Dozois, D. J. A., Lanius, R.A., Neufeld, R. W. J., & Stevens, T.K. (2010). Neuroimaging social emotional processing in women: FMRI study of script-driven imagery. *Social, Cognitive and Affective Neuroscience*, 6(3), 375-392.
- Fullan, M. (2003). The moral imperative of school leadership. Thousand Oaks, CA: Corwin Press, Inc.
- Fullan, M. (1985). Change processes and strategies at the local level. *The Elementary School Journal*, 85(3), 391-420.
- Fullan, M. (1993). Change Forces: Probing the depths of educational reform. Bristol, PA: Falmer.
- Fullan, M. (1997). What's worth fighting for in the principalship. New York, NY: Teachers College Press.
- Fullan, M. & Scott, G. (2009). Turnaround leadership for higher education. San Francisco, CA: Jossey and Banks.
- Gallagher, E. M. & Vella-Brodrick, D. A. (2008). Social support and emotional intelligence as predictors of subjective well-bng. School of Psychology, Psychiatry and Psychological Medicine. Monash University, Victoria Australia

- Gannon, N. & Ranzijn, R. (2004). Does emotional intelligence predict unique variance in life satisfaction beyond IQ and personality? *Personality and Individual Difference*, 38, 1353-1364.
- Gardner, H. (1983). Frames of mind. New York, NY: Basic Books.
- Gardner, L. & Stough, C. (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership and Organizational Development Journal*, 23(2), 68-78.
- Geher, G., Brown, A. S., & Warner, R. M. (2001). Predictive validity of the emotional accuracy research scale. *Intelligence*, 29, 374-388.
- George, J. M. (2000) Emotions and leadership: The role of emotional intelligence. *Human Relations*, 53, 1027-1055.
- Gignac, G. E. (2006). Self-reported emotional intelligence and life satisfaction: Testing incremental predictive validity hypotheses via structural equation modeling (SEM) in a small sample. *Personality and Individual Difference*, 40, 1569-1577.
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2001). Supervision and instructional leadership: A developmental approach. Needham Hghts, MA: Allyn & Bacon.
- Gohm, C. L., Corser, G. C., & Dalsky, D. J., (2005). Emotional intelligence under stress: Useful, unnecessary, or irrelevant? *Personality and Individual Differences*, 39, 1017–1028.
- Goldring, R. & Taie, S. (2014). Principal attrition and mobility: Results from the 2012–13 principal follow-up survey (NCES 2014-064rev). *U.S. Department of Education.*, Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch.

- Goleman, D. (1995). Emotional intelligence: Why it can matter more than IQ. New York, NY: Bantam Books.
- Goleman, D. (1998). Working with emotional intelligence, New York, NY: Bantam.
- Goleman, D. (2003). An emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups and organizations. San Francisco, CA: Jossey-Bass.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). Primal leadership: Realizing the power of emotional intelligence. Boston, MA: Harvard Business School Press.
- Goldenberg, I., Mantler, J., & Matheson, K. (2006). The assessment of emotional intelligence: A comparison of performance-based and self-report methodologies. *A Journal of Personality Assessment*, 86(1), 33-45.
- Goldman, S. L., Kraemer, D., T. & Salovey, P. (1996). Beliefs about mood moderate the relationship of stress and symptom reporting. *Journal of Psychosomatic Research*, 41(2), 115-128.
- Goldring, R. & Owens, C. (2014). Principal attrition and mobility: Results from the 102-13 principal follow up survey first look. *National Center for Educational Statistics, Institute of Education Sciences*. U.S. Department of Education.
- Goldstn, H. W., Goldstein, I. L., & Zedeck, S. (2002). Is this your final answer? *Human Performance*, 15(1-2), 123-142.
- Gordon, K. A., & Coscarelli, W. C. (1996). Recognizing and fostering resilience. *Performance Improvement*, 35(9), 14-17.

- Grandy, J. (2009). Psychrometric properties and Analysis of the EQ profile. *Peak Learning*.

  Retrieved from
  - $\underline{http://peaklearning.com/documents/PEAK\_AQP\_technicalSupplement.pdf}$
- Grissom, J. A. & Anderson, S. (2012). Why superintendents turn over. *American Educational Research Journal*, 49(6), 1146-1180.
- Grissom, J. A., Loeb, S., & Master, B. (2013). Effective Instructional Time Use for School Leaders: Longitudinal Evidence from Observations of Principals. *Educational Researcher*, 42(8), 433-444.
- Gross, J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271-299.
- Guillaume, O. & Austin, A. (2014). A qualitative study; The link between leadership and an innovative and an emotionally intelligent organization. *Global Business & International Management*, 7(1), 65-70.
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, 49(2), 125-142.
- Hallinger, P. & Heck, R. H. (2012). Collaborative leadership and school improvement: understanding the impact on school capacity and student learning. *School Leadership & Management*, 30(2), 95-110.
- Hallinger, P. & Murphy, J. F. (1986). The social context of effective schools. *American Journal of Education*, 94(3), 328-35.
- Hamidia, S. F., Abdolmanafia, A., Farhoodia, F., & Rostami, R. A. (2010. A study and comparison of Alexithymia among patients with substance use disorder and normal people. *Procedia Social and Behavioral Sciences*, 5, 1367-1370.

- Harris, A. & Jones, M. (2015). Transforming education systems: comparative and critical perspectives on school leadership. *Asia Pacific Journal of Education*. 35(3), 311-318.
- Hauke, J. & Kossowski, T. (2011). Comparison of values of pearson's and spearman's correlation coefficients on the same sets of data. *Quaestiones Geographicae*. 30(2), 87-93.
- Hawkins, D. L. & Chien-Pai, H. (1997). A central limit theorem for certain nonlinear statistics in repeated sampling of a finite population. *Statistics & Probability letters*. 39, 25-35.
- Heck, R. H. & Hallinger P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American Educational Research Journal*, 46(3), 659-689.
- Hill, J., DeRoche, J., & Ottem, R. (2016). Trends in public and private school principal demographics and qualifications: 1987-88 to 2011-12. Stats In Brief. U.S. Department of Education, NCES, 189.
- Hogan, R., Curphy, G. J., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. *American Psychology*, 49(6), 493-504.
- Holcomb, Z. C. (2017). SPSS basics; Techniques for a first course in statistics 6<sup>th</sup> edition. Fred Pyrczak, Publisher, A California Corporation, Glendale, CA.
- Hollenbeck, J. R., De Rue, D. S., & Guzzo, R. (2004). Bridging the gap between I/O research and HR practice: Improving team composition, team training, and team task design.

  Human Resource Management, 43(4), 353-366.
- Hooijberg, R., Dodge, G. E., & Hunt, J. G. (1997). Leadership complexity and development of the leaderplex model. *Journal of Management*, 23(3), 375-408.

- Hunter, J. (1986). Cognitive ability, cognitive aptitudes, job knowledge, and job performance. *Journal of Vocational Behavior*, 29(3), 340-362.
- Isen, A. M. (2001). An influence of positive affect on decision making in complex situations:

  Theoretical issues with practical implications. *Journal of Consumer Psychology*, 11(2), 75-85.
- Investopedia (n.d.). What is the 'central limit theorem? Investopedia.Com. Retrieved from: <a href="https://www.investopedia.com/terms/c/central\_limit\_theorem">www.investopedia.com/terms/c/central\_limit\_theorem</a>.asp.
- Jain, A. K. & Sinha, A. K. (2005). General health in organizations: Relative relevance of emotional intelligence, trust, and organizational support. *International Journal of Stress Management*, (12)3, 257-273.
- Johnson, Jr., B. L. & Kruse, S. D. (2012). Decision making for educational leaders: Underexamined dimensions and issues. Albony, NY: *SUNY Press*.
- Kirby, P. C., King, M. I., & Paradise, L.V. (1992). Extraordinary leaders in education:

  Understanding transformational leadership. *The Journal of Educational Research*, 85(5), 303-311.
- Klitz, G., Danzig, A., & Szecsy, E. (2004). Learner centered leadership: A mentoring model for the professional development of school administrators. *Mentoring & Tutoring:*Partnership in Learning, 12(2), 135-153.
- Kong, F. A., Jingjing, Z. B., & Xuqun, Y. B., (2012). Emotional intelligence and life satisfaction in chinese university students: The mediating role of self-esteem and social support. *Personality and Individual Difference*, 53, 1039-1043.

- Kouzes, J. M. & Posner, B. Z. (2011). Leadership begins with an inner journey. *Leader to Leader*. Retrieved from <a href="http://www.leadertoleaderjournal.com/sample-articles/leadership-inner-journey.aspx">http://www.leadertoleaderjournal.com/sample-articles/leadership-inner-journey.aspx</a>.
- Laborde, S., Achtzehn, S., Allen, M. S., Herbert, C., & Lautenbach, F. (2014). The role of trait emotional intelligence in emotion regulation and performance under pressure. *Personality and Individual Difference*, 57(43), 47.
- Lam, L. T. & Kirby, S. L. (2002). Is emotional intelligence and advantage? An exploration of the impact of emotional and general intelligence on individual performance. *The Journal of Social Psychology*, 142(1), 133-143.
- L & T Direct & the McClelland Center for Research and Innovation Hay Group. (2011).

  Emotional and social competency inventory (ESCI) A user guide for accredited practitioners. Retrieved from http://consortium.org/pdf/ESCI\_user\_guide.pdf
- Lane, R. D., Quinlan, D. M., Schwartz, G. E., Walker, P. A., & Zeitlin, S. B. (1990). The levels of emotional awareness scale: A cognitive-developmental measure of emotion. *Journal of Personality Assessment*, 55(1-2), 124-134.
- Larson, J. (2006). Business practice findings: Emotional intelligence. *Business Psychology: Latest Findings*. 291.
- Law, K. S., Song, L. J., & Wong, C. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, 89(30), 483-496.
- Leeper, R. R. (1969). Politics and school. *The Association for Supervision and Curriculum Development*, Retrieved from www.ascd.org/ASCD/pdf/journals/ed\_lead/el\_196901\_leeper.pdf

- LeDoux, J., (1996). The emotional brain: The mysterious underpinnings of emotional life. New York, NY: Simon and Schuster Paperbacks.
- Leithwood, K., Anderson, S., Louis, K. S., & Wahlstrom, K. (2004). Review of research: How leadership influences student learning. Washington, D.C.: The Wallace Foundation.
- Leithwood, K., Day, C., Harris A., Hopkins, D., & Sammons, P. (2006). Seven strong claims about successful school leadership. *Leadership Innovations Team Website*. Retrieved from <a href="www.leadershipinnovationsteam.com/files/seven-strong-claims.pdf">www.leadershipinnovationsteam.com/files/seven-strong-claims.pdf</a>.
- Leithwood, K., Harris, A., Hopkins, D., (2008). Seven strong claims about successful school leadership. *School Leadership & Management*, 28(1), 27-42.
- Leithwood, K., Anderson, S., Louis, K. S., & Wahlstrom, K. (2004). Review of research: How leadership influences student learning. *Learning From Leadership Project: Center for Applied Research and Educational Improvement*. Retrieved from <a href="https://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf">https://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf</a>.
- Lerum, E. (2016). School leadership policy toolkit. *Center on Rnventing Public Education & Thomas B. Fordham Institute*, Washington, D.C.
- Lindenmayer, J. P., Abraham, G, Amod, T. A., Buccelleto, K. J., Capodilupo, G. I., Fregenti, S. H., Isidora, L., Kahn, A., Kirstie, M., Kulsa, A. F., McGurke, S., Mohan, P., Ozog, V. G., & Parker, B. (2018). Does social cognition training augment response to computer-assisted cognitive remediation for schizophrenia? Schizophrenia Research. Retrieved from https://www.schres-journal.com/article/S0920-9964(18)30345-1/fulltext.

- Livingstone, H.A. & Day, A. L. (2005). Comparing the construct and criterion-related validity of ability-based and mixed-model measure of emotional intelligence. *Educational and Psychological Measurement*, 65(5), 757-779.
- Lopes, P. N., Brackett, M. A., Nezlek, J. B., Salovey, P., Sellin, I., & Shutz, M. A. (2004). Emotional intelligence and social interaction. *Society for Personality and Social Psychology, Inc.*, 30(8), 1018-1034.
- Lopes, P. N., Gall, M., Grewal, D., Kadis, J., & Salovey, P. (2006). Evidence that emotional intelligence is related to job performance and affect and attitudes at work. *Psicothema*, 18(1), 132-138.
- MacCann, C. & Roberts, R. D. (2008). New paradigms for assessing emotional intelligence: Theory and data. *The American Psychologists Association*, 8(4), 540-551.
- Magyar, M., Feltz, D.L. (2003). The influence of dispositional and situational tendencies on adolescent girls' sport confidence sources. Psychology of Sport and Exercise, 4, 175-190.
- Manna, P. (2015). Developing excellent school principals to advance teaching and learning: Considerations for state policy. *The Wallace Foundation*, Washington, D.C.
- Martin, A. (2007). The changing nature of leadership. *Center For Creative Leadership*. Retrieved from http://www.ccl.org/leadership/pdf/research/natureleadership.pdf.
- Martin, J. R. (1997). Mindfulness: A proposed common factor. *Journal of Psychotherapy Integration*,7(4), 291-312.
- Martins, A., Morin, E., & Ramalho, N. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 49(6), 554-564.

- Martinez-Pons, M. (2000). Intelligence as a self-regulatory process: A social cognitive view. *Imagination, Cognition and Personality*, (19)4, 331-350.
- Masten, A. K., Best, M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425-44.
- Matthews, G., Roberts, R. D., & Zeidner, M. (2002). Emotional intelligence: Science and myth. Cambridge, MA: MIT Press.
- Matthews, G., Roberts, R. D., & Zeidner, M. (2007). Measuring emotional intelligence:

  Promises, pitfalls, solutions? *Oxford Handbook of Methods in Positive Psychology*. New York, NY: Oxford University Press.
- Maul, A. (2012). The validity of the Mayer-Salovey-Caruso emotional intelligence test (MSCT) as a measure of emotional intelligence, *Emotion Review*, 4(4), 394-402.
- Maulding, W. S. (2002). Emotional Intelligence and Successful Leadership. *Presented at the Annual Meeting of the Southern Regional Council on Educational Administration*.

  Kansas City, KS.
- Maulding, W. S., Leonard, E., Peters, G. B., Roberts, J., & Sparkman, L. (2012). Emotional intelligence and resilience as predictors of leadership in school administrators. *Journal of Leadership Studies*. 5(4), 20-29.
- Mayer, J. D. (2001). A field guide to emotional intelligence. In J. Ciarrochi, J. P. Forgas & J. D. Mayers (Eds.). *Emotion intelligence in everyday life*. Philadelphia, PA: Psychology Press.
- Mayer, J. D. (2009). What emotional intelligence is and is not. *Psychology Today*. Retrieved from: <a href="https://www.psychologytoday.com/blog/the-personality-analyst/200909/what-emotional-intelligence-is-and-is-not">https://www.psychologytoday.com/blog/the-personality-analyst/200909/what-emotional-intelligence-is-and-is-not</a>.

- Mayer, J. D., Carlsmith, M., & Chabot, H. F. (1998). Describing the person's external environment, conceptualizing and measuring the life space. *Journal of Research in Personality*, 32(3), 253-296.
- Mayer, J. D., Caruso, D., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267-298.
- Mayer, J. D., Caruso, D. R., Salovey, P. & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *American Psychological Association Inc.*, 1(3), 232-242.
- Mayer, J. D. & Salovey, P. (1997). What is emotional intelligence? Emotional Development and Emotional Intelligence; Educational Implications. New York. NY:

  Basic Books.
- Mayer, J. D., Caruso, D. R., Salovey, P., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCT V2.0. *Emotion*, 3(1), 97-105.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2004). Emotional intelligence: Theory, findings and implications. *Psychological Inquire*, 15(3), 197-215.
- Mayer, J. D., Caruso, D. R. & Salovey, P. (2008). Emotional intelligence: new ability or eclectic traits. *American Psychologist*, 63(6), 503-517.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2012). The validity of the MSCT: Additional analyses and evidence. *Emotion Review*, 4(4), 403-408.
- Mayer, J. D. & Cobb, C. D. (2000). Educational policy on emotional intelligence: does it make sense. Educational *Psychology Review*, 12(2), 163-183.
- Mayo Clinic Staff. (n.d). Resilience training. Retrieved from: <a href="https://www.mayoclinic.org/tests-procedures/resilience-training/basics/definition/PRC-20013967">https://www.mayoclinic.org/tests-procedures/resilience-training/basics/definition/PRC-20013967</a>

- McClelland, D.C. (1973). Testing for compentencies rather than intelligence. *American Psychologist.*, 28(1), 1-40.
- McCrea, R. & Terracciano, A. (2005). Universal features of personality traits from the observer's perspective: Data from 50 cultures. *Journal of Personality and Social Psychology*, 88(3), 547-561.
- McCurdy, J. & Hymes, D. L. (1992). Building better board-administrator relations: An AASA critical issues report. *American Association of School Administrators*, 1801.
- Mendels, P. (2016). Building principal pipelines: A job that urban districts can do. *The Wallace Foundation*. New York, NY.
- Merriam Webster. (n.d). Online dictionary. *An Encyclopedia Britanicca Company*. Retrieved from <a href="http://www.merriam-webster.com/dictionary/adversity">http://www.merriam-webster.com/dictionary/adversity</a>.
- Mikolajczak, M., Balon, N., Kotsou, I., & Ruosi, M. (2011). Sensitive but not sentimental:

  Emotionally intelligent people can put their emotions aside when necessary. *Personality and Individual Differences*, (52), 537–540.
- Mills, L. G., (2009). A meta-analysis of the relationship between emotional intelligence and effective leadership. *Journal of Curriculum and Instruction*, 3(2).
- Moore, B. (2009). Emotional intelligence for school administrators: A priority for school reform? *American Secondary Education*. 37(3), 20-28.
- Moriguchi, Y. & Komaki, G. (2013). Neuroimaging studies of alexithymia: Physical, affective, and social perspectives. *BioPsychoSocial Medicine*, 7(8).
- Moss, F. A. & Hunt, T. (1927). Are you socially intelligent? Scientific American, 137, 108-110.
- Montana PBS. (2014). What is resilience? *This Emotional Life*. Retrieved from <a href="http://www.pbs.org/thisemotionallife/topic/resilience/what-resilience">http://www.pbs.org/thisemotionallife/topic/resilience/what-resilience</a>.

- National Association of Secondary Principals (NASSP). (N.D.). Principal shortage. Position Statement.
- Neubauer, A. C. & Freudenthaier, H. H. (2005). Emotional intelligence: the convergent and discriminant validities of intra-and interpersonal emotional abilities. *Personality and Individual Differences*, 39(3), 569-579.
- Newsome, S., Catano, V. M., & Day, A. L. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences*, 29(6), 1005-1016.
- Norušis, M.J. (2005). SPSS 13.0 Guide to data analysis. Upper Saddle River, NJ: Prentice Hall
- Noorbakhsh, S. N., Besharat, M. A., & Zar, J. (2010). Emotional intelligence and coping styles with stress. *Procedia Social and Behavioral Sciences*, 5, 818-822.
- Pallant, J. (2010). SPSS survival manual. Berkshire, England: Open University Press. McGraw-Hill Education.
- Palmer, B., Burgess, Z., Stough, C., & Walls, M. (2001). Emotional intelligence and effective leadership. *Leadership and Organization Development Journal*, 22(1), 5-10.
- Palmer, B., Donaldson, C., & Stough, C., (2002). Emotional intelligence and life satisfaction.

  \*Personality and Individual Differences, 33, 1091-1100.
- Parker, J. D. A., Bagby, M.R., & Tayler, G. J. (2001). The relationship between emotional intelligence and alexithymia. *Personality and Individual Differences*, 30, 107-115.
- Parks, D. J. (1986). Create a vision, build a consensus, be an effective leader. *The Clearing House*. 60(2), 88-90.
- Patterson, J. & Patterson, J. (2004). Leading in tough times: Sharing the lead. *Educational Leadership*, 61(7), 74-78.

- Pedler, M. (2006). Manager's guide to self development. Columbus, OH: McGraw-Hill Education.
- Petersen, K. D. (2002). Positive or negative. Journal of Staff Development, 23(3), 10-15.
- Petersen, G. J., Fusarelli, L.D., & Kowalski, T. J. (2008). Novice superintendent perceptions of preparation adequacy and problems of practice. *Journal of Research on Leadership Education*, 3(2), 1-22.
- Petrides, K. V. (2010). An application of belief-importance theory with reference to the big five and trait emotional intelligence. *Social Behavior and Personality*, 38(5), 697-710.
- Petrides, K. V. (2011). Personality and social psychology: An application of belief-importance theory with reference to trait emotional intelligence, mood, and somatic complaints. Scandinavian Journal of Psychology. (52), 161-167.
- Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36(2), 277-293.
- Petrides, K. V. & Furnham, A. (2000a). Gender differences in measures and self-estimated trait emotional intelligence. *Sex Roles: A Journal of Research*, 42(5-6), 449–461.
- Petrides, K. V. & Furnham, A. (2000b). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, 29(2), 313-320.
- Petrides, K. V. & Furnham, A. F. (2001). Trait emotional intelligence: psychometric investigation with reference to established trait taxonomies. *The European Journal of Personality*, 15(6), 425-448.

- Petrides, K. V. & Furnham, A. F. (2002). Trait emotional intelligence: behavioral validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, (17)1, 39-57.
- Petrides, K.V., Kokkinaki, F., & Pita, R. (2007). The location of trait emotional intelligence in personality factor space. The *British Journal of Psychology*, 98(2), 273-289.
- Petrides, K.V., Philip, A. V., Schermer, J. A., & Veselka, L. (2007). Trait emotional intelligence and the dark triad traits of personality. *Twin Research and Human Genetics*, 14(1), 35-41.
- Phaneuf, J. E., Bouidrias, J. S., Brunelle, E., & Rousseau, V. (2016). Personality and transformational leadership: The moderating effect of organizational context. Personality and Individual Differences, 102, 30-35.
- Prati, M., Ammeter, A. P. Buckley, M. R., Douglas, C., & Ferris, G. R. (2003). Emotional intelligence, leadership effectiveness, and team outcomes. *The International Journal of Organizational Analysis*. 11(1), 2.
- Pritchard, R. R. (2012). The influence of ability grouping on math achievement in a rural middle school. Seton Hall University Dissertations and Theses, 1-50.
- Obama, B. H. (2012). Education knowledge and skills for the jobs of the future. *The White House*. Washington, D.C. Retrieved from http://www.whitehouse.gov/issues/education/k-12.
- Quinn, R., Chak, F. L., & Spreitzer, G. M. (2012). Building a sustainable model of human energy in organizations: Exploring the critical role of resources. *The Academy of Management Annals*. Retrieved from http://dx.doi.org/10.1080/19416520.2012.676762.
- Rand Education. (2012). Challenges and opportunities facing principals in the first year at a school. *RAND Corporation Research Brief*, Santa Monica, CA.

- Rehman, S., Baker, A., Bakeri, A., & Majid, S. (1998). Competency definition and validation for library and information professionals in malaysia. Journal of Education for Library and Information Science, 39(2), 100-117.
- Rey, L., Extremera, N., & Pena, M., (2011). Percved emotional intelligence, self-esteem and life satisfaction in adolescents. *Psychosocial intervention*, 20(2), 227-334.
- Rode, J. C., Arthaud-Day, M. L., Baldwin, T. T., Bommer, W. H., Mooney, C. H., Near, J. P., & Rubin, R. S. (2007). Emotional intelligence and individual performance: evidence of direct and moderated effects. *Journal of Organizational Behavior*, 28, 399-404.
- Roseman, I. J. & Smith, C. A. (2001). Appraisal theories. In K. R. Sherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal Processes in Emotion: Theory, Method, Research*.

  Oxford: Oxford University Press.
- Rosete, D. & Ciarrochi, J. (2005). Emotional intelligence and its relationship to workplace performance out comes of leadership effectiveness. *Leadership Organizational Develo pment*, 26, 388-399.
- Rossen, E., Algina, J., & Kranzler, J. H. (2007). Confirmatory factor analysis of the Mayer-Salovey-Caruso emotional intelligence test v 2.0 (MSCT). *Personality and Individual Differences*, 44, 1258-1269.
- Rutter, M. & Maughan, B. (2002). School effectiveness findings 1979-2002. *Journal of School Psychology*, 40(6), 451-475.
- Saklofske, D. H., Andrews, J. W., Austin, E. J., & Rohr, B. A. (2007). Personality, emotional intelligence and exercise. *Journal of Health Psychology*, 12(6), 937-948.
- Saklofske, D. H., Austin, E. J., & Minski, P. S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Difference*, 34(4), 707-721.

- Sala, F. (2001). It's lonely at the top: Executive's emotional intelligence self (mis)perceptions.

  Consortium for Research on Emotional Intelligence in Organizations. Retrieved from http://www.consortium.org/pdf/executive\_emotional\_intelligence360.pdf
- Salkind, N. J. (2010). Encyclopedia of research design. *Sage Research Methods*. Retrieved from http://methods.sagepub.com/reference/encyc-of-research-design/n145.xml
- Salovey, P., Ciarrochi, J. V., Forgas, J. P., & Mayer, J. D. (2001). Emotional intelligence in everyday life; a scientific inquiry. (Eds) Philadelphia, PA: Psychology Press.
- Salovey, P., Bedell, B. T., Detwieler, J. B., & Mayer, J. D. (1999). Coping intelligently: emotional intelligence and the coping process. New York, NY: Oxford Press.
- Salovey, P., Goldman, S. E., Mayer, J. D., Palfai, T. P., & Turvey, C. (1995). Emotional attention, clarity and repair: Exploring emotional intelligence using the trait meta-mood scale. In J. W. Pennebaker (Eds.), *Emotion, Disclosure & Health*. American Psychological Association. Retrieved from: <a href="https://search-proquest-com.weblib.lib.umt.edu:2443/docview/614156113/BAE0C1559E814D1APQ/1?accountid=14593">https://search-proquest-com.weblib.lib.umt.edu:2443/docview/614156113/BAE0C1559E814D1APQ/1?accountid=14593</a>
- Salovey, P. & Grewal, D. (2005). The science of emotional intelligence. *American Psychological Society*, (14)6, 281-285.
- Salovey, P. & Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- Sanchez-Ruiz, M. J., Mavroveli, S., & Poullis, J. A. (2012). Trait emotional intelligence and its links to university performance: An examination. *Personality and Individual Differences*, 54(5), 658-662.

- Saphier, J. & King, M. (1985). Good seeds grow in strong cultures. *Educational Leadership*, 03, 67-73.
- Schneider, B. I. (1985). Further evidence of school effects. *The Journal of Educational Research*, 78(6), 351-356.
- Schneider, R. J., Ackerman, P. L., & Kanfer, R. (1996). To act wisely in human relations:

  Exploring the dimensions of social competence. *Personality and Individual Differences*,

  21, 469-481.
- Hanson-Peterson, J., Kitil, M. J., & Schonert-Reichl, K. A. (2017). To reach the students, teach teachers: A national scan of teacher preparation and social and emotional learning. *A Report prepared for the Collaborative for Academic, Social and Emotional Learning* (CASEL). Vancouver, B.C.: University of British Columbia.
- School Leaders Network. (2014). Churn: The high cost of principal turnover. *Center on Great Teachers & Leaders at American Institute for Research*. Washington, D.C.
- Schutte, N. S., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., Malouff, J. M., Rhodes, E., & Wendorf, G. (2000). Emotional intelligence and interpersonal relations. *The Journal of Social Psychology*, 141(4), 523-536.
- Schutte, N. S., Bhullar, N., Malouff, J. M., Rooke, S. E., & Thorsteinsson, E. B. (2007). An investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 42(6), 921-933.
- Schutte, N. S., Cooper, J. T., Dornhm, L., Golden, C. J., Haggert, D. J., Hall, L. E., & Malouff, J. M. (1998). Development and validation of a measure of emotional intelligence.

  \*Personality and Individual Differences\*, 25(2), 167-177.

- Schutte, N. S., Hollander, S. Malouff, J.M., & Simunek, J.M. (2002). Characteristic emotional intelligence and emotional well-bng, *Psychology Press*, 16(6), 769-785.
- Schutte, N. S. & Malouff, J.M. (2011). Emotional intelligence mediates the relationship between mindfulness and subjective well-bng. *Personality and Individual Differences*, 50, 1116-1119.
- Schutte, N.S., Malouff, J.M., & Thorstnsson, E. B. (2013). Increasing emotional intelligence through training: Current status and future directions. *Journal of Emotional Intelligence*, 5(1), 56-72.
- Segon, M. & Booth, B. (2014). Virtue: The missing ethics element in emotional intelligence.

  (Doctoral Dissertation). The Graduate School of Business and Law, RMIT University.

  128:789–802.
- Serani, D. (2014). Alexithymia. *Scientific American*, Retrieved from <a href="https://blogs.scientificamerican.com/mind-guest-blog/the-emotional-blindness-of-alexithymia/">https://blogs.scientificamerican.com/mind-guest-blog/the-emotional-blindness-of-alexithymia/</a>.
- Shapiro, S.L., Bonner, G., & Schwartz, G.E. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, 21(6), 581-599.
- Shipley, N.L., Jackson, M.J., & Segrest. L S. (2004). The effects of emotional intelligence, age, work experience, and academic performance. *Research in Higher Education Journal*.

  Retrieved from http://www.aabri.com/manuscripts/10535.pdf.
- Smieja, M., Orzechowski, J., & Stolarski, M. S. (2014). TIE: An ability test of emotional intelligence. *PLoS ONE*, 9(7). Retrieved from <a href="https://doi.org/10.1371/journal.pone.0103484">https://doi.org/10.1371/journal.pone.0103484</a>

- Smith, H. J., Archer, D., & Costanzo, M. (1991). "Just a hunch": Accuracy and awareness in person perception. *Journal of Nonverbal Behavior*, 15(1), 3-18.
- Smith, L., Ciarrochi, J., & Heaven, P. C. L. (2007). Trait emotional intelligence, conflict communication patterns, and relationship satisfactions. *Personality and Individual Differences*, (44), 1314–1325.
- Smith, L., Ciarrochi, J., & Heaven, P. C. L., (2008). The stability and change of trait emotional intelligence, conflict communication patterns, and relationship satisfaction: A one-year longitudinal study. *Personality and Individual Differences*, (45), 738–743.
- Smith, C.A. & Lazarus, R. S. (1990). Emotion and adaptation. Handbook of Personality: Theory and Research. New York, NY: Guilford.
- Spencer, L. M. Jr., & Spencer S. M. (1993). Competence at work: Models for superior performance. New York, NY. Wiley.
- Sosik, J. J. & Megerian, L. E. (1999). Understanding Leader Emotional Intelligence and Performance: The role of self-other agreement on transformational leadership perceptions. *Group & Organization Management*, 24(3), 367-390.
- Steinberg, W. J. (2011). Statistics alive. Sage Publications, Inc. Thousand Oaks, CA.
- Stoltz, P. G. (1997). Adversity quotient: Turning obstacles into opportunities. John Wiley & Sons, Inc. Hoboken, NH.
- Stoltz, P. (2001). Your adversity quotient. *Innovative Leader*, 10(2), 1-55.
- Swearingen, J. M. (2014). Principal longevity, leadership behaviors and student academic achievement. *Doctoral dissertation*. Retrieved from http://scholarcommons.sc.edu/etd/3021.

- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2, 53–55.
- Tekniepe, R. J. (2015). Identifying the factors that contribute to involuntary departures of school superintendents in rural America. *Journal of Research in Rural Education*, 30(1), 1-13.
- Thompson, B. L., Croyle, K., Pepper, A.C., & Waltz, J. (2007). Trait meta-mood and affect as predictors of somatic symptoms and life satisfaction. *Personality and Individual Differences*, 43(7), 1786-1795.
- Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine*, 140, 227-235.
- Thorndike, E. L. & Stein, S. (1937). An evaluation of the attempts to measure social intelligence. *Psychological Bulletin*, 34, 275-284.
- Trinidad, D. R. & Johnson, C. A. (2002). Early adolescent tobacco and alcohol use. *Personality* and *Individual Differences*, 32, 95-105.
- Van Rooy, D. L. & Viswesvaran, C. (2002). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, (65), 71–95.
- Van Rooy, D. L. & Viswesvaran, C. (2004). Emotional intelligence: a meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior*, 65(1), 71-95.
- Van Velsor, E., Leslie, J. B., & Taylor, S. (1993). An examination of the relationships among self-perception accuracy, self-awareness, gender, and leader effectiveness. Human Resource Management, 32 (2-3), 249-263.
- Velasco, C., Campos, M., Fernandez, I., & Paez, D. (2006). Perceived emotional intelligence, alexithymia, coping and emotional regulation. *Psycothema*, 18, 89-94.

- Watson, D. & Clark, L. A. (1988). Development and of brief measures of positive and negative affect: The PANAS scales. *Journal of Personal and social Psychology*, 54(6), 1063-1070.
- Weinstein, N., Brown, K. W., & Ryan, R. M. (2009). A multi-method examination of the effects of mindfulness on stress attribution, coping and emotional well-being. *Journal of Research in Personality*, 43(3), 374-385.
- Wing, J. F., Byrne, B., & Schutte, N. S. (2006). The effect of positive writing on emotional intelligence and life satisfaction. *Journal of Clinical Psychology*, 62(10), 1291-1302.
- Wolff, S. B., Druskat, V. U., & Pescosolido, A. T. (2002). Emotional intelligence as the basis of leadership emergence in self-managing teams. *Leadership Quarterly*, 13, 505–522.
- Wolff, S. B. (2006). Emotional competence inventory (ECI) technical manual, version 2. Boston: Hay Group.
- Wong, C. & Law, K. S. (2002). The effects of leader and follower emotional intelligence. *The Leadership Quarterly*, (13), 243-274.
- Zeidner, M. & Kloda, I. (2012). Emotional intelligence, conflict resolution patterns, and relationship satisfaction: Actor and partner effects revisited. *Personality and Individual Differences*. 54, 278-283.
- Zeidner, M. & Matthews, G. (2016). Ability emotional intelligence and mental health: Social support as a mediator. *Personality and Individual Differences*, (99), 196–199.
- Zeidner, M., Matthews, G., & Roberts, R. (2012). The emotional intelligence, health, and well-bng nexus: What have we learned and what have we missed? *Applied Psychology:*Health and Well-Bng, 4(1), 1-30.

- Zorana, I., Brackett, M. A., & Mayer, J.D. (2007). Emotional intelligence and emotional creativity. Journal of Personality, (75)2, 199-236.
- Zorn, D. & Boler, M. (2007). Rethinking emotions and educational leadership. *International Journal of Leadership in Education*, 10(2), 137-151.
- Zammuner, V.L., Sbrascini, F., & Veerzeletti, C. (2013). Awareness of emotionally competent responding in work contexts and its relationship with personal traits and well-bng. Oral presentation at the 4<sup>th</sup> World Conference on Psychology, Counseling and Guidance.

  \*Procedia Social and Behavioral Sciences. 000-000.

## Appendix A

December 15th, 2017

RE: Educational Research Request

Dear Montana Educational Leader,

I am a Doctoral candidate with the University of Montana, working on the research portion of my dissertation. According to recent research, understanding emotional intelligence and its correlation to overcoming adversity is valuable in building resiliency in leadership. This resiliency is expedient to effectively fulfilling a leadership role long term. To best understand emotional intelligence and how it is used, continued research is necessary. In this pursuit, my research will investigate the relationship between longevity in an educational leadership position and a leader's emotional intelligence and resilience in the face of adversity.

I am writing to ask for your participation in this research. Participation would require about thirty minutes of your time and would help provide valuable information to Montana Educational leaders. You would be required to take two online assessments: The Emotional and Social Competence Inventory (ESCI), containing sixty-eight questions, and the Adversity Response Profile, containing 24 questions.

These tests will be taken online, confidentially, and data is also reported confidentially. If you are willing to participate, you will be required to provide me with your email address. I will then share your email address with Korn Ferry, the administrative company overseeing the ESCI survey, and they will send you links to the survey and directions on its use. I will also send you the link to the ARP survey, which will be taken using the Qualtrics survey software. It will take approximately thirty minutes to complete both surveys.

If you agree to take part in this study, you will be given the findings from the completed research. Thank you for your time and consideration,

Erica L. Allen

## Appendix B

## SUBJECT INFORMATION AND INFORMED CONSENT

**Study Title:** LONGEVITY VARIANCE OF AN EDUCATIONAL LEADER, PREDICTED BY EI AND RESLIANCE

**Investigator(s):** Erica Allen,

6 2<sup>nd</sup> Lane SE, Fairfield, MT

406-467-2575

University of Montana Doctoral Candidate

Dr. John Matt, Chair

## **Special Instructions:**

This consent form may contain words that are new to you. If you read any words that are not clear to you, please ask the person who gave you this form to explain them to you.

#### **Inclusion Criteria:**

• Superintendents, principals and assistant principals who currently hold an educational leadership position in the State of Montana will be included in this study.

## **Purpose:**

- You are being asked to take part in a research studying the correlation between emotional
  intelligence and the ability to overcome adversity and thrive in an educational leadership
  position.
- You have been invited to participate because you are a superintendent, principal or assistant principal in a Montana school.
- The purpose of this research study is to gain information that can help you and other educational leaders remain resilient and thrive in your leadership position, despite adversity, by employing emotional intelligence.
- The results will be used for research for my doctoral dissertation and contribute to the general field of knowledge.
- This understanding can be valuable in building resiliency in educational leaders.
- You must be 18 or older to participate in this research.

#### **Procedures:**

• If you agree to take part in this study you will be given the findings from the completed research.

- You will be asked to complete the Emotional and Social Competence Inventory (ESCI), containing 68 questions, and complete the Adversity Response Profile (ARP) survey, containing 24 questions.
- You will be required to provide researcher with your email address.
- The researcher will share your email address with Korn Ferry, the administrative company overseeing the ESCI survey, so they can send you to the link needed to take the ESCI survey.
- The researcher will send you the link to take the ARP survey.
- The study will take place online.
- It will take about thirty minutes to complete the survey.

#### **Risks/Discomforts:**

- There is no anticipated discomfort for those contributing to this study, so risk to participants is minimal.
- Mild discomfort may result from sitting at a computer for thirty minutes.
- Answering the questions may cause you to think about feelings that make you sad or upset.
- There is slight risk of a breach of confidentiality but this is unlikely to occur.
- You will be informed of any new findings that may affect your decision to remain in the study.

#### **Benefits:**

- There is no promise you will receive any benefit from taking part in this study.
- Your participation in this study may be valuable in building resiliency in your position and may benefit Montana Educational Leaders.

## **Confidentiality:**

- Your records will be kept confidential and will not be released without your consent except as required by law.
- The researcher will maintain records with personal identifiers but will not release information to unauthorized personnel.
- Your identity will be kept private.
- If the results of this study are written in a scientific journal or presented at a scientific meeting, your name will not be used.
- The data will be stored in a locked file cabinet.
- Your signed consent form will be stored in a cabinet separate from the data.

## **Voluntary Participation/Withdrawal:**

- Your decision to take part in this research study is entirely voluntary.
- You may refuse to take part in or you may withdraw from the study at any time.
- You may leave the study for any reason.
- You may be asked to leave the study for any of the following reasons:

- o Failure to follow the Project Director's instructions;
- o A serious adverse reaction which may require evaluation;
- o The Project Director thinks it is in the best interest of your health and welfare; or
- The study is terminated.

## **Questions:**

- o If you have any questions about the research now or during the study, please contact: Erica Allen 406-750-5501.
- o If you have any questions regarding your rights as a research subject, you may contact the UM Institutional Review Board (IRB) at (406) 243-6672.

## **Statement of Your Consent:**

I have read the above description of this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

Printed Name of Subject		
Subject's Signature	Date	

## **ONLINE SURVEY CONSENT FORM**

You are invited to participate in a research project about the longevity variance of an educational leader, predicted by emotional intelligence and resilience. This online survey should take about thirty minutes to complete. Participation is voluntary, and responses will be kept confidential, to the degree permitted by the technology being used.

You have the option to not respond to any questions that you choose. Participation or nonparticipation will not impact your relationship with the University of Montana. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

If you have any questions about the research, please contact the Principal Investigator, Erica Allen, via email at <a href="mailto:Erica.allen@shelby,k12.mt.us">Erica.allen@shelby,k12.mt.us</a>, or the faculty advisor Dr. John Matt, at <a href="mailto:John.matt@mso.umt.edu">John.matt@mso.umt.edu</a>. If you have any questions regarding your rights as a research subject, contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Please print or save a copy of this page for your records.

\* I have read the above information and agree to participate in this research project.

\_\_\_\_ Enter survey

## Appendix C

# KornFerry/HayGroup

# **ESCI Conditional Use Agreement**

For good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, I hereby agree that the permission granted to me by Hay Group, Inc., to receive and utilize, without charge, the Emotional and Social Competency Inventory (ESCI) is subject to the following conditions, all of which I hereby accept and acknowledge:

- 1. I will utilize the ESCI for research purposes only and not for commercial gain.
- 2. The ESCI and all derivatives thereof is and shall remain the exclusive property of Hay Group. Hay Group shall own all right, title, and interest, including, without limitation, the copyright, in and to the ESCI.
- 3. I will not modify or create works derivative of the ESCI or permit others to do so. Furthermore, I understand that I am not permitted to reproduce the ESCI for inclusion in my thesis/research publication.
- 4. I will provide Hay Group with a copy of any research findings arising out of my use of the ESCI and will credit Hay Group in any of my publications relating thereto. Hay Group may disseminate this research and report any results relating to the ESCI.
- 5. I will not provide individual feedback to participants.
- 6. HAY GROUP WILL NOT BE DEEMED TO HAVE MADE ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, IN CONNECTION WITH THE ESCI, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
- 7. My rights under this Agreement are non-transferable and non-exclusive and will be limited to a period of two (2) years from the date of this Agreement.
- 8. Hay Group may immediately terminate this Agreement by giving written notice to me in the event that I breach any of its terms or conditions.
- 9. This Agreement will be construed in accordance with the laws of Pennsylvania without recourse to its conflict of laws principles.
- 10. This Agreement may not be assigned by me without the prior written consent of Hay Group. Any attempted assignment shall be void.
- 11. Failure by Hay Group to enforce any provisions of this Agreement will not be deemed a waiver of such provision or any subsequent violation of the Agreement by me.

12. This is the entire agreement with Hay Group pertaining to my receipt and use of the ESCI, and only a written amendment signed by an authorized representative of Hay Group can modify this agreement.

\_\_\_\_\_

www.haygroup.com

# Appendix D

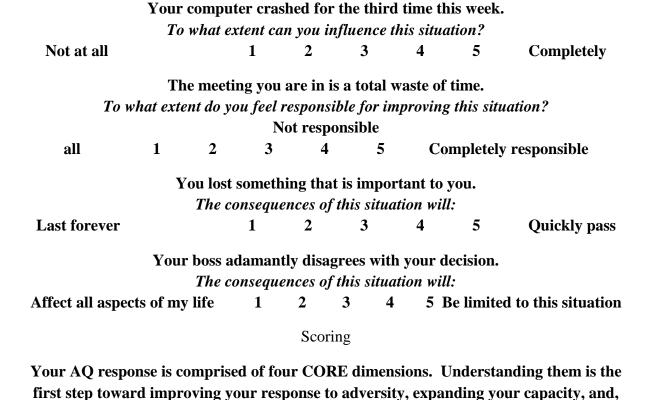
# **Adversity Response Profile**

How many adverse events do you experience on your average day? Are you consumed by these events or are you letting them lead to stronger performance? I developed the Adversity Quotient (AQ) to test the unconscious pattern of how people respond to adversity, and show how to increase it and, thereby, help individuals become valuable at work.

Imagine the following events as if they were happening right now. Then circle the number that represents your answer to each of the related questions.

	7	You suff	fer a fina	ancial se	tback.		
	To what o	extent co	an you ir	ıfluence	this situ	uation?	
Not at all		1	2	3	4	5	Completely
	You	are ove	erlooked	for a pr	omotio	n.	
To	what extent do	you feel	respons	ible for i	improvii	ng the situ	uation?
		No	ot respoi	nsible at			
all	1 2	3	4	5	C	ompletely	y responsible
,	You are criticiz	ed for a	ı big pro	ject that	t you ju	st comple	eted.
	The c	consequ	ences of	this situ	ation w	ill:	
Affect all aspec	ets of my life	1	2	3	4	5	Be limited to this situation
	You acc	cidental	ly delete	an imp	ortant e	email.	
	The c	consequ	ences of	this situ	ation w	ill:	
Last forever		1	2	3	4	5	Quickly pass
,	The high-priori	ity proje	ect you a	re work	ing on	gets cance	eled.
	The c	consequ	ences of	this situ	ation w	ill:	
Affect all a	spects of my lif	ře 1	2	3	4	5 Be	limited to this
			situat	ion			
Someo	ne you respect i	ignores	your att	empt to	discuss	an impo	rtant issue.
To	what extent do y	you feel	responsi	ible for i	mprovii	ng this sitt	uation?
Not respon	nsible at all	1	2	_	4	4 5	Completely
			respon	sible			

People	e respo	ond u	nfavora	ably to y	your late	est ideas.	
To wh	hat ext	tent co	ın you i	nfluenc	e this si	tuation?	
Not at all		1	2	3	4	5	Completely
You a	re una	ıble to	take a	much-	needed '	vacation.	
T	The cor	nsequ	ences o	f this sit	tuation v	vill:	
Last forever		1	2	3	4	5	Quickly pass
You hit every r	ed lig	ht on	your w	ay to ar	n import	tant appo	intment.
T	he con	isequ	ences of	f this sit	uation w	vill:	
Affect all aspects of my life	e	1	2	3	4 5	Be lim	ited to this situation
After extensive	searcl	ning,	you can	not fine	d an imj	portant d	ocument.
I	The con	nsequ	ences o	f this sit	tuation v	vill:	
Last forever	1	2	3	4	5	W	ill Quickly pass
	You	ı wor	kplace i	is under	rstaffed		
To what extent	do you	u feel	respons	sible for	improvi	ing this si	ituation?
Not responsible at all		1	2	3	4	5	Completely
			respon	ısible			
•	You m	iss ar	ı impor	tant ap	pointme	ent.	
I	The con	nsequ	ences o	f this sit	- tuation v	vill:	
Affect all aspects of my lif	e 1	2	2 3	4	5	Be limi	ited to this situation
Your pers	sonal a	and w	ork obl	ligation	s are ou	t of balar	ice.
To wh	hat ext	tent co	ın you i	nfluenc	e this si	tuation?	
Not at all		1	2	3	4	5	Completely
Ye	ou nev	er se	em to h	ave eno	ugh mo	nev.	
					tuation v	•	
Last forever		1	2	3	4	5	Quickly pass
You are not e	exercis	sing r	egularly	y thoug	h you kı	now you s	should.
		_		_	•	tuation?	
Not at all		1	2	3	4	5	Completely
Yo	ur org	aniza	tion is	not mee	eting its	goals.	
To what extent	_				_	_	ituation?
Not responsible at all	-	1	2	3	4 5	Com	pletely responsible



Insert each of the 20 numbers you circled on the Adversity Response Profile in the corresponding boxes that appear below. Then insert the total for each column in the corresponding box. Add the four totals and then multiply that number by two for your

final score.

ultimately, increasing your overall AQ.

<u>C</u>	<u>O</u>	<u>R</u>	$\underline{\mathbf{E}}$			
1	2	3	4			
7	6	5	8			
13	11	9	10			
15	16	12	14			
17	18	20	19			
Total C =	Total O =	_ Total R =	_ Total E =			
<b>Total C+O+R+E x 2 = ARP Score =</b>						

The average ARP score is 147.5. What's your score? The higher the better.

Now, look at your CORE breakdown and determine which aspects of the AQ you need to improve.

C = Control

To what extent can you influence the situation?

How much control do you perceive you have?

Those with higher AQs perceive they have significantly more control and influence in adverse situations than do those with lower AQs. Even in situations that appear overwhelming or out of their hands, those with higher AQs find some facet of the situation they can influence. Those with lower AQs respond as if they have little or no control and often give up.

O = Ownership

To what extent do you hold yourself responsible for improving this situation?

To what extent are you accountable to play some role in making it better?

Accountability is the backbone of action. Those with higher AQs hold themselves accountable for dealing with situations regardless of their cause. Those with lower AQs deflect accountability and most often feel victimized and helpless.

R = Reach

How far does the fallout of this situation reach into other areas of your work or life?

To what extent does the adversity extend beyond the situation at hand?

Keeping the fallout under control and limiting the reach of adversity is essential for efficient and effective problem solving. Those with higher AQs keep setbacks and challenges in their place, not letting them infest the healthy areas of their work and lives. Those with lower AQs tend to catastrophize, allowing a setback in one area to bleed into other, unrelated areas and become destructive.

E = Endurance

How long will the adversity endure?

Seeing beyond even enormous difficulties is an essential skill for maintaining hope. Those with higher AQs have the uncanny ability to see past the most interminable

difficulties and maintain hope and optimism. Those with lower AQs see adversity as dragging on indefinitely, if not permanently.