A CORRELATIONAL STUDY ON TRANSFORMATIONAL LEADERSHIP AND RESILIENCE IN HIGHER EDUCATION LEADERSHIP

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

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Authorization to Submit Dissertation

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Abstract

This quantitative correlational study investigated the relationship between self-perceived transformational leadership and self-perceived resilience within the confines of higher education leadership. This dissertation is written from a professional practice doctorate (PPD) perspective. A discussion of the PPD and its components is provided along with two critiques relating to distributive leadership in secondary education and emotional intelligence in higher education leadership. A review of the literature showed a limited amount of research had been performed when jointly combining the conceptual frameworks of transformational leadership and resilience within the confines of higher education leadership. The 45-point Multifactor Leadership Questionnaire (MLQ) and the 25-point Connor-Davidson Resilience Scale (CD-RISC) were administered. The demographic data variables collected included individuals' gender, age, leadership position level, years of employment with the university, years of experience in higher education, and completed level of education. The results of this study showed a moderately strong statistical positive correlation exists between self-perceived transformational leadership and self-perceived resilience within higher education leadership. Transformational leadership and resilience do not appear to be affected by age, gender, experience, leadership level, or educational attainment. However, transformational leadership and resilience are affected by years of employment, or institutional longevity, with the university where this research was performed.

Keywords: transformational leadership, resilience, higher education leadership

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Dedication

I express sincere appreciation and admiration to my children. Kayeli, Whitney, Tanner, Lydia, and Porter—thank you for your patience and late night hugs. You kept me going! In some small way, I hope you too have realized the importance of education while experiencing this process with me. This journey would not have been possible without support from my parents and in-laws. My father Glade Wasden is a friend, colleague, and hero. Thanks Dad! Finally, to my wife Joanna, I express heartfelt gratitude and love. Without her, this dream would not have been possible. She often carried a heavy load due to my studies and research. Joanna, you are my strength, my friend, and my confidant.

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Preface

Leaders within higher education have acknowledged much has changed throughout its history (Kerr, 2001); and with these alterations, modifications, and adaptations, the setting becomes increasingly complex. Bearing in mind evolving complexities, university leaders may benefit when considering how to meet the changing needs of stakeholders, such as students, faculty, and administrators. Leadership practices must continue to evolve if institutions of learning desire to continue producing "cutting edge" graduates (Jones, Lefoe, Harvey, & Ryland 2012). Transformational leadership and resilience are two frameworks that may benefit leaders in carrying out their responsibilities.

Education has continued to evolve and modify throughout its long history (Cohen & Kisker, 2010). As higher education progresses and some might say regresses, the importance of good leaders cannot be understated. New complexities are continually being introduced, such as privatization, fundraising, accountability, oversight, corporations, and technology. The technological advances of how learning and teaching is accessed and provided are innovative yet multifaceted and constantly require institutions of learning to rethink how education is offered. As higher education continues to change, perhaps a study of the transformational and resilient qualities of educational leaders may assist institutions of learning in facing future challenges and opportunities.

The professional practices doctorate (PPD) focuses on a localized issue where additional clarity and information is brought to light for the stakeholders. As stated on the University of Idaho College of Education website, "The professional practitioner will work on a dissertation that uses more accessible language and can be delivered in a non-traditional format . . . to more effectively promote change" ("Professional Practices Doctorate,"

2011).This dissertation is the partial fulfillment of the requirements for the Doctor of Education (Ed.D.) degree through the College of Education at the University of Idaho. See Appendix A for a broad discussion on the University of Idaho Professional Practices Doctorate program and its relationship with CPED.

All professional practices doctorate programs vary to some degree across higher education institutions of learning. The variation it seems is inherently an interwoven component of the PPD. The dissertation does not argue the superiority of one dissertation style versus the other; both the traditional styled dissertation and the PPD styled dissertation have a vital and necessary role in higher education institutions of learning. The purpose of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leaders at a baccalaureate degree-granting private university in the Northwest United States. Leaders who perceive themselves to have both resilience and transformational leadership may have leadership practices meaningful to discover.

Individualization of PPD structures was evident as correspondence was reported back to the cohort about various models across the nation approaching the PPD in vastly different ways. With this being stated, there does seem to be a consensus in regards to the foundational qualities, or PPD backbone characteristics. Willis, Inman, and Valenti (2010) provided an extensive 15-point list outlining some of the following components: courses prepare students for practice; content is broadly focused; coursework and dissertation are integrated; students often complete PPD while working full time; and they generally more experienced in the workforce. See Appendix B to view a comprehensive list of PPD characteristics.

The dissertation outline follows the recommendations received from the dissertation committee while also embodying the professional practices doctorate (PPD) approach. The Preface provides the reader with an overview of the entire dissertation, noting some of the unique elements, which might not be as commonly found in a traditional dissertation.

Chapter 1 presents a stand-alone manuscript to be submitted for potential article publication. The essence or core of the dissertation is found in Chapter 1. A goal of the PPD is to have a dissertation blending theory with application or practice. This manuscript assesses higher education leadership under the conceptual frameworks of transformational leadership and resilience. The purpose of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leaders at a baccalaureate degree-granting private university in the Northwest United States.

Chapter 2 brings to light a unique feature of the PPD—the team. This researcher alone takes credit for the enlightenment or the error of this dissertation; however, the author was a cohort group member of twenty-two and more intimately a team member of three. Each member from this team of three researched their individual theoretical leadership frameworks within education. Fellow team members' research centered on distributive leadership within secondary education at a discovery-based learning school and emotional intelligence within higher education leadership. Chapter 2 is a critique of the distributive leadership manuscript and the emotional intelligence manuscript written by the other two researchers who were a member of this author's team. As a component of the PPD dissertation philosophy, collaborative teamwork is encouraged, as opposed to solitary research, since many significant issues in the workplace are also approached as a team.

Chapter 3 is a white paper written with the intent of the stakeholders in mind. Historically, white papers are documents written to the stakeholder in a simple, clear, straightforward fashion. This document presents specific solutions or research to the interested localized party. White papers are traditionally written with the target audience in mind—the stakeholders.

Lastly, Chapter 4 is the conclusion. This chapter linked the findings to the literature, responded to fellow team members' critiques, and discussed future study recommendations.

The professional practices doctorate aims to assist in bridging the gap between the scholar and the practitioner. In this study, transformational leadership and resilience are the theories and the practitioners are higher education leaders. By blending theory and practice, both academe and practice have their research and application needs met. The researcher investigates and discovers ideas, solutions, and concepts to assist the practitioner in the field while the academic is brought to a new level of understanding, which may encourage future research. The following manuscript investigates the correlation between transformational leadership and resilience within a higher education environment.

Chapter 1: Manuscript

Manuscript Abstract

This quantitative correlational study investigated the relationship between self-perceived transformational leadership and self-perceived resilience within the confines of higher education leadership. A review of the literature showed a limited amount of research had been performed when jointly combining these two frameworks within a higher education leadership environment. Data was gathered using the survey method compiled of two proven and accepted assessments. The 45-point Multifactor Leadership Questionnaire (MLQ) and the 25-point Connor-Davidson Resilience Scale (CD-RISC) were administered with six demographic questions as control variables. These demographic data included individuals' gender, age, leadership position level, years of employment with the university, years of experience in higher education, and completed level of education. The results of this study showed a moderately strong statistical positive correlation exists between self-perceived transformational leadership and self-perceived resilience within higher education leadership. Transformational leadership and resilience do not appear to be affected by age, gender, experience, leadership level, or educational attainment. However, transformational leadership and resilience appear are affected by years of employment, or institutional longevity, with the university where this research was performed.

Keywords: transformational leadership, resilience, higher education leadership

Transformational Leadership and Resilience within Higher Education

Leaders within higher education institutions of learning have experienced and will continue to experience change as higher education evolves. Historically speaking, higher education might be considered anything but changing. Higher education could be viewed as archaic and slow changing, with both innovative and conformist leaders, entombed in a massive entity impossible of rapid change. However, as Cohen and Kisker (2010) and Kerr (2001) pointed out, higher education is anything but stagnant. The amphitheater of modern higher education is full of changing backdrops and characters, which requires effective leadership. Although transformational leadership and resilience have been researched separately, these two frameworks have not been thoroughly explored or correlated within higher education leadership. A gap in the literature and a clear understanding of these two frameworks within higher education presented itself. The purpose of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leaders at a baccalaureate degree-granting private university in the Northwest United States. Leaders who perceive themselves to have both resilience and transformational leadership may have leadership practices meaningful to discover to assist them in their responsibilities.

The significance of this study will assist higher educational leaders in professional development and with future hiring. Moore and Diamond (2000) noted, “Leaders of . . . academic units know that, unimproved, today’s excellence will be tomorrow’s ordinary” (p. ii). Higher education and leadership have a long history of analysis and research. Leadership has been researched, analyzed, and critiqued by many scholars from a wide variety of viewpoints; leadership discussion is associated with many intellects, academics, and

professionals (Bass & Bass, 2008; Bass & Steidlmeier, 1999; Burns, 1978; Drucker, 2005; Goleman, 1998; Greenleaf, 1977; Greenleaf, Frick, & Spears, 1996; Lipman-Blumen, 1996, 1998; Palmer, 1990, 2000, 2008; Senge, 1990, 2005; and Senge, McCabe, Lucas, Kleiner, Dutton, & Smith, 2000). Leadership theories labeled servant, transformational, transactional, emotional, legacy, resilience, distributive, democratic, autocratic, participatory, contingency, and visionary are simply a few examples. Leadership has also been studied from various industry or field perspectives such as business, political, or educational. Coming to understand the relationship of the two paradigms of transformational leadership and resilience within an environment of higher education will assist current and future administrators with their leadership, managing, hiring, and professional development.

A large amount of research has been done on transformational leadership and resilience, yet strong empirical evidence is lacking regarding the significance of these two conceptual frameworks within higher education leadership. Furthermore, limited research exists concerning a joint study of transformational leadership and resilience; however, these two constructs have common characteristics, which embody and define their formation. Hence, this investigation should add information to the scholarly research and literature in the field of transformational leadership and resilience within higher education leadership.

The Multifactor Leadership Questionnaire of Bass and Avolio (2004) and the Connor-Davidson Resilience Scale (2003), which are both based on years of empirical research, provide practical guidance to leaders in every organization on how to lead, as well as practical suggestions of how to act during difficult situations. Higher education leaders are constantly exposed to the demands of a complex and changing education environment. To manage change in a world where increasingly complex problems emerge, education leaders

need to understand effectually their stakeholders' interests and needs. Since transformational leadership and resilience enable more effective handling of change (Conner, 1993; Flach, 1988), it has immense potential relevance to education.

Background

Institutions of learning are undergoing times of change and evaluation (Staley & Trinkle, 2011). Fulton-Calkins and Milling (2005) declared the constant assessment of leadership is imperative if higher education is to succeed in the future. Similarly, Kerr (2001) cautioned while looking forward: "It is important to avoid the big danger of overvaluing the past and undervaluing the future" (p. 211). Higher education administrators have an important role in the oversight of their respective educational entities. With this perpetual change, a need to reexamine effective higher education leadership principles is necessitated. Higher education has been altered greatly; this article does not weigh in on the modifications as being positive or negative for higher education. The researcher accepts the assertion change is inevitable within higher education and leaders must effectively function within this environment. Petrov (2006) stated, "Because of the organizational complexity of the university, its multiple goals, and its traditional values, the nature of leadership in higher education is ambiguous and contested" (p. 11).

The bulk of literature reviewed noted the increasing complexities continuously developing and forming within higher education. Existing researchers advocated and presented a wide variety of leadership concepts (Leithwood & Jantzi, 2000). These multifarious times in higher education may be assisted by leaders who possess resilience and transformational leadership characteristics. Perhaps a study into the interrelationship of these two frameworks would benefit faculty, administrators, and ultimately, students.

Drew (2010) posited higher education is becoming more complex over time and even though many have researched and published on the topic of higher education leadership, times are continually changing. With "the increased complexity of the leadership role in higher education" comes a need for continued academic leadership research (p. 57). Effectiveness, learning, teaching, and productivity may possibly be at risk if higher education leaders stop searching for innovative and groundbreaking approaches to higher education leadership.

The investigation of transformational leadership and resilience within the context of higher education may assist deans, department chairs, upper-level administrators, and mid-level managers in leading students, employees, and stakeholders through turbulent and exciting times. Vaill's (1996) "white water" can be ridden and future success opportunities seized. The outcomes of the study could ultimately influence how higher education administrators and managers facilitate and promote employee professional development and hiring practices. An assumption of the researcher is that, because of successful higher education leadership, students will have a better learning environment, faculty will teach more effectively, and administrators will more efficiently utilize resources. The researcher also acknowledges effective leadership is one of many items affecting effective teaching, learning, and working within higher education.

The list of challenges in higher education has increased and become more diverse in nature. Various demands and opposing paradigms exist amongst administrators, students, and faculty. Some view the university from a practical vocational point of view, where students engage in pursuit of academic excellence for strictly occupational purposes, driven by economic forces more than the pursuit of knowledge. Others view students as teachers, and

still others have a more traditional pedagogical approach to education where the professor is the bearer of all knowledge. Yet still, some view the university as a center for innovative research and discovery. Kerr (2001) discussed in detail these opposing or contrasting allegiances of a university (pp. 1–34); he shared scholarly research over nearly half a decade pertaining to the ever-changing university. With these contrasting views and complexities, higher education leaders who have a better understanding of resilience and transformational leadership may be poised to better lead.

Research Question

The overarching research question guiding this quantitative research was the following. Is there a correlation between transformational leadership and resilience; and if so, what are the variables affecting this possible relationship? Out of this research question, arose six hypotheses, which guided the study in its investigation of the correlation between transformational leadership and resilience.

The first sub-question is the following: Is there a relationship between transformational leadership and resilience in higher education leaders? The *first hypothesis is H1o:* There is no relationship between transformational leadership and resilience.

The second sub-question is the following: Does the relationship between transformational leadership and resilience vary by educational attainment? The *second hypothesis is H2o*: The relationship between transformational leadership and resilience does not vary depending on educational attainment.

The *third sub-question* is the following: Is there a difference in resilience between higher education leaders who have less experience (0 to 15 years) and more experience (16 to

35 years) in the higher education field? The *third hypothesis is H3o*: There is no significant difference in resilience between less experienced and more experienced administrators.

The *fourth sub-question* is the following: Does the relationship between transformational leadership and resilience vary depending on age? The *fourth hypothesis is H4o*: The relationship between transformational leadership and resilience does not vary depending on age.

The *fifth sub-question* is the following: Does the relationship between transformational leadership and resilience vary by leadership level? The *fifth hypothesis is H5o*: The relationship between transformation leadership and resilience does not vary depending on leadership level.

The *sixth sub-question* is the following: Does the relationship between transformational leadership and resilience vary by years of employment with the institution? The *sixth hypothesis is H6o*: The relationship between transformation leadership and resilience does not vary depending on years of employment with the institution.

Conceptual Framework

The framework is the theoretical or conceptual foundation for a study that informs how the research is developed and how the study and the discoveries are linked to higher education leadership. According to Miles and Huberman (2014), "A conceptual framework explains, either graphically or in narrative form, the main things to be studied–the key factors, constructs or variables–and the presumed relationships among them" (p. 20). In this quantitative research design study, the constructs of this study are transformational leadership and resilience and the presumed relationship among them within higher education leadership. It is plausible the outcomes of this study could ultimately influence how higher education

administrators and managers facilitate and promote employee professional development and hiring practices.

As the correlation and application of transformational leadership and resilience is better understood, a greater awareness of this information may assist current and future educational leaders. Bass and Avolio (2004) and Connor and Davidson (2003) have both presented accepted conceptual frameworks of transformational leadership and resilience, respectively. With these two leadership constructs and the environment of higher education, a gap in the literature and in the understood correlation of transformational leadership and resilience presented itself.

Transformational leadership and resilience are two separate frameworks reviewed in the literature. There has been minimal research investigating these two frameworks together in the setting of higher education, which presented a need. Although these two conceptual frameworks have several meanings, generally speaking, all were similar in nature. Resilience derives it Latin root meaning, "to bounce back," and transformational leadership is widely viewed as a leader who believes the ability to be a power of positive change lies within each individual. Coming to understand the relationship of these two paradigms within an environment of higher education may assist current and future leaders within their perspective stewardships.

Transformational Leadership

A clarification or a 'trans-leadership' delineation of terms is necessary to clearly understand transformational leadership because a misinterpretation, and even an occasional misusage, of terminology existed in the current literature. Transformational leadership, transactional leadership, and transformative leadership are three distinct leadership

frameworks that, although closely related, vary in connotation and are easily misunderstood. This study was undertaken with the historically traditional "transformational" leadership as introduced by Burns (1978), Bass and Avolio (1994), and Bass and Bass (2008).

Transformational

Transformational leadership describes leaders who act as role models; leaders who have high standards of ethical and moral conduct; leaders who communicate high expectations to followers; leaders who stimulate followers to be creative and innovative; and leaders who provide a supportive climate in which they listen carefully to the needs of followers. General accepted transformational leadership theory asserts to be honorable, ethical, and morally sets a higher standard for leader and follower to both be elevated to a higher level by individually working together for the good of the organization. Bass and Avolio (2004) identified transformational leaders to have the following five characteristics—the five "**I**'s" of transformational leadership: (1) **I**dealized Influence–Attributes; (2) **I**dealized Influence–Behaviors; (3) **I**nspirational Motivation; (4) **I**ntellectual Stimulation; and (5) **I**ndividualized Consideration (see Figure 1). These five "I's" of transformational leadership are quantifiable and measurable in a scale called the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio and Mind Garden, Inc., 2004).

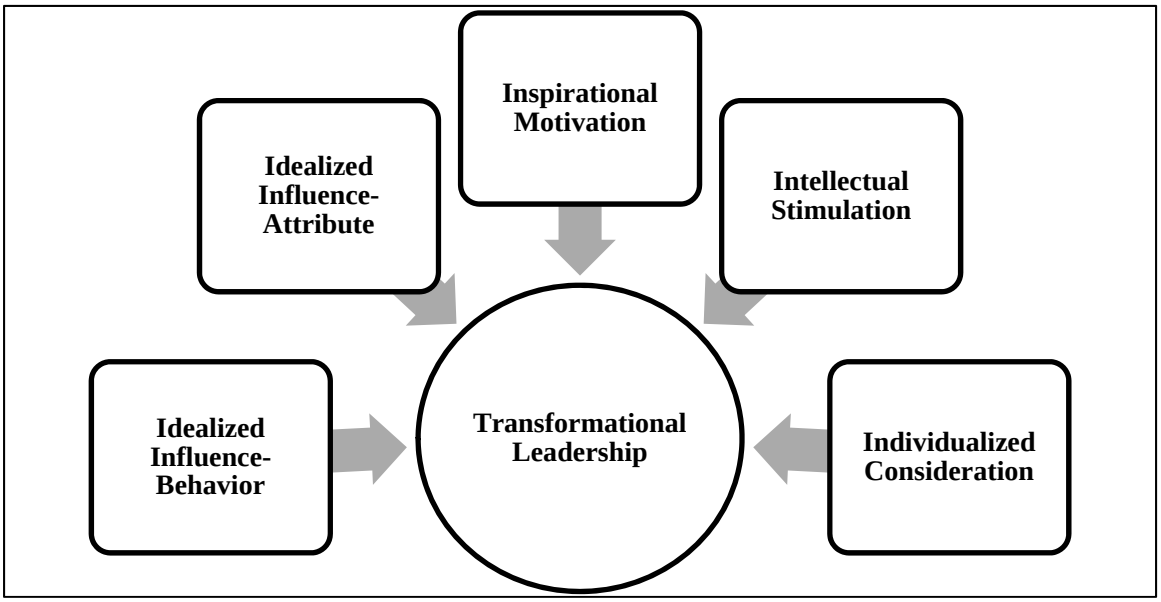


Figure 1. Transformational leadership characteristics as identified by Bass and Avolio (1994) and measured in the MLQ.

Adapted from the Multifactor Leadership Questionnaire (MLQ) User Manual (Bass & Avolio, 2004), the following descriptions are provided of the five "I's" of transformational leadership. A leader who embodies the *Idealized Influence-Attribute* instills pride in others for being associated, puts group first before self-interests, acts in ways to build self-respect, and displays a sense of power and confidence. Leaders who exemplify *Idealized Influence-Behavior* have a moral compass and discuss what is important to them. They consider moral and ethical consequences of their decision-making. *Inspirational Motivation* leaders behave in a motivational, optimistic, and enthusiastic manner. They have the ability to articulate a team vision or plan and confidently express achievement. Leaders who "stimulate their followers' effort to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways" characterize *Intellectual Stimulation* (Bass & Avolio, 2004, p. 102.). Last of all, the fifth characterization of a transformational leader is one who has *Individualized Consideration*. The leader who brings a positive mentor

or coach-type mentality to lead their followers is focused on the individual. A supportive climate will exist and focus on 'the one' rather than just the group.

Transformational leadership emphasizes the power of change lies within every individual. Effective transformational leaders realize and understand their power as an initiator of positive change. A transformational leader will implement plans of action and take on the role as a change agent.

Transactional

Transactional leadership, of which the pioneering scholars are again Burns and Bass, contrasted transformational leadership in that there is an emphasis placed upon a reward-punishment component. A transactional leader "is rooted in two-way influence: a social exchange in which the leader gives something and gets something in return" (Albritton, p. 188). The term transaction represents that the transactional leader understands doing 'x' will become 'y,' a transactional event. Corrective transactions take place but are motivated by the benefit it will bring to both organization and leader. In summary, individuals are motivated by reward or punishment. Bass (1985) categorized transactional leadership behaviors into contingent reward, management by exception-active, management by exception-passive and laissez-faire, or avoidance of leadership being (see Figure 2).

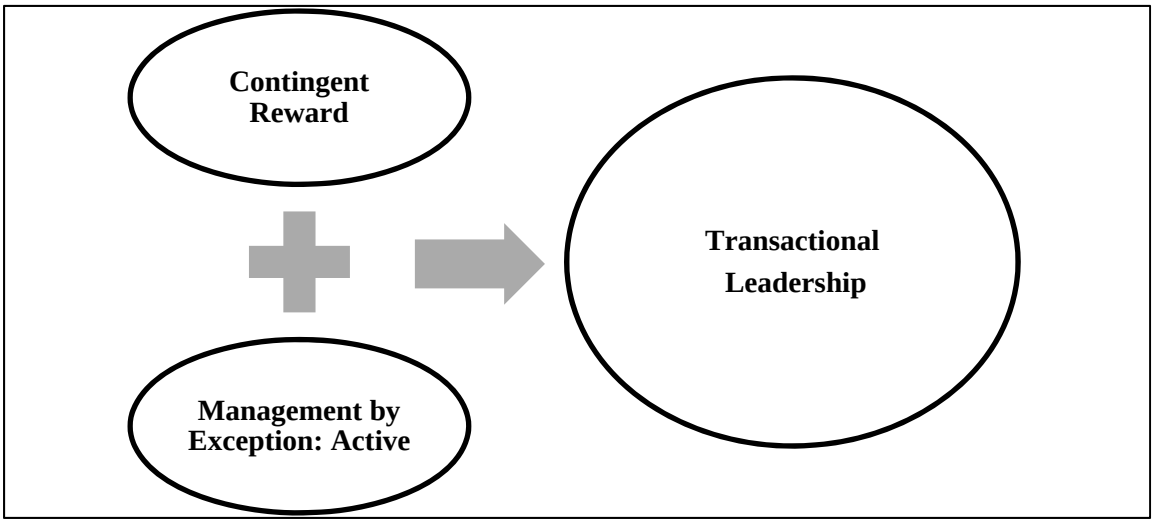


Figure 2. Transactional behaviors as identified by Bass (1985).

Bass was likely referring to transactional leadership in his Hooijberg and Choi (2000) interview where he defined the following:

> [Pseudo transformational leadership] looks like a transformational leader, it acts like a transformational leader, but in fact, it is not. A typical example would be the executive who cries crocodile tears when downsizing, but then gives himself a big bonus. I even developed a series of charts contrasting the authentic and pseudo-transformational leaders. However, assessing it in reality is hard because you do not know exactly what people's intent is. I think that authenticity and ethical behavior are closely associated with transformational leadership. I think there are great differences between transformational leaders who have a dark side and those who do not. Transformational leaders with a dark side will not upgrade the moral level of their followers. (p. 298)

Transformative

Astin, Astin, and Kellogg (2000) emphasized the importance of transformative leadership from both the collective and individual level. To be collectively successful, an institution of higher education has realization of the following five transformative leadership

concepts: collaboration, shared purpose, disagreement with respect, division of labor, and a learning environment. On the other hand—individually—educators and administrators must have self-knowledge, authenticity/integrity, commitment, empathy/understanding of others, and competence to be a transformative (p. 11-12) (see Figure 3).

Transformative leadership is a "group process whereby individuals work together in order to foster change and transformation" (p. 11). Astin, Astin, and Kellogg asserted, "The individual and group principles of transformational [sic] leadership can be applied to an almost limitless number of other change efforts that could be initiated by student affairs professionals" (p. 67). Shields delineated transformative leadership to "inextricably link education and educational leadership with the wider social context within which it is embedded" (2010, p. 569). Shields viewed transformative leadership within higher education leaders as a leadership for equity, deep democracy, and social justice; transformative leadership is more inclusive than exclusive.

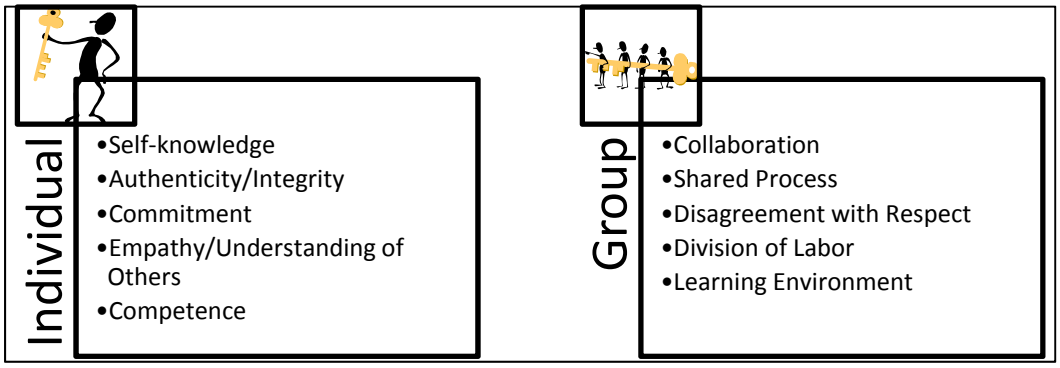


Figure 3. Transformative leadership characteristics broke down by group and individual (Astin, Astin, & Kellogg, 2000).

Transformational leadership (Avolio & Bass, 1987; Bass & Bass, 2008; Burns, 1978; Roueche, Baker, & Rose, 1989) recognized James Burns (1978) and Bernard Bass (1985) as its two pioneers. Burns (1978) is identified as the initial scholar to have mentioned transformational leadership in his book, *Leadership*. He drew attention to "transforming

leadership" in his discussion on the connection between "transactional leadership" and "transforming leadership in regards to political leaders. Burns (1979), the father of transformational leadership asserted:

> *Transforming* leadership . . . occurs when one or more persons *engage* with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. Their purposes, which might have started out as separate but related, [in contrast to] transactional leadership, become fused. Power bases are linked not as counterweights but as mutual support for common purpose. (p. 382)

Transformational leadership is necessary in order to navigate these times of change effectively. Bass and Avolio (1990) proposed in order to maintain viable in rapidly changing environments, establishments and their leaders must continually undertake change. Leadership must be open and willing to implement ideas that are more diverse. Such perpetual change calls for the need of transformational leadership. They suggested successful leaders must be transformational because of today's rapid pace of technological growth.

Authentic transformational leadership provides a more reasonable and realistic concept of self—a self that is connected to friends, family, and community whose welfare may be more important to oneself than one's own. One's moral obligations to them are grounded in a broader conception of individuals within community and related social norms and cultural beliefs. (Bass & Steidlmeier, 1999, p. 186)

According to Avolio and Bass (1987), "Transformational leaders do not necessarily react to environmental circumstances—they create them" (p. 36). Bass (1985) draws attention in his research to transformational leadership in relation to organizations. He proposed:

> [Transformational leaders] attempt and succeed in raising colleagues, subordinates, followers, clients, or constituencies to a greater awareness about the issues of consequence. This heightening of awareness requires a leader with vision, self-confidence, and inner strength to argue successfully for what [he/she] sees is right or good, not for what is popular or is acceptable according to established wisdom of the time. (p. 17)

The MLQ is a widely used tool to measure transformational leadership. Bass & Avolio (2004) MLQ instrumentation is further expounded upon in the 'Instrumentation' section of this article. The MLQ was first published in 1985 by Dr. Bernard Bass with 63 items included in the questionnaire. Subsequently, Avolio and Bass made several changes and modifications throughout the years. The MLQ is a 45-item factor questionnaire measuring transformational, transactional, and passive/avoidant leadership.

Resilience

Resilience derives its meaning from Latin *resiliens*, the present participle of *resilire* meaning to jump back or recoil, with the base root words from *re-* + *salire* to leap (Merriam-Webster's online dictionary, n.d.). Scholars have various definitions of resilience (see Figure 4) and the literature showed a universally accepted definition is not present. That being stated, research did display all definitions of resilience having similar key concepts and similarity in their makeup (Allison, 2011; Bernard, 1993; Conner, 1993; Flach, 1988; Hagevik, 1998; Higgins, 1994; Henderson & Milstein, 1996; Isaacs, 2003, Newell, 2013, Patterson, 2001) (see Figure 4).

Figure 4. Basic traits of resilience commonly found in a review of the literature.

Conner (1993) described resilience as having the following seven overall dimensions: Positive-Yourself, Positive-The World, Focused, Flexible-Thoughts, Flexible-Social, Organized, and Proactive (see Appendix E). Conner resolved that resilient individuals have these shared characteristics that allow them to meet overpowering challenges, which eventually all leaders encounter. Conner (1993) and Connor and Davidson (2003) created two separate resilience measure scales. Conner's (1993) scale is titled "Personal Resilience Questionnaire" (PQR), while Connor and Davidson's (2003) scale is titled "Connor-Davidson Resilience Scale" (CD-RISC). CD-RISC was the resilience scale implemented to select and identify leaders with the highest degree of resilience for this study. A few conceptual sample statements of the CD-RISC are provided in Table 1. Due to copyright laws, the CD-RISC in its entirety may not be included.

Table 1. Sample content of Connor-Davidson Scale (CD-RISC).

Description
Able to adapt to change
Coping with stress strengthens
Tend to bounce back after illness or hardship
Best effort no matter what
Strong sense of purpose
I like challenges
You work to attain your goals
Pride in your achievements

Allison (2011) examined resilience and its relationship to educational leadership. She noted one of the risks to the 'resilient leader' is stagnation in learning: when the desire to stop learning begins, resilience in leadership becomes endangered (p. 80). Allison and her counterpart, Davies, have an ongoing web-inventory where they ask readers to rank themselves on happiness and resilience among other items. Those who rate themselves a 9 or 10 on happiness also rate quite high in resilience. A similar pattern was seen with those who rated themselves low on happiness. "Resilience is often described as a personal quality that predisposes individuals to bounce back in the face of loss. Resilient leaders, however, do more than bounce back—they bounce forward" (p. 79). Resilient leaders are realistically optimistic even in the face of unpleasant realities; they press forward still.

"Strong nations, vibrant communities, and wise individuals very often share one common trait: they are resilient. They learn from the past, grow from their setbacks and mistakes, and move forward with a resolve to make things better" (Newell, 2012). Allison (2011) noted resilience at an educational institution is in jeopardy if these five resilience risks creep into existence: "top leaders stop learning; people blame everything on the budget; leaders ignore critical indicators; too many initiatives drain people; and success goes

uncelebrated" (p. 81). Allison then highlighted institution resilience is important, but strongly emphasized, "Resilience, it turns out, is an inside job that begins with choosing to be resilient" (p. 81). She asserted resilient leaders do the six following personal practices: "Engage in personal renewal. Watch [their] mouth. Stay optimistic. Quickly blunt the impact of setbacks. Cultivate networks before challenges hit. And last of all, see patterns—and use insights for change" (p. 81).

"One way to foster resilience in times of strife and loss is to ask powerful questions during coaching sessions. Good questions elicit ideas about resilience and inspire leaders toward resilient action" (Allison, 2011, p. 82). She asserted all are born with some level of resilience. She also provided a list of potential questions to motivate and build resilience (see Appendix D). George Washington professed, "Happiness and moral duty are inseparably connected" (as cited in Allison, 2011, p. 82). "Leaders who choose resilience over defeat not only gain energy to sustain change, but also gain happiness from doing meaningful work that makes a difference for students" (p. 82).

In the words of Confucius (as cited in Edwards, 1891, p. 149), "Our greatest glory is not in never falling, but in rising every time we fall." Higher education leaders who more clearly understand resilience, recognize occasional setbacks will occur; however, it is important to keep progressing. Newell (2013) described resilience in the following light, "The ability to rebound from disappointment, to work through adversity with courage and patience, refusing to give up or give in. . . . Resilience reveals something about our character—and it can empower us to become even better, wiser, and stronger."

> [Resilience in education] is a critical component to successfully manage change. Resilient people are not only able to 'bounce back' from change, but also

> come through even stronger and more capable than before; they are less likely to become victims of change. Resilient people more often accomplish their goals timely while not losing quality. In the face of uncertainty, particularly during budget cuts and restructuring, they tend to achieve their objectives and maintain their physical and emotional health. (Isaacs, 2003, p. 108)

Resilient leaders see potential problems as challenges, as opposed to trials; they strive to continue moving forward in the face of adversity. This characteristic is necessary for higher education leadership in navigating an environment of rapid change. As the higher education environment and community evolve, leaders who do not adapt well to this change risk being left behind. Resilience aids the leader in having the ability to bounce back when they might be pushed to a level of change, which they have not previously experienced. Resilient people are more likely to perceive a situation as a challenge, and less resilient people are more likely to perceive a situation as a threat. Resilient people demonstrate strength and flexibility in a difficult situation or adverse circumstances (Conner, 1993).

The Connor-Davidson Resilience Scale (CD-RISC) was the utilized instrument to measure resilience in this study. The CD-RISC is discussed in greater detail in the instrumentation portion of this article; however, in summation this scale provided a valid, simple, and concise method to self-report and quantify resilience. As higher education leaders become aware of these simple and basic self-reporting measures, their awareness and perception of resilience will increase.

In summary, the transformational leader will exemplify activities similar to coaching and mentoring. A transformational leader seeks to understand the individual's needs and how best to assist in their progression. They are visionary, inspirational, and charismatic (Boerner,

Eisenbeiss, & Griesser, 2007) while desiring to grow capacity in others. A transformational leader motivates through genuineness and sincerity. “Transformational leaders inspire followers to achieve extraordinary outcomes by providing both meaning and understanding” (Boerner et al., 2007, p. 16). Transformational leadership seeks to increase the capacity of others. The MLQ is the instrument commonly used to measure this capacity.

Leaders who are proactive in facing the problems or opportunities presented even after a setback have resilience—they have the ability to spring back into action. Resilient leaders are optimistic yet have a strong understanding of the actualities of the situation or circumstances; they are neither pessimistic nor overly optimistic. Resilience in leadership means taking action to react to the new and ever-changing realities introduced in organizations (adapted from Allison, 2011).

Methodology

The purpose of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leadership. A correlational research design was used to measure the degree of correlation between transformational leadership and resilience. A foundational understanding of the term correlation is critical to the methodology. Sharp (1979) taught, “When a researcher wants to find out the degree to which two variables are related, he is asking a correlation question” (p. 306). According to Leedy and Ormrod (2001), “This type of research involves either identifying the characteristics of an observed phenomenon or exploring possible correlations among two or more phenomena” (p. 182). A quantitative variable is measured in statistical units. A qualitative variable is normally not expressed with numbers, but is narrative in nature; therefore, a quantitative design was best for this study in

order to measure the correlation between transformational leadership and resilience. "Correlational designs are procedures in quantitative research in which investigators use a correlational statistical technique to describe and measure the degree of association (or relationship) between or among variables or sets of data" (Creswell, 2002, pp. 59–60).

Data was gathered using the survey method compiled of two proven and accepted assessments. The 45-point Multifactor Leadership Questionnaire (MLQ) and the 25-point Connor-Davidson Resilience Scale (CD-RISC) were administered, along with six initial demographic questions. These demographic data included individuals' gender, age, leadership position level, years of employment, years of experience, and completed level of education. The sample frame included all level 1 through level 4 staff or administrators who managed at least one employee—vice presidents through department managers; the sample frame included the entire population of 131 potential respondents. Of the 131 leaders, 80 of them completed the transformational leadership-resilience leadership questionnaire.

Participants

The organizational structure of the institution where this research was performed has multiple levels of rank or leadership, such as vice president, associate vice president, managing director, director, and manager. The higher education university is also divided into four areas, or divisions, of responsibility with a vice president over each area. All departments and offices fall under the direction of one of these four vice presidents. Each department has various title descriptions for their personnel. All administrator and staff personnel who fell into level 1, level 2, level 3, and level 4 of the university's official organizational chart and who also had stewardship or managing authority of other personnel were invited to participate in the leadership questionnaire. The entire population at the time

of this research study numbered 131. Out of the population of 131 persons, 80 respondents came forth and completed the MLQ-CD-RISC survey. A full breadth of the participants and their demographics can be viewed in Tables 2 through 7 in the 'Descriptive Statistics' portion of this study.

The university president and faculty were not included in the population frame because approval was not granted from the participating university due to ongoing current and existing institutional research and accreditation. Prior and following this research study, the university's faculty had already been requested to complete surveys for their institutional research. The head research officer had concerns in regards to faculty survey fatigue; however, permission to administer the leadership survey to administrators and staff was granted because this population had not been as heavily involved in previous surveys, and no future survey plans existed to request research from administrators.

Descriptive Statistics

Eighty people were surveyed for this study. As shown in Table 2, 90% of respondents were male and 10% were female. Although it should be noted, out of the population sample, 57% of the eligible female potential respondents and 61% of the eligible male respondents completed the survey. In other words, 88% of the population was male and 12% were female.

Table 2. Gender of survey participants.

Answer		Response	%
Male		72	90%
Female		8	10%
Total		80	100%

As shown in Table 3, the age of the participants were quite evenly spread, with a slight majority, 38%, coming from the 41-50 years of age range; a little over a quarter of the participants were 21-40 years of age, and a third of the participants fell between the ages of 55-70.

Table 3. Age of survey participants.			
Answer		**Response**	**%**
21 - 40 years old		22	27.5%
41 - 50 years old		31	38.8%
51 - 70 years old		27	33.8%
Total		80	100%

As shown in Table 4, 6% of percent of the participants achieved an associate degree; nearly a third of respondents have completed a bachelor degree; a little over half of all participants have completed a master degree; and a tenth of them have completed a doctorate degree.

Table 4. Formal educational attainment of participants.			
Answer		**Response**	**%**
Completed Associate Degree		5	6.3%
Completed Bachelor Degree		25	31.3%
Completed Master Degree		42	52.5%
Completed Doctorate Degree		8	10%
Total		80	100%

The largest survey response came from the office- level-type managers at 45%. Next, department-level-type managers (level 3) respondents were at 38%. Area managing directors and associate vice presidents were 13% of respondents, while executive-level-type respondents were 2%, as presented in Table 5. Note, the university's organizational chart population numbers also grow proportionally in numbers similar to the number of respondents at each leadership level; i.e., there are more level 4 employees than level 3, more level 3 than level 2, and more level 2 than level 1.

Table 5. Participants' leadership level.			
Answer		**Response**	**%**
Level 1 (executive level)		2	2.5%
Level 2		11	13.7%
Level 3		31	38.8%
Level 4 (manager)		36	45%
Total		80	100%

As demonstrated in Table 6, a fifth of the participants have been employed with the university 0-5 years. The remainder of the respondents were split almost equally between 6-10 years, 11-15 years, and 16-35 years, at a little over a quarter of respondents in each category.

Table 6. Participants' number of years employed with university where research was performed.

Answer		Response	%
0 - 5 years		16	20.0%
6 - 10 years		21	26.3%
11 - 15 years		22	27.5%
16 - 35 years		21	26.2%
Total		80	100%

Sixty percent of the participants have 0-15 years of experience working in higher education and 40% of them have 16-35 years of experience as shown in Table 7.

Table 7. Participants' number of years employed within higher education.

Answer		Response	%
0 - 15 years		48	60%
16 - 35 years		32	40%
Total		80	100%

The welfare of the participants was of the utmost importance. The study was conducted in accordance with the Institutional Review Boards requirements of both the University of Idaho and the university wherein the research was performed. Measures for ethical protection were under consideration from the initial design phase of the research. All participants were provided an informed consent via email requesting them to participate voluntarily in the study, which was again confirmed with the first question prior to beginning the questionnaire. Participants were also provided with contact information if they had any concerns or questions. Lastly, they were provided with information on how to unsubscribe from any additional contact (see Appendix K).

Instrumentation

The study utilized two widely accepted and proven leadership scales. Self-perceived transformational leadership was measured using the MLQ and self-perceived resilience was measured with the CD-RISC. The MLQ creators, Dr. Bernard Bass and Dr. Bruce Avolio, now administer and direct MLQ copyright and permission requests through a company titled Mind Garden. CD-RISC copyright and permissions were obtained directly from Dr. Jonathan Davidson (see Appendices F and G).

The MLQ was first originally published in 1985 by Dr. Bernard Bass with 63 items included in the questionnaire. Subsequently, Dr. Bruce Avolio with Dr. Bass made several changes and modifications throughout the years. The MLQ is now a 45-item factor questionnaire identifying leadership attributes pertinent to transformational leadership, transactional leadership, and passive/avoidant leadership. For this study, the transformational leadership factorial was taken into consideration. Twenty of the forty-five questions were designed to measure transformational leadership.

Multifactor Leadership Questionnaire (MLQ)

The Multifactor Leadership Questionnaire's reliability and validity has increased since 1985, as the questionnaire's psychometrics have been polished, analyzed, and tested. At one point, the MLQ was a five-factor analysis, six factor analysis, and now a nine-factor analysis. The name has been modified to reflect these changes as MLQ 5X, MLQ Form 5X, MLQ 5R, and MLQ (Bass & Avolio, 2004, pp. 46–69). The MLQ has been translated into multiple languages and administered in multiple countries throughout the world.

As with any leadership survey, there will always be some limitations that have been well documented in the leadership literature. Cognizant of these limitations, we have

> set out over the last 20 years to provide the very best validation evidence for the MLQ and now in its most recent form 5X. We have learned over time, which items work and which don't. We have seen a tremendous amount of consistency across raters, regions, and cultures in terms of support for the nine-factor full range model. The current [user] manual provides ample support for using the nine-factor model as the basis for research, assessment, and development. (Bass & Avolio, 2004, p. 82)

Kanste, Miettunen, and Kyngäs (2007) performed a study investigating the psychometrics of the MLQ. As displayed in Table 8, the results showed support for the internal consistency of the MLQ. Of particular importance are the five factors (II-A, II-B, IM, IS, and IC) measuring transformational leadership, which were the leadership characteristic measured for in this correlational study. The results showed support for the stability of the MLQ and the leadership subscales have been found to be internally consistent by various scholars (Den Hartog, Van Muijen, & Koopman, 1997; Lowe, Kroeck, & Sivasubramaniam, 1996; Stordeur, D'hoore, & Vandenberghe, 2001; and Tejeda, Scandura, & Pillai, 2001).

Table 8. Psychometric Properties of the Multifactor Leadership Questionnaire

	Cross-sectional study ($n = 604$)			Follow-up study ($n = 78$)			
MLQ	α*	item-total correlations†	inter-item correlations†	r‡	ICC§	ICC 95% CI¶	α**
II (A)	0·88	0·53–0·80	0·23–0·83	0·70	0·69	0·56–0·79	0·82
II (B)	0·90	0·55–0·73	0·35–0·65	0·70	0·70	0·56–0·80	0·82
IM	0·92	0·56–0·79	0·37–0·69	0·63	0·62	0·47–0·74	0·77
IS	0·91	0·20–0·80	0·15–0·76	0·68	0·68	0·54–0·78	0·81
IC	0·94	0·67–0·84	0·51–0·81	0·71	0·70	0·56–0·79	0·82
CR	0·91	0·51–0·82	0·24–0·83	0·68	0·68	0·54–0·78	0·81
MBEA	0·80	0·39–0·64	0·18–0·68	0·74	0·74	0·62–0·82	0·85
MBEP	0·78	0·34–0·69	0·20–0·63	0·75	0·75	0·63–0·83	0·86
LF	0·90	0·52–0·77	0·36–0·70	0·74	0·74	0·62–0·83	0·85

II (A), idealized influence (attributed); II (B), idealized influence (behaviour); IM, inspirational motivation; IS, intellectual stimulation; IC, individualized consideration; CR, contingent reward; MBEA, active management-by-exception; MBEP, passive management-by-exception; LF, laissez-faire leadership.

*Cronbach's α coefficient of leadership dimensions; †Pearson product moment correlation coefficient (r); ‡Correlation coefficient between two times of measurement (Pearson product moment correlation coefficient), P-value of all variables < 0·001; §correlation coefficient between leadership dimensions: ICC, intra-class correlation coefficient, single measure, P-value of all variables < 0·001; ¶95% confidence interval of intra-class correlation coefficient; **Cronbach's α coefficient between two times of measurement.

Note: Table reprinted from the *Journal of Advanced Nursing, 57*(2), p. 206, by O. Kanste, J. Miettunen, and H. Kyngäs (2007).

Connor-Davidson Resilience Scale (CD-RISC)

The CD-RISC's creators, Connor and Davidson, first published the self-resilience scale in 2003. The CD-RISC is a short, self-rated measure of resilience that "has sound psychometric properties" (Connor & Davidson, 2003, p. 81). The findings of their validation and reliability studies over the past eleven years revealed resilience is quantifiable and influenced by health; resilience is modifiable and can improve with treatment; and greater improvement in resilience corresponds to higher levels of global improvement.

> The CD-RISC has been tested in the general population, as well as in clinical samples, and demonstrates sound psychometric properties, with good internal consistency and test–retest reliability. The scale exhibits validity relative to other measures of stress and hardiness, and reflects different levels of resilience in populations that are thought to be differentiated, among other ways, by their degree of resilience. (Connor & Davidson, 2003, p. 81)

Connor and Davidson (2003) introduced a resilience scale after reviewing the past twenty years of psychometrics on resilience (see Table 9). They recognized the need for a simple, concise, and easy to use self-reporting scale to quantify resilience. Although several scales exist, "the Connor-Davidson Resilience Scale was developed as a brief self-rated assessment to help quantify resilience and as a clinical measure to assess treatment response" (Connor & Davidson, 2003, p. 77). The CD-RISC was the instrument utilized to assist in identifying participants for this study.

Table 9. Connor and Davidson (2003) historically identified these resilience characteristics to assist them in the creation of the Connor-Davidson Resilience Scale (CD-RISC).

Reference	Characteristic
Kobasa, 1979	View change or stress as a challenge/opportunity
Kobasa, 1979	Commitment
Kobasa, 1979	Recognition of limits to control
Rutter, 1985	Engaging the support of others
Rutter, 1985	Close, secure attachment to others
Rutter, 1985	Personal or collective goals
Rutter, 1985	Self-efficacy
Rutter, 1985	Strengthening effect of stress
Rutter, 1985	Past successes
Rutter, 1985	Realistic sense of control/having choices
Rutter, 1985	Sense of humor
Rutter, 1985	Action oriented approach
Lyons, 1991	Patience
Lyons, 1991	Tolerance of negative affect
Rutter, 1985	Adaptability to change
Connor & Davidson, 2003	Optimism
Connor & Davidson, 2003	Faith

"Psychometric properties of the RISC hold up well, although its factor structure and mean score varies with setting" (Connor & Davidson, 2013). For this reason, Connor and Davidson do not recommend separate scoring of the factor subscales. Notario-Pacheco, Solera-Martinez, Serrano-Parra, Bartolomé-Gutiérrez, Garcia-Campayo, and Martinez-Vizcaino (2011) reported good psychometric properties for the CD-RISC 10 in Spanish university students. The mean score of that study was 27.4. Yu and Zhang (2007) noted the CD-RISC to show strong psychometric properties in a Chinese adult population. Respectable internal reliability was obtained (Cronbach α coefficient = 0.91), and significant correlations were obtained between the CD-RISC and the Rosenberg Self-Esteem Scale, Life Satisfaction Index and the five scales of the NEO Inventory. As noted, a factor analysis produced somewhat different, yet still overlapping findings (Connor & Davidson, 2013).

Data Collection

The collection of the quantitative data was an important aspect for the research questions and the hypotheses. Data collection was performed using the online survey technology provided through Qualtrics. They are a proven company with the highest level of security and privacy offered in their field. All data gathered was password protected and only viewed by the researcher.

The process of data collection through the survey method was guided by Dillman, Smyth, and Christian (2009), with particular attention given to the "Web Survey Implementation" section (pp. 271–297). As shown in Appendix C, data collection using the MLQ and the CD-RISC with a few demographic questions was provided online to 131 administrators and staff who were responsible for managing personnel at a private baccalaureate degree granting university in the NW USA. As suggested by Dillman, et al.,

the "three email contact strategy" was implemented in this data collection (pp. 277–279). An initial email invitation was sent to potential respondents inviting them to complete the leadership questionnaire and informing them of the right not to participate and confidentiality (see Appendix K). A second brief reminder-invitation email letter was sent one week later. Finally, on the last day of the survey, a final email was sent to those not yet having completed the survey informing them that they questionnaire was closing the next day should they have a desire to participate. The survey was open for 15 days. It should also be noted, all participants who completed the survey were sent "thank you" emails acknowledging their time and consideration. This technique was selected over mailing questionnaires to participants because the online demographic questionnaire was an assessable and time-effective technique for collecting data. The researcher was able to go to the Qualtrics online portal to observe the process of the data collection.

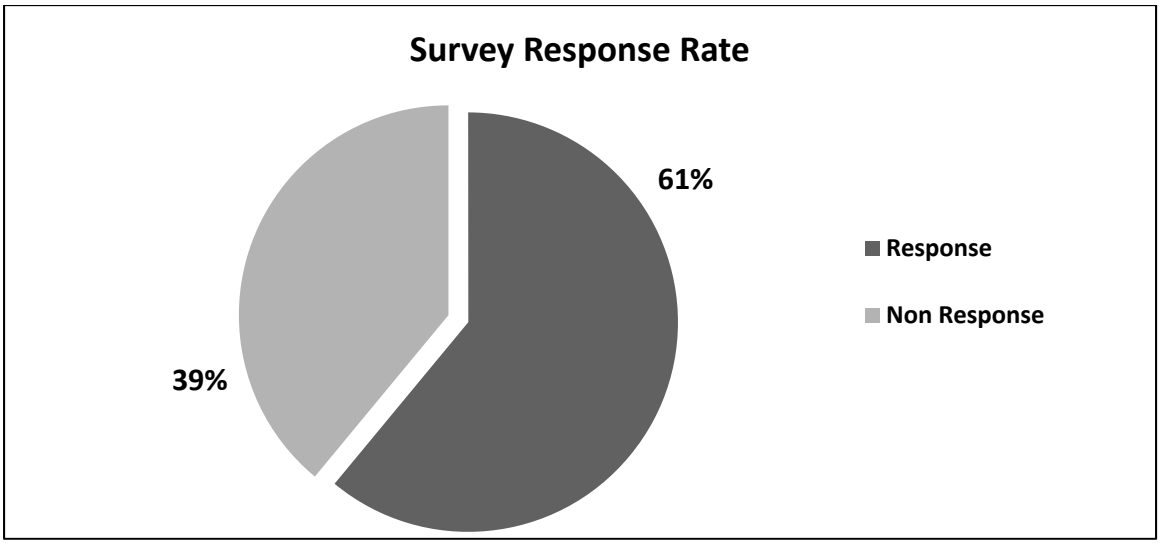


Figure 5. Survey response rate of sample population.

Data Analysis

"Validity is the term that psychologists use to describe the relationship between an answer and some measure of the true score" (Fowler, 2009, p. 15). The validity and

reliability of this study as it pertains to the localized leadership of the researched NW USA university is strengthened by the significant response rate of 61% (see Figure 5). Likewise, the entire population of categorized administrators and staff level 1 through level 4 were invited to participate in the study. Tanner (2012) emphasized, "There is a relationship between statistical significance and sample size. The connection is particularly clear with correlation. As sample sizes increase, the magnitude of the coefficient required for significance declines" (p. 273). Real time consistent monitoring of the survey method and survey data helped to minimize possible survey response error. To prevent survey "ballot stuffing," each participant was sent a unique survey link corresponding to his or her response identification number. This allowed participants to complete the survey only one time.

In a correlational design, the first step in selecting a statistic is to decide what is being related to what. In this correlational design, the correlation between transformational leadership and resilience was assessed. Moreover, the correlation between a number of control variables, i.e., gender, age, leadership level, years of institution employment, years of higher education experience, and level of education attainment. Leedy and Ormrod (2010) asserted, "A correlational study examines the extent to which differences in one characteristic or variable are related to differences in one or more other characteristics or variables" (p. 183); therefore, it was considered to be appropriate to address the objectives of the present study.

The quantitative correlational research design was appropriate for this study because it obtained data consisting of numbers, analyzed the numbers using statistics, and asked specific narrow research questions (Creswell, 2002, pp. 43–44). In order to assess the extent

of the relationship between transformational leadership and resilience, Pearson's correlation coefficients, independent samples t-test, and multiple linear regressions.

The software package, IBM Statistical Processing for the Social Sciences (SPSS) Version 22 (IBM SPSS, 2013), was used to make determinations of relationships and displayed results of the data. SPSS is a comprehensive, integrated software system developed for statistical data analysis utilized to calculate and analyze specific information from data used in research studies (IBM SPSS, 2013). George and Mallery (2013) wrote, "Descriptive is another frequently used SPSS procedure" (p.97). Descriptive statistics are designed to describe the data about a study in a clear understandable way.

Qualtrics web hosted survey technology collected and compiled the quantitative data. The research data from the quantitative study was collected, formatted, and entered into IBM SPSS software programming for analysis. Minimal assistance was provided by statisticians within the Math Department from the university where this research was performed. The statisticians were not participants in the study, nor did they have any knowledge of the assigned participant response identification numbers. Prior to the transfer of survey responses and numbers, the researcher assigned each participant a unique survey response identification number to ensure confidentiality.

Results

The previous sections described the background, relevant literature review, and the methodology for this research study. This section reports the data collected by the methodology laid in the previous segment. The purpose of this study was to determine the correlation between transformational leadership and resilience within higher education. A correlational design was used in the quantitative research study to investigate the relationship

between transformational leadership and resilience. The correlation between a number of control variables (gender, age, leadership level, years of institution employment, years of higher education experience, and education attainment) and resilience was also assessed. This study focused on a sample of eighty higher education administrators and staff personnel who have leadership responsibility to manage personnel at a N.W. U.S. private baccalaureate degree granting university.

As shown in Table 10, a historical listing of studies was performed using the CD-RISC (Connor & Davidson, 2013). For comparison purposes, the researcher has inserted the statistical results from this study. The 'comments' column listed to the side of each study should be taken into consideration, as the majority of previous studies were performed on populations with a unique ailment, experience, or designation. The mean score of 83.1 ranked higher than the US national random sample performed.

Table 10. CD-RISC previous study comparison scores with current study** inserted (Connor & Davidson, 2013)

Authors	Number	Mean (SD)	Location	Comments
Connor et al (2003)	458	80.4 (12.8)	USA	National random digit dial sample
Lamond et al (2008)	1,395	75.7 (13.0)	USA	Community sample over age 60
Sutherland et al (2009)	64	82.7 (8.0)	USA	Women in university community; healthy controls in study of chemical dependency
Kavirajan et al (2011)	1,151	76.1 (12.6)	USA	Postmenopausal women in community
Groins et al (2012)	160	83.0 (13.4)	USA	Federally recognized Native American tribe
Yu et al (2009)	560	65.4 (13.9)	China	Community sample
Yu et al (2009)	326	71.0 (11.3)	China	Parents (healthy controls in a study of autism)
Peng et al (2012)	1,998	61.7 (10.6)	China	Medical students
Ha et al (2009)	143	66.8 (12.7)	Korea	Healthy volunteers
Faria et al (2010)	421	73.4 (12.0)	Portugal	Community sample Lisbon
Solano & Neto (2012)	103	75.4	Brazil	Family member normative controls of chronic pain subjects
Ziaian et al (2012)	53 35 82	60 69 70	Australian refugees	Africa Former Yugoslavia Middle East
***Wasden (2014)**	***80***	***83.1 (8.9)***	***USA***	***NW USA university administrators/staff***

A conspicuous result of the resilience scale is the observation of the lowest mean question score and the highest mean question score. Respondents' answers to the following two questions were the lowest and highest scored, respectively as evident in Figure 6: "I try to see the humorous side of things when I am faced with problems." In addition, "I have a

strong sense of purpose in life." The lowest average scored question—humor—had a 2.99 score with a standard deviation of .59 and a variance of .35. The highest average scored question—purpose in life—had a 3.68 score with a standard deviation of .57 and a variance of .32.

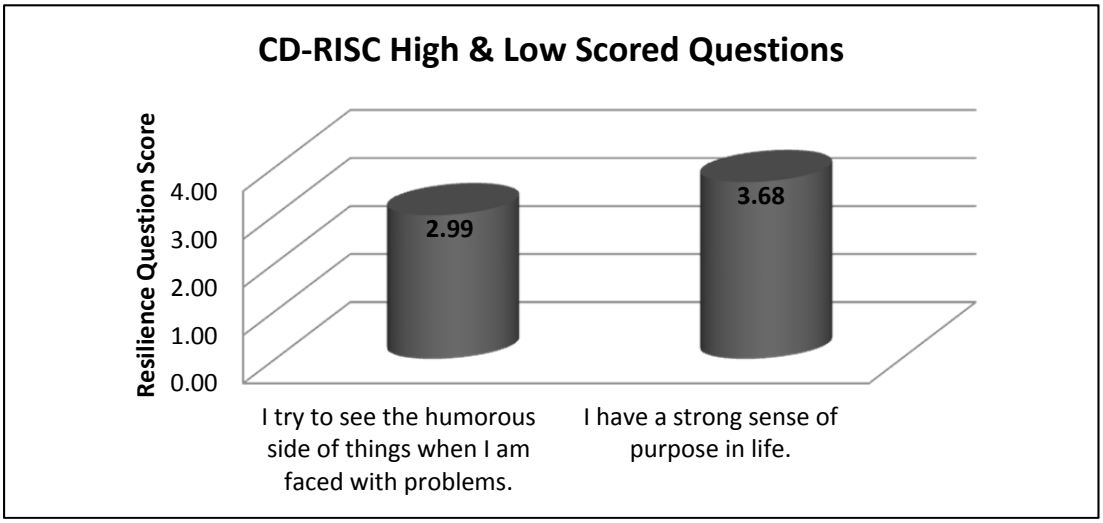


Figure 6. These two statements recorded the lowest average and highest average score from respondents out of the twenty-five CD-RISC statements.

The MLQ is designed to assess three leadership styles: transformational, transactional, and passive/avoidant leadership. Although the entire MLQ is a 45-point scale measure of these three types of leadership, this study focused purely on the transformational leadership style. Thus, the concentration was upon the twenty questions, which measured the five "I's" of transformational leadership: Idealized Influence–Attribute, Idealized Influence–Behaviors, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration. Respondents of this study scored highest on the transformational characteristic of "Inspirational Motivation" and scored the lowest on "Idealized Influence-Attribute" (see Figure 7).

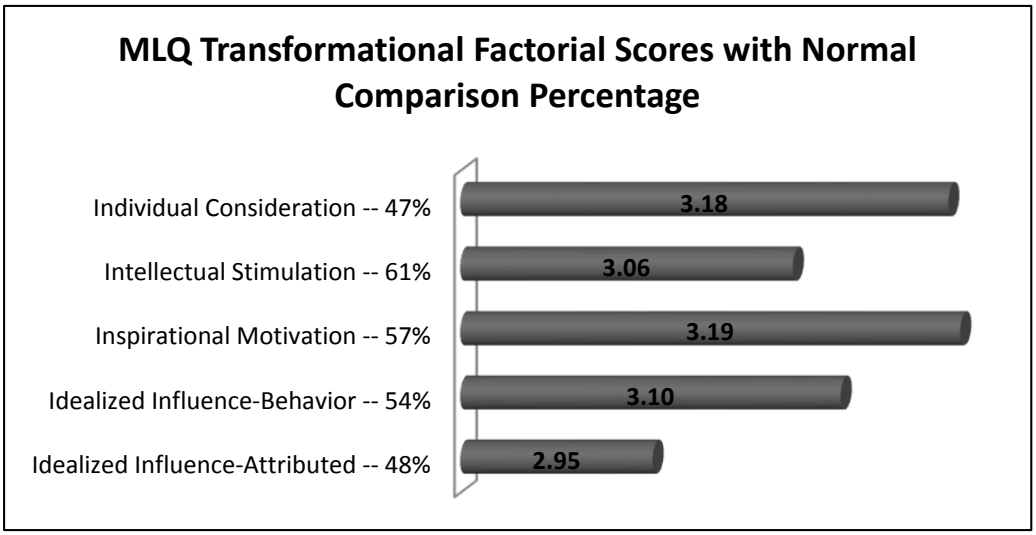


Figure 7. Transformational Leadership Factorial scores from the MLQ.

The MLQ User Manual provided a "Norms Table" for comparison purposes in the analysis of the respondents' scores. These norms are based off 3,755 individual scores taken from the general U.S. population. The following statements are portrayed in Figure 7. *Idealized Influence-Attributed*: 48% of the normed population scored lower, and 52% scored higher than 2.95. *Idealized Influence-Behavior*: 54% of the normed population scored lower, and 46% scored higher than 3.10. *Inspirational Motivation*: 57% of the normed population scored lower, and 43% scored higher than 3.19. *Intellectual Stimulation*: 61% of the normed population scored lower, and 39% scored higher than 3.06. *Individual Consideration*: 47% of the normed population scored lower, and 53% scored higher than 3.18.

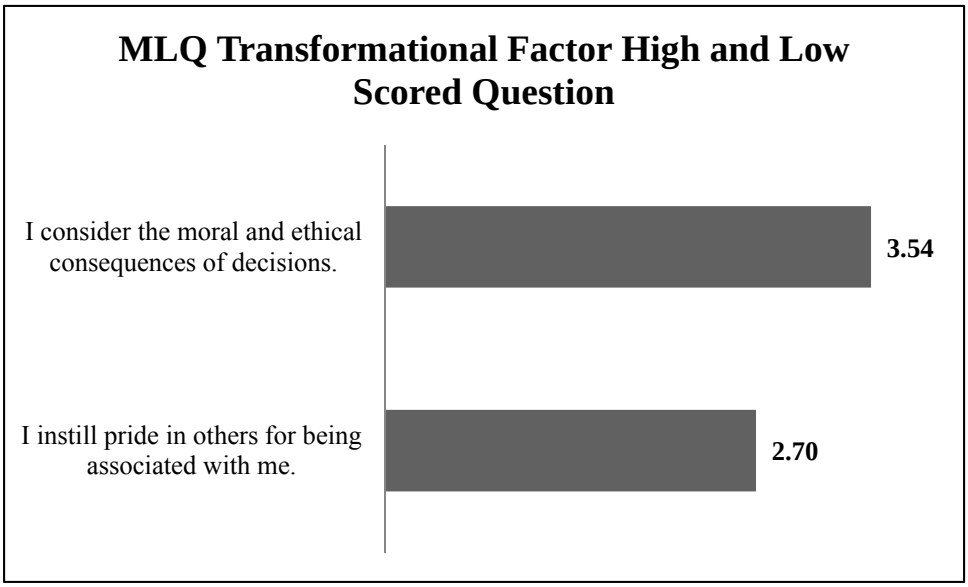


Figure 8. These two statements received the highest and lowest averaged scores of the transformational factorial questions on the MLQ.

Out of the twenty statements on the MLQ measuring transformational leadership, these two statements received the lowest average and highest average from the 80 respondents. The 'moral and ethics' statement received the highest average score and the 'pride and association' statement recorded the lowest average score (see Figure 8).

Analysis by gender virtually played no role in this study (see Figure 9). The mean or average CD-RISC score of male participants was 83.21 with female participants' average score being 82.38. A standard deviation of 9.17 for males and 5.48 for female participants was calculated, the variance being 84.08 for males and 29.98 for females.

The MLQ by gender analysis was similar to the CD-RISC in that no significant differences were noted between genders (see Figure 10). The average transformational leadership score of male respondents was 3.10 and the average score for female respondents was 3.09. A standard deviation of .40 and .27, for males and females respectively, was measured with the variance of .16 for male respondents calculated to be and .08 for female respondents.

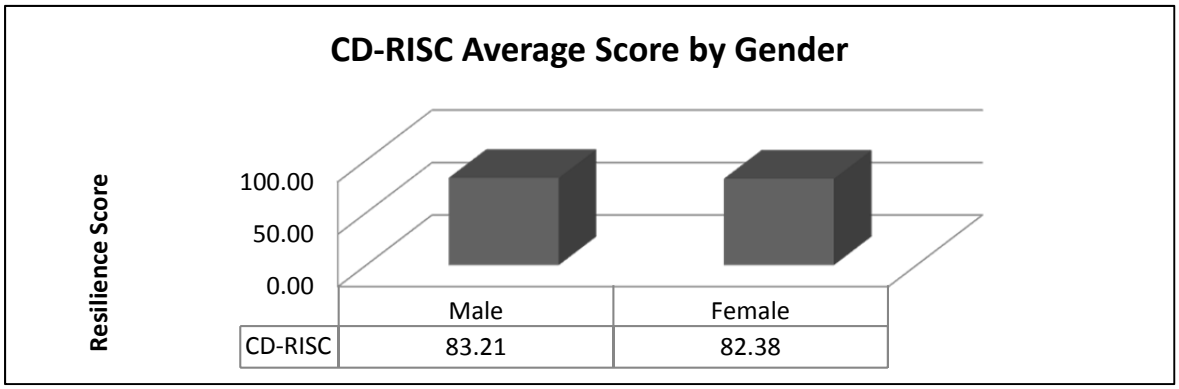


Figure 9. Scores broken out by gender from the CD-RISC.

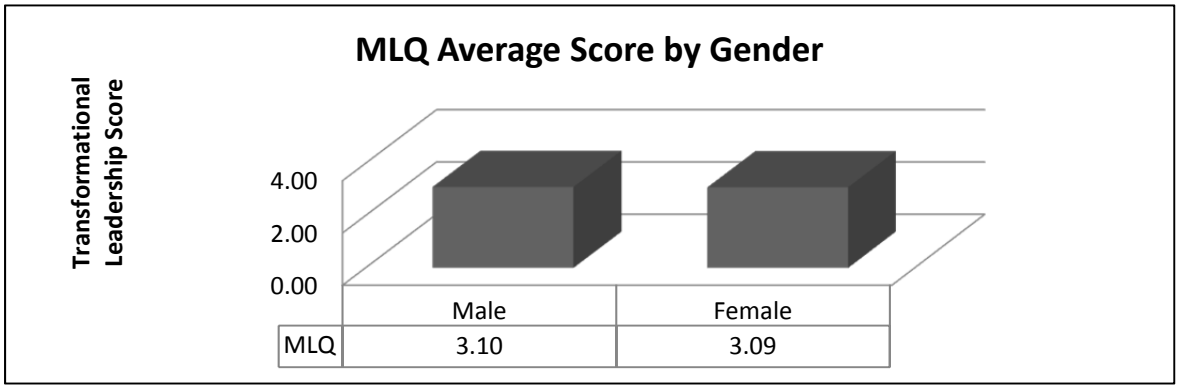


Figure 10. Scores broken out by gender from the MLQ.

Research Sub-Question I

Is there a relationship between transformational leadership and resilience in higher education leaders? The first hypothesis is H1o: There is no relationship between transformational leadership and resilience.

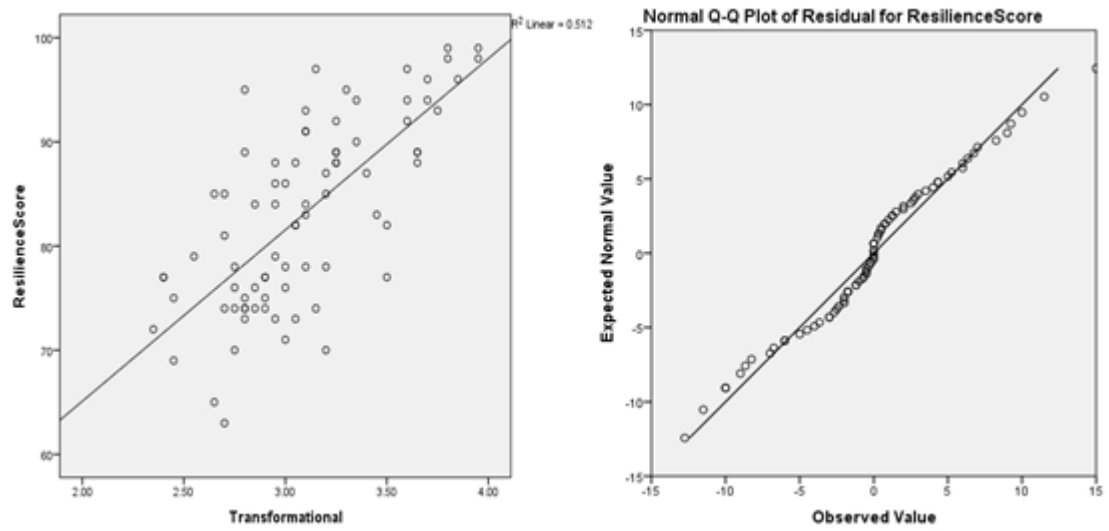


Figure 11. Scatter plot rejecting the first null hypothesis of a correlation between transformational leadership and resilience. As portrayed, a moderately positive correlation does indeed exist.

The R-Value (correlation coefficient) is .716 with a .512 R-Squared value, which is a moderately strong R-Squared value when predicting human behavior versus, perhaps, a physical process or event. This signifies a moderately strong correlation between the MLQ transformational leadership score and the CD-RISC resilience score. This relationship is also signified in the scatter plot graphed in Figure 11.

A t-value of 9.052 is calculated with a .000 p-value. This informs the reader the slope of the line is not zero—thus, reinforcing there indeed is a linear relationship between transformational leadership and resilience (see Appendix F for complete statistical calculations).

Research Sub-Question II

Does the relationship between transformational leadership and resilience vary by educational attainment? The second hypothesis is H2o: The relationship between transformational leadership and resilience does not vary depending on educational attainment.

There is insufficient evidence to prove the relationship between transformational leadership and resilience varies according to the level of education one might attain. Through evaluation of the p-value, one observes a .647 value that is > .05. (See Appendix G for in depth observations of data analysis.) Consequently, because the p-value is greater than the .05 significance level, the determination can be made to accept the second null hypothesis. In summary, this informs the reader how the levels of educational attainment affect resilience scores after factoring in transformational leadership—meaning that the relationship does not vary by educational attainment.

Research Sub-Question III

Is there a difference in resilience between higher education leaders who have less experience (0 to 15 years) and more experience (16 to 35 years) in the higher education field? The third hypothesis is H3o: There is no significant difference in resilience between less experienced and more experienced administrators.

H_0: $\mu_{(0\text{-}15\ years)} = \mu_{(16\text{-}35\ years)}$
$\alpha = .05$

The research shows a lack of sufficient proof to reject the null. Since the resilience p-value is .510, one must fail to reject the null hypothesis. One cannot conclude there is a significant difference in CD-RISC scores between those who have less experience (0-15 years) and those who have more experience (16-35 years) in the higher education field (see Appendix H for statistical calculations).

Research Sub-Question IV

Does the relationship between transformational leadership and resilience vary depending on age? The fourth hypothesis is H4o: The relationship between transformational leadership and resilience does not vary depending on age.

The calculated p-value for the control variable of 'Age' is significantly greater than .05 at .876. Since the Sig. (p-value) is > .05, there is not sufficient evidence to state the relationship between transformational leadership and resilience varies depending on age (see Appendix I for complete statistical tables).

Research Sub-Question V

Does the relationship between transformational leadership and resilience vary by leadership level? The fifth hypothesis is H5o: The relationship between transformation leadership and resilience does not vary depending on leadership level.

Again, the null hypothesis cannot be disproved because of a lack of evidence in the statistical calculations (see Appendix J). Upon in depth analysis of the variable 'Leadership Level,' the results show a Sig (p-value) of .964, which is also significantly greater than .05. This means there is insufficient evidence to state the relationship between the transformational MLQ score and the CD-RISC resilience score varies depending on the level of leadership at the university.

Research Sub-Question VI

Does the relationship between transformational leadership and resilience vary by the amount of years employed with the university? The sixth hypothesis is H6o: The relationship between transformation leadership and resilience does not vary depending on years of employment with institution.

As observed in Table 11, the Sig. (p-value) for the 'Tenure' row is less than .05. One has sufficient evidence to state the relationship between transformational leadership and resilience does indeed vary by the amount of time one has been employed with the institution because the p-value is less than .05. The institutional longevity or employment length with

the university affects the resilience scores after factoring in transformational leadership. The correlation between transformational leadership, resilience, and institutional longevity exists. As a side note, the terminology, “tenure” in this research instance is referring to administrators or staff length of time that have been employed with the University, not the common terminology “tenure,” which is often referred to when referencing faculty or professors—although this would be a recommendation for a future study.

Table 11. The 'Tenure' row shows a .049 Sig. (p-value) rejecting the null hypothesis. The relationship does vary depending on the amount of time one is employed at the university where the research occurred.

Between-Subjects Factors

		N
Tenure	1.00	16
	2.00	21
	3.00	22
	4.00	21

Descriptive Statistics

Dependent Variable: ResilienceScore

Tenure	Mean	Std. Deviation	N
1.00	80.19	8.534	16
2.00	84.05	10.171	21
3.00	85.95	8.599	22
4.00	81.48	7.731	21
Total	83.13	8.929	80

Levene's Test of Equality of Error Variances[a]

Dependent Variable: ResilienceScore

F	df1	df2	Sig.
1.042	3	76	.379

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Tenure + Transformational

Tests of Between-Subjects Effects

Dependent Variable: ResilienceScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3530.739[a]	4	882.685	23.917	.000
Intercept	1282.641	1	1282.641	34.754	.000
Tenure	303.745	3	101.248	2.743	.049
Transformational	3141.571	1	3141.571	85.122	.000
Error	2768.011	75	36.907		
Total	559080.000	80			
Corrected Total	6298.750	79			

a. R Squared = .561 (Adjusted R Squared = .537)

Discussion

The results of this study are intriguing because they state a moderately positive correlation does exist between transformational leadership and resilience; however, five of the variables affecting this relationship are vague and not yet fully identified. Possibly, with a

longer study or larger sample, a more definitive answer could be provided in regards to age, gender, educational attainment, leadership level, and experience.

In regards to length of institution employment, one does see a correlation with resilience affecting transformational leadership with this control variable. Correlation does not lead to causation; however, this relationship is worthy to consider when promotions are being considered within the institution.

Results for Hypothesis VI should be of particular interest to the stakeholder, as this is the one control variable where a correlation existed between transformational leadership and resilience scores. This variable appears to be a localized result because the demographic question asked participants to answer the number of years they had been employed with this particular university. The longer one works with the institution it appears, the greater their transformational leadership and resilience scores were affected; however, causation is unknown. Further research interest might be to compare this correlation with another university's correlation of the same variable.

The purpose of this study was to determine the correlation between transformational leadership and resilience within higher education. An important point of caution was provided by Tanner (2012) when he asserted, "It's very tempting to make the leap from correlation to causation. . . . Be warned against making such assumptions. Casual relationships are very difficult to validate in research with people" (p. 256). Leadership within higher education has great potential— individually and collectively—to bring about much good within higher education institutions of learning and to the individuals within these establishments. Administrators, deans, and chairs cognizant of resilience and transformational leadership are better equipped to face the modern day complexities within

higher education. The implications of identifying the interrelationship of transformational leadership and resilience frameworks brought a greater awareness to the importance of leading higher education institutions and individuals to success.

Limitations are powers the researcher cannot regulate. They are influences beyond the control of the researcher. Limitations are conditions, which limit the latitude of the study or may affect the result and cannot be controlled. Some limitations to this study were the honesty of the participants' responses; the MLQ and the CD-RISC were both self-assessment scales. Another limitation in regards to analysis by gender were the inherently low number of females in the population sample to begin, which was also represented by the 90% males who completed the survey and 10% female. The researcher was only granted permission to survey the administrators and staff. As with all emailed online questionnaires, a limitation is the lack of knowledge or guarantee that the individual who received the email and the individual who clicked on the link are indeed the same person.

The results are limited by the reliability of the MLQ and the CD-RISC is another limitation of the study. Last of all, a limitation of time constraints was present particularly because of the looming semester break and holiday season. An additional limitation is the researcher himself. Inherent in all research are the biases and ontologies every researcher brings with them to their research. Creswell (2013) emphasized, "All writing is 'positioned' and within a stance. All researchers shape the writing that emerges" (p. 215).

Delimitations are decisions made by the investigator, which should be declared. They define boundaries the researcher has set for the study. Delimitations define the parameters of the investigation. A delimitation of this study is the format of the professional practices doctorate (PPD). This type of doctorate program encourages research on a localized issue for

a localized audience. Permission was not granted to survey department chairs and college deans because of potential survey fatigue for ongoing and existing in-house institutional research.

This study did not include other leadership theories or framework—only resilience and transformational leadership. The research did not attempt to consider secondary education leadership, business leadership, or political leadership. This research was performed at a higher education institution offering only undergraduate degrees; consequently, the lack of graduate-degree organizational establishment could be viewed as a delimitation of the study. This study recognized that although the outcomes of this research are helpful in assessing higher education leadership in general, the results are specifically pertinent to the university where the study was carried out in the Northwestern, U.S.

Recommendations

The conclusions of this study have identified a few points to recommend for future research. As was revealed in the study, the control variables of age, gender, experience, leadership level, and educational attainment do not affect the correlation between transformational leadership and resilience within higher education leadership; however, there is a moderately positive correlation between transformational leadership and resilience. With this being stated, further research is recommended into investigating the causes and/or effects of transformational leadership and resilience correlation.

As the lone control variable, employee institutional longevity, having a correlation with transformational leadership and resilience, a future study might be of interest with faculty on the professorial tenure path. A similar study performed on a faculty population versus an administrator population. As previously noted, the terminology, “tenure” in this

research instance is referring to administrators or staff length of time they have been employed with the University, not the common terminology "tenure," which is often referred to when referencing faculty or professors—although this would be an intriguing future recommended study to pursue.

As this study was performed exclusively at one educational campus, another recommendation for additional research would be to compare and contrast these findings with another university's administrator and staff personnel. For the two studies to adequately be compared and contrasted, a similar demographically built university would need to be identified. Last of all, additional research might be done with the same MLQ and CD-RISC; however, a change in the control variables could be done to assist in narrowing down possible reasons for the correlation or affects.

Summary

This study did not debate the evolutionary progression or deterioration of higher education; the focus of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leadership. With a better understanding of this relationship, leaders within higher education are better prepared for the current and increasing complexities on the horizon. Implementation of resilience and transformational leadership will assist higher education leaders to seize effectively today's opportunities to meet tomorrow's challenges. Multifaceted times of change within higher education call for innovative leadership practice to match the unique circumstances of the time. Leaders who implement transformational leadership with resilience uniquely position themselves to guide effectively organizations and individuals in the rapidly changing environment of higher education.

The continuous evaluation of leadership is vital if higher education is to flourish in the future. Effective leadership within higher education is critical to the success of departments, colleges, teachers, students, and many other stakeholders. Leadership is defined by many entities in various ways; however, this study investigated the relationship of transformational leadership and resilience within higher education leaders. Analysis of these characteristics and practices was helpful in bringing a greater awareness to those in a position of leadership and those in a position where employee development falls under their stewardship. These stewards have the opportunity to create a greater holistic team that responds more efficiently and favorably to guidance and direction while also bouncing back in the face of day-to-day challenges: resilience and transformation in practice.

Chapter 2: Critiques

Leadership is a subject, which has been reviewed, researched, and assessed from many different perspectives and in many different environments. As mentioned in the Preface, part of the University of Idaho Professional Practices Doctorate (PPD) program is the group portion of the dissertational process. Each member of the cohort was also a member of a smaller intimate team of three or four researchers. As the program progressed into its second year, individuals and research topics became more identifiable and group selections became more natural. The categorical topic of this group is educational leadership. The team consisted of Ms. Trina Caudle, an Assistant Superintendent at a 5A public school district in the Northwest United States, Mr. Nathan Relken, the Online Degrees and Services Director at a private baccalaureate degree granting university in the Northwest United States, and this researcher, a small business owner and former higher education administrator at a private baccalaureate degree granting university in the Northwest United States.

This researcher will first review or critique Ms. Trina Caudle's manuscript, "Distributed Leadership: Developing College and Career Readiness through Student Empowerment." Distributive leadership in secondary education at a discovery-based learning magnet was researched. The second critique will focus on Mr. Nathan Relken's study, "Examining the Relationship between Emotional Intelligence and Perceived Leadership Practices among College Enrollment Services Administrators." As revealed by his title, Mr. Relken researched the relationship of emotional intelligence within a higher education leadership environment. Key (1997) provided the outline for the format of the critique.

Critique of Caudle Manuscript

Caudle, T. C. (2014). *Distributed leadership: Developing college and career readiness through student empowerment* (Unpublished doctoral dissertation). University of Idaho, Moscow.

Problem

The era of secondary education has changed; however, students are still being educated using the industrial model where they are viewed as products to be molded and sorted into two categories: semi-skilled labor or college bound. The Association for Career and Technical Education, National Association of State Directors of Career Technical Education Consortium, and Partnership for 21st Century Skills have all declared technology and a global economy require students to possess a different set of understanding and skills. Vollmer (2010) also asserted the "industrial model is no longer as relevant" (as cited in Caudle, 2014, p. 3).

The 21st Century Skills is a step in the right direction; however, they do provide students with an opportunity to practice or learn by doing in the application process. Trilling and Fadel (2009) asserted empowering students and giving them a voice in their own education is the key to providing students the opportunity to learn and practice the 21st Century Skills (as cited in Caudle, p. 4).

Comments: There appeared to be two problems stated: the first problem—seemed to be the main problem—was in regards to the outdated industrial model for teaching and learning within secondary education. The second problem, a sub-problem, concerned the lack of student opportunity to learn and practice the 21st Century Skills and Common Core State Standards. The educational significance of this problem is a good fit within the PPD because

it is a professional practices problem, which Caudle hopes to bring clarity to in her field of work. The title is clearly stated and has a direct tie to the research.

Purpose

The purpose of this study is not to address all . . . questions, but to determine, through a constructivist lens, action research, and systemic inquiry, [whether] students at Compass Academy feel empowered to take an active role in the development and maintenance of school culture and how students have influenced school culture based upon their perceptions of empowerment (Caudle, pp. 5, 8, 27, 38).

Comments: The purpose of the study was clearly stated four times throughout the study. Caudle was able to state her research method, design, and talking points into her purpose statement. Action research and systemic inquiry were briefly mentioned as methods utilized to perform this research. Throughout the article, her discussion and research successfully focused on tying the problem and purpose statements together. The purpose statement correlated to the main problem and sub-problem.

Objective

Data were collected to determine whether students feel empowered to take an active role in the development and maintenance of school culture and how students have influenced school culture based upon their perceptions of empowerment (Caudle, p. ii).

Comments: The objective was clearly stated and attainable. As this particular study was of a qualitative nature, the objectives were open-ended, as the exploratory nature of this research tends to be. A qualitative research design seeks to understand or further explore questions of a narrative nature.

Review of Literature

The literature review section evaluated literature pertaining to *Distributed Leadership, School Culture, and 21st Century Skills* [emphasis added]. The review of the literature sought to develop an understanding of the relationships between the three concepts and prepare students to be competitive in a global economy.

A review of the literature revealed that research is silent on the empowerment of students and their role as leaders within the school. Students need to have a voice and active role in their own education. Trilling and Fadel (2009) asserted empowering students improves motivation and provides them with an opportunity to achieve 21st Century Skills of collaboration, communication, leadership, and responsibility (as cited in Caudle, pp. 4–5). Students have much to contribute to the culture of the school and to their own development in preparation for life beyond high school. Cook-Sather (2002) noted when students have a voice in the classroom and in the school; students are more likely to engage in the direction of their own learning (as cited in Caudle, p. 5).

The author discovered distributed leadership literature mainly tended to focus on theory and not the application of this leadership model. Distributed leadership was defined by Caudle as when students and teachers have a voice in the decision making process. Distributed leadership is a different view of leadership, shifting from an individual phenomenon to a collective phenomenon, where leadership arises from a group of individuals working together.

Peterson and Deal (1998) defined school culture as encompassing the shared vision, mission, values, beliefs, norms, and traditions that impact how members of the school community interact with each other and the school environment (as cited in Caudle, p. 16).

21st Century Skills have been shaped by a series of studies directed at changing curriculum and instruction to provide students the knowledge, skills, and attributes to be competitive globally (Caudle, p. 18). Caudle also provided a table, which presented the 21st Century Skills Framework (p. 21).

Procedures

Through a constructivist lens, the Rapid Assessment Process (RAP) was utilized within the action research methodology to examine the collective leadership phenomena of distributed leadership and its relationship to school culture and 21st Century Skills from the perspective of students. Beebe (2009), declared the RAP approach as having many characteristics of ethnography and case study research, recognizing all members have decision-making power within the study. Creswell's (1998) notation of inquiry within a bounded system is also of importance to remember. RAP has its development from the Rapid Rural Appraisal methodology and has been utilized in multiple research contexts since the 1970s (Beebe, 2001; Beebe, 2013; Chambers, 1981; as cited in Caudle, p. 27). Beebe (2009) noted RAP also offers an increased cultural understanding through a diverse research team.

Comments: Action Research was the overarching methodology while Rapid Assessment Process was utilized to collect the data. RAP is relatively new in the research world; however, the author introduces the foundational underpinnings of the RAP methodology bringing strength to this unfamiliar methodology. This is the Rapid Appraisal Process, Rapid Appraisal Method, or Rapid Qualitative Inquiry. The mention of Sondeo's Methodology (Hildebrand, 1982) is absent, which would further strengthen this history of RAP.

Findings

The results of the study found students did feel empowered at the magnet school and felt they had a voice influencing choices within the school. This empowerment and voice, however, left several students feeling confused or frustrated with how to manage properly their freedom of choice while being held accountable. Through the qualitative action research interview process, the sought after answers were obtained, but the lack of self-management and prioritization skills was brought to light. Also noted were the strong positive relationships between teachers and students. Students often referred to the instructors as facilitators; this is representative of the project-based style of learning, which occurs at this magnet school.

Comments: The findings were objectively reported; however, the RAP methodology is personal in nature and has some ethnography roots in its creation. All writers will to some degree, bring biases to their research. Researchers bring certain ontologies with them from life, environment, learning, etc. The author was able to balance successfully her valuable personal experience and scholarly research to create an objective study. Figures and tables were not present in the findings, and they might have been helpful to recognize more easily the breadth of the findings. The narrative was clear and easy to understand and the 'Findings' portion of this study blended nicely heading into the 'Discussion' section.

Summary

The "manuscript" format of the research study, presented the 'Summary' and 'Findings' jointly under sub-section headers. A clear summary discussion existed and contained three talking points: Student Empowerment & Voice, Relationships with Teachers, and Developing Student Self-Management.

Conclusions

Caudle also organized the conclusion into the three categories of Student Empowerment & Voice, Relationships with Teachers, and Developing Student Self-Management. This assisted the reader in tying connections to the 'Findings.' It appears the conclusion section of this article began with the header titled, 'Discussion;' although there is a 'Recommendations and Conclusions' section toward the end of the manuscript. The 'Conclusion' clearly and simply reviewed purposes, objectives, review of the literature, and it tied together the 'Findings' with the 'Discussion.'

Recommendations

Recommendations are for the school to not leave its core roots established its first year in operation. During the first year, there was a more natural tendency to provide opportunities for the students to feel empowered and they had a voice in the decision-making process. Recommendations to ensure this continues are paramount to not slipping back into the industrial model.

Another recommendation was issued concerning the usage of collaboration time. The researcher proposed a possible scaffolding approach to the allotment of collaboration time. As a student shows improvement, development, or progression, they will have shown and earned the right to have self-managed collaboration time granted unto them. This will develop self-management skill as well as also solving the dilemma of collaboration time.

List of References

The layout and design of the references listed was in accordance with APA format and style. The reference sources came from a variety of sources and authors; helping this study to be founded upon strong scholarly research.

Overall Critique of the Study

Strengths: The study's conceptual framework provided a strong foundation to measure appropriately the skill sets of students. The qualitative nature of the study can be viewed as both a strength and weakness of the study. As the nature of qualitative research is defined, the author was able to conduct exploratory interviews with a team of researchers that allowed for repeat interviews and data triangulation. Through the interview coding process, like themes arose from the data analysis. A research team of insiders and outsiders improved efficacy and minimized bias. The RAP team also consisted of both genders and each member brought different ontologies to the research.

Weaknesses: The researcher has an established pre-conceived notion of the magnet school because of her professional responsibilities. An unanswered question might be how well the researcher balanced her emotion or passion concerning the magnet school to minimize her bias; however, the researcher most likely accounted for this through the RAP methodology mentioned under the "strengths" section and also alluded to in the 'Findings' piece of this critique.

Critique of Relken Manuscript

Relken, N. A. (2014). *Examining the relationship between emotional intelligence and perceived leadership practices among college enrollment services administrators* (Unpublished doctoral dissertation). University of Idaho, Moscow.

Problem

Often college administrators will adequately perform their job; however, in the process, they miss subtleties and nuances of effective leadership—particularly in regards to relationships and social capital. Noticing these subtleties and nuances is a necessary skill for

college administrators to be effective leaders in order to build and strengthen the support for staff, faculty, and students. Emotional intelligence may be a key to this objective (Relken, 2014, p. 4).

Comments: The problem was stated under the "Problem Statement." As a quantitative study, a consideration for the author might be to make a stronger quantitative or statistical connection in the 'Purpose' or 'Problem' that connects the correlational-based study.

Purpose

The purpose of this correlational research design study is to help identify trends or new hypotheses in order to obtain a certain level of reliability about the relationship between emotional intelligence and perceived leadership (Relken, p. 4).

Comments: The purpose of the study was clearly stated one time in the document. Purpose-like nuances were also listed under the 'Significance of the Study' portion of the article. As mentioned above, it might have been helpful somehow to tie a more detailed quantitative design concept or terminology into the problem statement or purpose statement, possibly a hypothesis of some sort. If a purpose is to identify new hypotheses as stated, then it sounds more like and exploratory narrative qualitative design or mixed-methods. A statement to consider: Either the title of the manuscript should be modified or the problem of the study should be modified to fit better the purpose of the study.

Objective

1. Is there a relationship between Emotional Intelligence and the perceived leadership skills of college administrators?
2. If so, how can these findings be used to shape or improve the practice of college administration?

3. Are college administrators with higher emotional intelligence perceived as better leaders by their subordinates, than administrators with lower emotional intelligence?
4. What leadership skills & practices are evidenced by college administrators with higher levels of emotional intelligence?

Comments: The first, third, and fourth objectives seem to be achievable for this research quantitative correlational study. Relken might consider if the second objective is more qualitative in nature and should be saved for another future study. If not, then the design of this study is a mixed-methods approach. The author may want to consider revising and narrowing down these research objectives to fit more appropriately with the methodology.

Review of Literature

The literature reviewed was separated into two areas: emotional intelligence and higher education leadership. The emotional intelligence portion of the reviewed literature examined the role of Goleman (1998) in terms of the emotional intelligence construction. He is a leading scholar in the current emotional intelligence field. Cavazotte, Moreno, and Hickmann (2012) informed, “Emotional intelligence is similar to intelligence and is often thought of as intelligence applied in an emotional context where the individual possesses the ability to perceive emotions, understand them, and apply them to situations that arise (p. 445; as cited in Relken, p. 7). Three models of emotional intelligence are widely accepted. The first is that emotional intelligence is an ability or a skill; the second model is that is a trait or personality characteristic; and the mixed model recognizes the value of both models in the emotional intelligence framework.

The literature review was absent of a deeper review of the instrumentation the researcher used for the study; although, there was a definition of the following terms. The *"Leadership Practices"* refers to those practices surveyed in this study utilizing the *Five Exemplary Leadership Practices* by Kouzes and Posner (2003): modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. *Leadership Practices Inventory Observer (LPIO)*: A thirty-question evaluation addresses each of the five leadership practices with six questions each from an observational perspective. *Leadership Practices Inventory Self (LPIS)*: A thirty-question evaluation addresses each of the five leadership practices with six questions each from a self-perspective. *Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) V2.0*: According to Mayer, Salovey, & Caruso (2002), the MSCEIT V2.0 is a test intended to provide a measurement of emotional intelligence, which covers perceiving, understanding, managing, and facilitating thought with emotion (as cited in Relken, p. 5).

Procedures

The correlational quantitative study chose a sample of twelve college administrators from within a division or department. All participants received an informed consent form and were provided the rights to participate voluntarily. The study was conducted under the appropriate IRB guidelines. Each participant was provided with a hard-copy paper survey to complete two instruments. Kouzes and Posner (2003) identified the first instrument measures leadership practices inventory. Mayer, Salovey, and Caruso (2002) created a widely used instrument to measure emotional intelligence titled, *Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT) V2.0 Leadership Practices Inventory Self (LPIS).* In the second

part of the study, direct report employees were asked to complete a *Leadership Practices Inventory Observer (LPIO)* concerning their administrator.

Comments: The methodology is a quantitative correlational design utilizing the survey method. The author might benefit his reader by providing them with the basics of a correlation study and its components, possibly, expounding upon the 'Quantitative Design' and providing a rudimentary description of correlational studies.

Findings

The researcher evaluated the findings between the two instruments administered: LPIS and the MSCEIT V2.0. A correlation matrix was presented showing the Pearson Correlation as .96. Also presented were the findings related to emotional intelligence and managing sub-scores highly correlated with LIP averages.

Comments: The Pearson Correlation of .96 is significantly high, leading to a strong positive correlation between the LPIS and the MSCEIT V2.0; however, the *n* = sample is quite low. This study might be a good springboard study to further confirm or deny these findings. Relken's two presented correlation tables showing the *Pearson's r* as .96 were quite helpful and informative.

Summary

The summary of the study successfully tied the literature review, purpose, and objectives together; however, a discussion/implications or review of the statistical findings was only briefly mentioned. A more in-depth summary or conclusion might have strengthened the statistical findings.

Conclusions

It appears the conclusion section of this article was tied directly to the summary section of the article—as is common with manuscript-style writing

Recommendations

Recommendations were not included in this article at the time of review.

List of References

The layout and design of the references listed was in accordance with APA format and style. The reference sources came from a variety of sources and authors, helping this study to be a founded upon strong scholarly research. Statistical references were absent.

Overall Critique of the Study

Strengths: The study was conducted on a localized issue under the PPD guidelines. It appears the findings welcome emotional intelligence as a necessary attribute to improve leadership within higher education. The statistical findings were presented in a simplified easy to understand manner.

Weaknesses: A weakness of the study might be the depth or breadth of the statistical analysis. Are there other methods or ways to consider analyzing the data? Another weakness is the discussion/summary/conclusions portion of the article. A stronger conclusion tying all the research study together would be a positive addition to include.

Chapter 3: White Paper

"Leaders of . . . academic units know that, unimproved, today's excellence will be tomorrow's ordinary" (Moore and Diamond, 2000, p. ii). A 'white paper' has multiple definitions among various audiences and environments. This white paper aims to provide a condensed, simplified report to the university where the research was completed and falls within guidelines established by the Purdue University Online Writing Lab-OWL (Sachiko & Stolley). A 'white paper' was encouraged as a part of this professional practices doctorate.

The purpose of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leaders at a baccalaureate degree-granting private university. The investigation of transformational leadership and resilience within the context of higher education may assist deans, department chairs, upper-level administrators, and mid-level managers in leading students, employees, and stakeholders through turbulent and exciting times. The outcomes of the study could ultimately influence how higher education administrators and managers facilitate and promote employee professional development and hiring practices. The motto 'rethinking education' is aligned with transformational resilient leaders. Leadership practices must continue to evolve if higher education desires to continue producing "cutting edge" graduates (Jones, Lefoe, Harvey, & Ryland 2012).

Research Questions

The overarching research question guiding this research was the following. Is there a correlation between transformational leadership and resilience; and if so, what are the variables affecting this possible relationship? From this research question arose the following sub-questions, which guided the investigation of the correlation between transformational

leadership and resilience at a private baccalaureate degree granting university in the Northwest United States. (1) Is there a relationship between transformational leadership and resilience in higher education leaders? (2) Does the relationship between transformational leadership and resilience vary by educational attainment? (3) Is there a difference in resilience between higher education leaders who have less experience and more experience in the higher education field? (4) Does the relationship between transformational leadership and resilience vary depending on age? (5) Does the relationship between transformational leadership and resilience vary by leadership level? (6) Does the relationship between transformational leadership and resilience vary by institution years of employment?

Transformational Leadership

Adapted from the Multifactor Leadership Questionnaire (MLQ) User Manual (Bass & Avolio, 2004), the following descriptions are provided of the five "I's" of transformational leadership. A leader who embodies the *Idealized Influence-Attribute* puts group first before self-interests; acts in ways to build self-respect; and displays a sense of power and confidence. Leaders who exemplify *Idealized Influence-Behavior* have a moral compass and discuss what is important to them. *Inspirational Motivation* leaders behave in a motivational, optimistic, and enthusiastic manner. They have the ability to articulate a team vision. Leaders who "stimulate their followers' effort to be innovative and creative by question assumptions, reframing problems, and approaching old situations in new ways" characterize *Intellectual Stimulation* (Bass & Avolio, 2004, p. 102.). Last of all, the fifth characterization of a transformational leader is one who has *Individual Consideration*. The leader who brings a positive mentor or coach-type mentality to lead their followers is focused on the individual.

Resilience

Resilience derives its meaning from Latin *resiliens*, the present participle of *resilire,* meaning to jump back or recoil, with the base root words from *re-* + *salire* to leap (Merriam-Webster's online dictionary, n.d.). Higher education leaders who more clearly understand resilience recognize occasional setbacks will occur; however, it is important to keep progressing. "[Resilience in education] is a critical component to successfully manage change. Resilient people are not only able to 'bounce back' from change, but also come through even stronger and more capable than before" (Isaacs, 2003, p. 108). Allison (2011) noted one of the risks to the 'resilient leader' is stagnation in learning: when the desire to stop learning commences, resilience in leadership is endangered. Additional threats were too man initiatives drain people; people blame everything on the budget; success goes uncelebrated; leaders ignore critical indicators (pp. 80-81).

Connor and Davidson (2003) researched the past twenty years of resilience history and created the CD-RISC. They recognized the need for a simple, concise, easy to use self-reporting scale to quantify resilience. Although other scales exist, "the Connor-Davidson Resilience Scale was developed as a brief self-assessment to quantify resilience and as a clinical measure to assess treatment response" (Connor & Davidson, 2003, p. 77). The CD-RISC was the instrument utilized to assist in identifying participants for this study. For copyright reasons, the CD-RISC cannot be included in this report; however, several characteristics or attributes measured were the following: ability to recover, ability to bounce back, ability to cope and adapt, ability to implement change, ability to overcome adversity, ability to withstand hardship, and strength to confront trials.

Data and Methods

The purpose of this quantitative study was to measure the degree of correlation between self-perceived transformational leadership and self-perceived resilience in higher education leadership. Data was gathered using the survey method compiled of two proven and accepted assessments: the 45-point Multifactor Leadership Questionnaire (MLQ) and the 25-point Connor-Davidson Resilience Scale (CD-RISC). Included with these two instruments were six demographic questions in regards to gender, age, leadership position level, years of employment, years of experience, and completed level of education.

Administrator and staff personnel who fell into level 1, level 2, level 3, and level 4 of the university's official organizational chart *and* who also had stewardship or managing responsibility of other personnel were invited to participate in the leadership questionnaire. The entire population at the time of this research study numbered 131. As shown in Figure 12, out of the population of 131 persons, 80 respondents came forth and completed the survey. Faculty was not included in the population frame because approval was not granted from the head institutional research officer due to current and ongoing institutional research and accreditation. Concerns in regards to faculty survey fatigue existed.

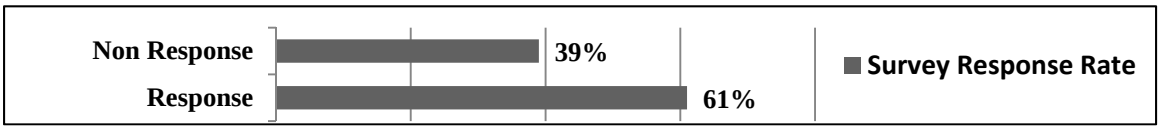


Figure 12. Survey response rate showing 61% responded and 39% with no response.

Data collection was performed using the online survey technology provided through Qualtrics through and invitation letter with informed consent (see Appendix K). Qualtrics is a widely used and offers a safe, secure, and reliable web based survey technology (www.qualtrics.com). To prevent survey "ballot stuffing," each participant was sent a unique

survey link corresponding to his or her response identification number. This allowed participants to complete the survey only one time. The process of data collection through the survey method was guided by Dillman, Smyth, and Christian (2009) with particular attention given to the web survey implementation (pp. 271–297).

As suggested by Dillman, et al., the "three email contact strategy" was implemented in this data collection (pp. 277–279). The survey was open for 15 days. The online survey method was selected over mailing questionnaires to participants for time and efficiency purposes as all participants have a computer.

The correlation between transformational leadership and resilience was assessed, in addition to the correlation between a number of control variables, including gender, age, leadership level, years of institution employment, years of higher education experience, and level of education attainment. Leedy and Ormrod (2010) asserted, "A correlational study examines the extent to which differences in one characteristic or variable are related to differences in one or more other characteristics or variables" (p. 183); therefore, it was considered to be appropriate to address the objectives of the present study.

In order to assess the extent of the relationship between transformational leadership and resilience, Pearson's correlation coefficients, independent samples t-test, and multiple linear regression were performed utilizing the software package, IBM Statistical Processing for the Social Sciences (SPSS) Version 22 (IBM SPSS, 2013). The research data from the quantitative study was then collected, formatted, and entered into IBM SPSS software programming for analysis. Minimal assistance was provided by statisticians within the Math Department at the university.

Results

Ninety percent of the respondents were male with 10% being female. The age of the participants was quite evenly spread with a slight majority, 38%, falling between the 41 to 50 age range. A little over half of all participants have completed a master degree; and a tenth of them have completed a doctorate degree. The largest survey response came from the office level-type managers at 45%, which stands to reason as the level-4 leaders are a larger population in a hierarchal organization. That is, there are more level-4 employees than level-3; more level-3 than level-2; and more level-2 than level-1.

A fifth of the participants have been employed with the university 0-5 years. A little over a quarter of the respondents have almost equally been with the university 6-10 years, 11-15 years, and 16-35 years. Sixty percent of the participants have 0-15 years of experience working in higher education and 40% of them have 16-35 years of experience.

Table 12. CD-RISC previous study comparison scores with current study** inserted (Connor & Davidson, 2013)

Authors	Number	Mean (SD)	Location	Comments
Connor et al (2003)	458	80.4 (12.8)	USA	National random digit dial sample
Lamond et al (2008)	1,395	75.7 (13.0)	USA	Community sample over age 60
Sutherland et al (2009)	64	82.7 (8.0)	USA	Women in university community; healthy controls in study of chemical dependency
Kavirajan et al (2011)	1,151	76.1 (12.6)	USA	Postmenopausal women in community
Groins et al (2012)	160	83.0 (13.4)	USA	Federally recognized Native American tribe
Yu et al (2009)	560	65.4 (13.9)	China	Community sample
Yu et al (2009)	326	71.0 (11.3)	China	Parents (healthy controls in a study of autism)
Peng et al (2012)	1,998	61.7 (10.6)	China	Medical students
Ha et al (2009)	143	66.8 (12.7)	Korea	Healthy volunteers
Faria et al (2010)	421	73.4 (12.0)	Portugal	Community sample Lisbon
Solano & Neto (2012)	103	75.4	Brazil	Family member normative controls of chronic pain subjects
Ziaian et al (2012)	53 35 82	60 69 70	Australian refugees	Africa Former Yugoslavia Middle East
***Wasden (2014)**	***80***	***83.1 (8.9)***	***USA***	***NW USA university administrators/staff***

As viewed in Table 12, the CD-RISC User Manual provides a table of past studies using the CD-RISC for evaluation purposes. For comparison purposes, the results of this study are inserted into the last row. The 'comments' column listed to the side of each study should be taken into consideration, as the majority of previous studies have been performed

on populations with a unique ailment or experience. The participants of this study had a mean score of 83.1 ranking higher than US normal population and other studies as well.

An intriguing result of the resilience scale is the observation of the lowest and highest average scored question as identified in Figure 13. The private university where this research occurred is a religiously sponsored institution, which is reflected in the highest averaged scored question relating to 'a purpose in life.'

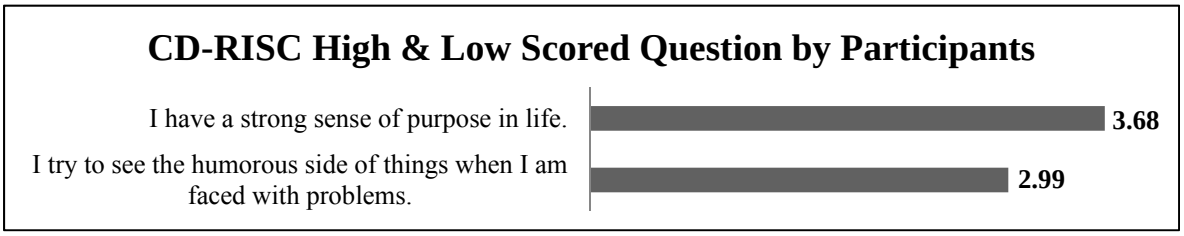


Figure 13. These two statements recorded the lowest average and highest average scores from respondents on the CD-RISC.

Out of the twenty statements on the MLQ measuring transformational leadership, these two statements received the lowest average and highest average from the 80 respondents. The 'moral and ethics' statement received the highest average score and the 'pride and association' statement recorded the lowest average score (see Figure 14).

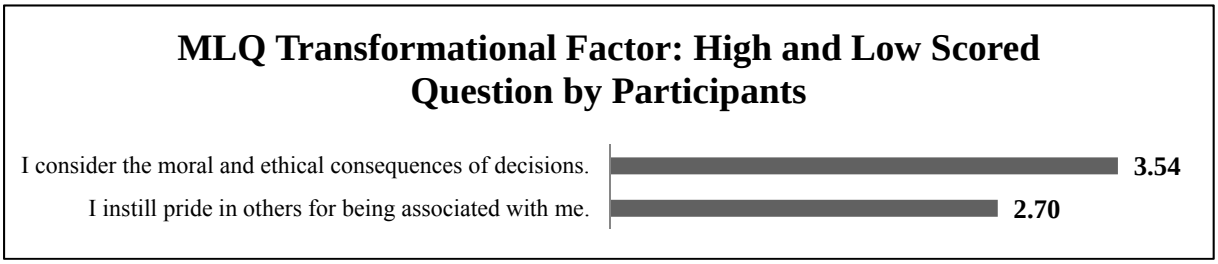


Figure 14. These two statements received the highest and lowest averaged scores of the transformational factorial questions on the MLQ.

The MLQ is design to assess three leadership styles: transformational, transactional, and passive/avoidant leadership. Although the entire MLQ is a 45-point scale to measure these three types of leadership, this study focused purely on the transformational leadership style. The concentration was upon the twenty questions, which measured the five "I's" of

transformational leadership: Idealized Influence–Attribute, Idealized Influence–Behaviors, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration. Respondents of this study scored highest on the transformational characteristic of "Inspirational Motivation" and scored the lowest on "Idealized Influence-Attribute."

For comparison purposes in the analysis of the respondents' scores, the MLQ User Manual provides a "Norms Table" for comparison. These norms are based off 3,755 individual scores taken from the general U.S. population. *Idealized Influence-Attributed*: 48% of the normed population scored lower, and 52% of this study's participants scored higher than 2.95. *Idealized Influence-Behavior*: 54% of the normed population scored lower, and 46% of this study's participants scored higher than 3.10. *Inspirational Motivation*: 57% of the normed population scored lower, and 43% of this study's participants scored higher than 3.19. *Intellectual Stimulation*: 61% of the normed population scored lower, and 39% of this study's participants scored higher than 3.06. *Individual Consideration*: 47% of the normed population scored lower, and 53% of this study's participants scored higher than 3.18.

Analysis by gender played no role in this study. The mean CD-RISC score of male and female participants was 83.21 and 82.38, respectively, with a standard deviation of 9.17 for male and 5.48 for female participants. The MLQ by gender analysis also had no significant differences; the average MLQ transformational score was 3.10 for male and 3.09 for female with a standard deviation of .40 for males and .27 for female respondents.

Research Question I: Is there a relationship between transformational leadership and resilience in higher education leaders? The first hypothesis is H1o: There is no relationship between transformational leadership and resilience.

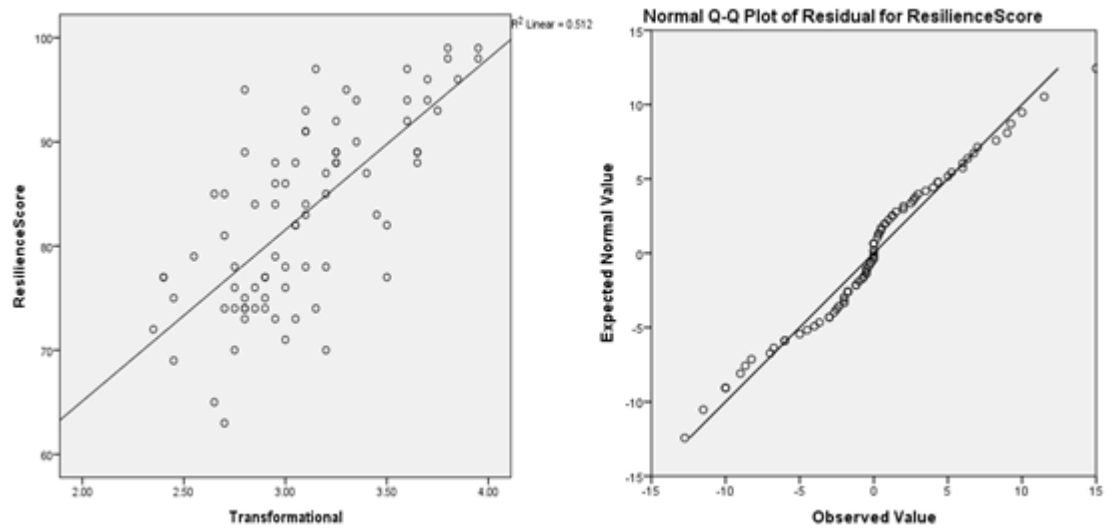


Figure 15. Scatter plot rejecting the first null hypothesis of a correlation between transformational leadership and resilience. As portrayed, a moderately positive correlation does indeed exist.

Results I: The R-value (correlation coefficient) = .716 with a .512 R-Squared value, which represents a moderately strong R-Squared value when predicting human behavior versus, say, a physical process or event. This signifies a moderately strong correlation between the MLQ transformational leadership score and the CD-RISC resilience score. As also shown in Figure 15, the scatter plot illustrates a moderately strong positive relationship as well. To reinforce this correlation, another test calculated the coefficients t-value of transformational at 9.052 with the Sig (p-value) at .000. This informs the reader the slope of the line is not "0," thus reinforcing there indeed is a linear relationship between transformational leadership and resilience.

Research Question II: Does the relationship between transformational leadership and resilience vary by educational attainment? The second hypothesis is H2o: The relationship between transformational leadership and resilience does not vary depending on educational attainment.

Results II: There was insufficient evidence to prove the relationship between transformational leadership and resilience varies according to the level of education one might attain. The evaluation of the Sig. (p-value) is .647 > .05. Consequently, because the p-value is greater than the .05 significance level, the determination can be made to accept the second null hypothesis. In summary, this informs the reader how the levels of educational attainment affect resilience scores after factoring in transformational leadership—meaning the relationship does not vary by educational attainment.

Research Question III: Is there a difference in resilience between higher education leaders who have less experience (0 to 15 years) and more experience (16 to 35 years) in the higher education field? The third hypothesis is H3o: There is no significant difference in resilience between less experienced and more experienced administrators.

Results III: The research showed a lack of sufficient proof to reject the null. Since the resilience p-value is .510, one must fail to reject the null hypothesis. One cannot conclude there is a significant difference in CD-RISC scores between those who have less experience (0-15 years) and those who have more experience (16-35 years) in the higher education field.

Research Question IV: Does the relationship between transformational leadership and resilience vary depending on age? The fourth hypothesis is H4o: The relationship between transformational leadership and resilience does not vary depending on age.

Results IV: The Sig. (p-value) for the 'Age' variable was significantly greater than .05 at .876. Since the Sig. (p-value) is > .05, insufficient evidence to state the relationship between transformational leadership and resilience varies depending on age existed.

Research Question V: Does the relationship between transformational leadership and resilience vary by leadership level? The fifth hypothesis is H5o: The relationship between transformation leadership and resilience does not vary depending on leadership level.

Results V: The null hypothesis can again not be disproved because of a lack of evidence in the statistical calculations. The results show a Sig (p-value) of .964, which is also > than .05. This means there is insufficient evidence to state the relationship between the MLQ score and the CD-RISC score varies depending on the level of leadership level.

Research Question VI: Does the relationship between transformational leadership and resilience vary by the amount of years employed with institution? The sixth hypothesis is H6o: The relationship between transformation leadership and resilience does not vary depending on years of employment with institution.

Results VI: The Sig. (p-value) for the institutional experience variable is .049. Adequate evidence exists to state the relationship between transformational leadership and resilience does indeed vary by the institutional longevity of employment since the Sig. (p-value) is < .05. The time of institutional longevity of experience affects the resilience scores after factoring in transformational leadership. As a side note, the terminology, "tenure" in this research instance is referring to administrators or staff length of time they have been employed with the University.

Discussion

The purpose of this study was to determine the correlation between transformational leadership and resilience within higher education. Tanner (2012) provided word of caution when viewing correlational study results when he asserted, "It's very tempting to make the

leap from correlation to causation. . . . Be warned against making such assumptions. Casual relationships are very difficult to validate in research with people" (p. 256).

The conclusions of this study have identified a few points, which are recommended for future research. As was revealed, the control variables of age, gender, experience, leadership level, and educational attainment do not affect the correlation between transformational leadership and resilience within higher education leadership; however, there is a moderately positive correlation between transformational leadership and resilience. With this being stated, further research is recommended into investigating the causes and/or effects of transformational leadership and resilience correlation.

Results for Hypothesis VI should be of particular interest to the stakeholder, as this is the one control variable where a correlation existed between transformational leadership and resilience scores. This variable appears to be a localized result because the demographic question asked participants to answer the number of years they had been employed with this particular university. It appears the longer one works with the institution, the greater their transformational leadership and resilience scores were affected; however, causation is unknown. Further research interest might be to compare this correlation with another university's correlation of the same variable.

As the lone control variable—years of institutional employment—to have shown a correlation, a future comparison study might be of interest with professorial faculty tenure, such as a study performed on a faculty population versus an administrator population. Another possible future study might be a focused analysis of resilience and transformational leadership from a moral or ethical perspective. Participants in this study identified 'purpose in life' and 'morals/ethics' as the highest scored item in both the MLQ and the CD-RISC.

Additional research of a similar study could also be performed on business and political leaders comparing them with educational leaders.

Summary

The results of this study are intriguing because they state a moderately positive correlation does exist between transformational leadership and resilience; however, five of the variables affecting this relationship are vague and not yet fully identified. Possibly, with a longer study or larger sample, a more definitive answer could be provided in regards to age, gender, educational attainment, leadership level, and experience. In regards to length of institution employment, one does see a correlation with resilience affecting transformational leadership with this control variable. Correlation does not lead to causation; however, this relationship is worthy to deliberate when promotions are considered.

Higher education leaders may be better prepared for the current and future complexities on the horizon through a better understanding of this assessed correlation of transformational leadership and resilience. Implementation of these attributes will assist higher education leaders to seize effectively today's opportunities to meet tomorrow's challenges. Multifaceted times of change within higher education call for innovative leadership practice to match the time.

"Leaders are key to how organizations function, and there is little doubt that the leaders who are needed to guide postsecondary institutions in tomorrow's complex environments have to think about their work differently than did their predecessors" (Amey, 2006, p. 58). Analysis of transformational leadership and resilience practices was helpful in bringing a greater awareness to those in a position of leadership and those in a position where employee development falls under their stewardship. These stewards have the opportunity to

create a greater holistic team, which responds more efficiently and favorably to guidance and direction while also bouncing back in the face of day-to-day challenges: resilience and transformation in practice.

Chapter 4: Conclusion

Higher education has changed, is changing, and will continue to change; as higher education continues to change, effective leadership is critical to the continued success. An analysis of higher education leadership may assist university leaders to more efficiently and effectively administer, lead, and guide their respective institutions. Pioneering transformational resilient leaders are necessary for innovative challenges and opportunities. Through improved understanding of transformational leadership and resilience, higher education leaders are better equipped to face the challenges, opportunities, and responsibilities they encounter at the ever-changing modern university.

History has shown change occurs in higher education and technology has altered the discussion of leadership in higher education forever. Effective educational leaders will be aware of change and prepared for the challenges and the opportunities introduced with the increasing complexities of the higher education institution. As education leaders continue to have the mindset that learning is a way of being, they will find success as they encounter the "white water" of their turbulent times (Vaill, 1996). Johnson, Hanna, and Olcott (2003) stated, "A leader in the leadership-for-change context is…someone who can facilitate individuals across an organization to think outside the box of what is and to instead envision what might be" (p. 45). Ferguson (1980) observed: "(1) that leadership is a personal, face-to-face enterprise, and (2) that leaders set the tone for others because their words and actions are magnified in the interpretations made by team members (p. 5). Transformational resilient leaders know and understand the importance of these personal interactions and allowing growth in difficult times.

Discussion

Transformational leadership and resilience are both important leadership elements. As was assessed in this study, a moderately significant relationship is present. With this correlation, the interrelationship of these two characteristics is shown. As with any study that utilizes a measurement scale or instrument, a limitation exists by the mere fact of the instrumentation. The MLQ and the CD-RISC have both been tested, modified, retested, and proven to be reliable and valid; however, limited—if any—research has been performed on these two instruments together.

A full understanding of the explanations of the discovered correlation was not revealed in this study. Though, it was found the relationship between transformational leadership and resilience does vary by years of employment with the university where this research occurred. This one lone control variable—time of employment with the university—appears to be a localized phenomenon or scenario, which ironically is a component of the PPD dissertation. The control variables educational attainment, age, experience, gender, and leadership level all seem to be more broadly applicable and transferrable to a larger audience or population. Years of employment, or institutional longevity, was the one variable narrowly focused pertaining to the localized population.

Educational attainment, age, experience, gender, and leadership level were all found, in this specific study, to have insufficient evidence proving a correlation to transformational leadership and resilience exists. As with any research, a larger sample and additional samples are recommended to confirm the findings of this study to a larger population as this is a PPD study. At this localized level; however, a comparison study of faculty leaders would be of interest.

Past research has generally shown women rate higher in transformational leadership than men (Bass, Avolio, & Atwater, 1996). In this study however, the transformational leadership between women and men was not evident. This might be attributed to a number of reasons, but one of those reasons is perhaps likely due to the insufficient statistical *n* of the sample. Only 8 participants or 10% of all respondents were female. Historically, the CD-RISC results in regards to gender have been inconclusive. The majority of research found no significant differences between gender; nevertheless, a handful of studies have found variance (Connor & Davidson, 2003).

Critique Response

The critiques by Caudle and Relken were insightful to the quality of the manuscript and a better understanding of the breadth of the research. Insightful criticism of one's research benefits the researcher, the publisher, the stakeholder, and the target audience. All researchers bring with them certain assumptions, biases, prejudices, life experiences—ontologies. With the benefit of a critique, the researcher has the opportunity to minimize biases that may arise from ontology.

Caudle Critique Response

Caudle noted the format of the dissertation followed the manuscript design approach. The purpose was stated consistently throughout the manuscript and addressed a gap in the research. An observation Caudle noted was the purpose and the problem are linked to one another. She also added, "The study was within the resources and capabilities of the researcher and had the potential for further research." This is an important component of successful research in that the researcher does not risk becoming misdirected or disoriented in their cause.

In regards to the literature reviewed, Caudle noted the thoroughness of the literature review and the breadth of sources utilized. The strength of various scholars from various sources is critical to fully understanding different angles and perspectives of the previous literature available on the research subject. Caudle noted the APA format of figures and tables was incorrect. Because of this criticism, adjustments have been made to the dissertation to addresses these concerns.

As with the majority of quantitative studies, hypotheses are necessary to allow for a structured approach to the methodology and data collection, which Caudle mentioned. The critique noted the helpfulness of the figures and tables in better understanding the statistical calculations. Caudle noted the strengths and weaknesses of the article being a well-developed conceptual framework, methodology, and analysis. Some of the weaknesses she perceived were in regards to tables and figures properly being APA formatted and a more clear statement of the problem of the study at the beginning of the manuscript. The author of the manuscript noted these suggestions and addressed these issues prior to submittal.

Relken Critique Response

Relken began his critique by noting the connection the author draws between the problem and the need for they study. He noted however, that in this section the researcher's prose tended to ramble at times. Relken also affirmed the strength of the purpose of the study and remarked the purpose was detailed, direct, and link to the title of the study. Relken noted the six objectives of the study, which were the hypothesis stated by the researcher. He endorsed the objectives as quantifiable and achievable.

Next, Relken reviewed the literature of the study; he observed research that adequately tied the literature to the conceptual frameworks of transformational leadership

and resilience. He was able to see the researcher linked relevant literature to the frameworks, which provided focus for the document. He appreciated the usage of APA formatted tables, figures, and acknowledged their value in improving concept comprehension. Relken also reviewed the procedures and findings of the study. He found the procedures to be valid and added credibility to the research manuscript. From one perspective, he found the tables quite useful; however, he also found a few of the SPSS tables to be unnecessary because the p-value results were clearly stated.

One of the highlights of the critique for Relken was the recommendations provided by the research. He found additional or future study recommendations of business and political leaders to be intriguing. He also noted the findings of the highest and lowest averaged scored questions on the MLQ and CD-RISC were in line with the particular beliefs of the faith-based institution where the research occurred.

Relken's critique and insights were of particular interest because he is a member of the administration at the research institution. His insider's perspective was helpful in making the necessary changes to the research, while polishing and strengthening the manuscript. The author of the manuscript noted Relken's critique and addressed many of his concerns prior to submittal.

Recommendations

Permission to administer the questionnaire to deans and chairs was not granted and one might perform a future study that strictly analyzes this particular population in comparison to the administrators and staff population. Yet, another approach might be to strengthen this study by increasing the population and surveying both bodies.

Interestingly, the two highest scored questions in the MLQ and CD-RISC were focused on morals or ethics and the purpose of life. As the university where this researched occurred is a faith-based sponsored private institution, the peculiarity of the survey population may have assisted in creating this unique correlation of institutional longevity with transformational leadership and resilience. However, this is pure speculation on the researcher's part because this was outside the scope of this study. A recommended future study would be to continue on this research path and perhaps perform a qualitative study to better understand the why or how this correlation or phenomena resulted.

The research of combining the conceptual frameworks of transformational leadership and resilience has been limited. A suggested recommended future study would perhaps be to continue establishing a greater understanding pertaining to the correlational relationship of transformational leadership and resilience.

Another recommendation for further research is a more acute analysis of the constructs of resilience and transformational leadership from a moral or ethical perspective. Participants in this study identified 'purpose in life' and 'morals/ethics' as the highest scored item in both the MLQ and the CD-RISC. Additional research of a similar study could also be performed on business and political leaders comparing them with educational leaders.

Summary

The professional practices doctorate provided a credible avenue from which to research the correlation of transformational leadership and resilience within a higher education institution in the Northwest. The instrumentation of the MLQ and the CD-RISC offered the necessary tools to quantify transformational leadership and resilience. Through the PPD dissertation, this research assisted local university leaders in becoming more

familiar with transformational leadership and reliance and its correlation. The white paper was the written method to provide a simplified summary of the study to benefit the stakeholders.

Another element of the PPD dissertation allowed for the blending or merging of education leadership research. As Caudle (2014) and Relken (2014) researched areas of interest, a greater holistic perspective of leadership in education was formed with this research. Obtaining a greater awareness for the value of different leadership theory, such as distributive and emotional intelligence, was a natural outcome of this PPD research dissertation. Distributive leadership, emotional intelligence, transformational leadership, and resilience all have worthy characteristics or attributes, which assist in leading educational institutions of learning. Certain element of each conceptual leadership framework certainly finds usage and value in different environments of education with diverse audiences.

The ability to identify and hire leaders who embody the ideals of transformational leadership with resilience while also understanding how to better develop these attributes within their organizations is critical because of the important roles these higher education leaders have within their respective institutions. Higher education leaders have the responsibility of managing, guiding, and directing the adjustment and adaptations, which are inevitably part of this type of change. They must not only develop transformational leadership and resilience qualities within themselves, but also work to develop a culture that allows leaders to identify administrators, faculty, and staff who could be future transformational resilient leaders in the organization. Department directors, chairs, faculty, and staff are responsible for the day-to-day implementation of change in their environments and it is important for them to have and know resilience and transformational leadership

characteristics, implement change proposed by resilient transformational leaders, and develop these traits within themselves. Students, faculty, and administrators will be impacted by this research because successful findings implemented prepare these institutions to more easily handle change, resulting in an improvement in the overall educational experience (Kirby, Paradise, & King, 1992, p. 309).

If today's higher education leaders are to effectively meet current opportunities and seize upon tomorrow's challenges, they would benefit by implementing cutting edge, innovative leadership practices to match the unique circumstances of the time. "Leaders are key to how organizations function, and there is little doubt that the leaders who are needed to guide postsecondary institutions in tomorrow's complex environments have to think about their work differently than did their predecessors" (Amey, 2006, p. 58). By evaluating effective leadership principles associated with resilience and transformational leadership, higher education leadership will be better prepared for the increasing complexities on the horizon.

References

Albritton, R. L. (1995). Perceptions of transformational vs. transactional leadership in university libraries. *Continuity and Transformation Continuity & Transformation: The Promise of Confluence,* 187–195.

Allison, E. (2011). The resilient leader. *Educational Leadership, 69*(4), 79–82.

Amey, M. J. (2006). Leadership in higher education. *Change, 38*(6), 55–58.

Astin, A. W., Astin, H. S., & Kellogg Foundation (2000). *Leadership reconsidered: Engaging higher education in social change.* Battle Creek, MI: W. K. Kellogg Foundation.

Avolio, B. J., & Bass, B. M. (1987). Transformational leadership, charisma, and beyond. In J. Hunt, B. Batiga, H. P. Dachler, & C. Schriesheim (Eds.), *Emerging leadership vistas*. Lexington, MA: Lexington Books.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.

Bass, B. M., & Avolio, B. J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. In W. Pasmore & R. Woodman (Eds.), *Research in organizational change and development: The implications of transactional Transformational Leadership and transformational leadership for individual, team, and organizational development* (pp. 231–272). Greenwich, CT: JAI Press.

Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.

Bass, B. M., & Avolio, B. J. (2004). *Multifactor leadership questionnaire manual and sample set (3rd edition)*. Menlo Park, CA: Mind Garden Inc.

Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *International Review of Applied Psychology, 45*, 5–34.

Bass, B. M., & Bass, R. (2008). *The bass handbook of leadership: Theory, research, and managerial applications*. New York, NY: Free Press.

Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly, 10*(2), 181–219.

Beebe, J. (2001). *Rapid assessment process: An introduction*. Walnut Creek, CA: AltaMira Press.

Beebe, J. (2009, November). *Introduction to rapid assessment process*. Improving leadership for transformation in cross-cultural situation through rapid assessment. Handout presented at the meeting of the International Leadership Association.

Beebe, J. (2013). *Rapid assessment process (RAP) and participatory action research (PAR): Complementary approaches with similar methodologies but different implications for leadership*. Retrieved February 7, 2013, from http://www.rapidassessment.net

Bernard, B. (1993). Fostering resiliency in kids. *Educational Leadership*, *51*(3), 44–48.

Boerner, S., Eisenbeiss, S. A., & Griesser, D. (2007). Follower behavior and organizational performance: The impact of transformational leaders. *Journal of Leadership & Organizational Studies, 13*(3), 15–26.

Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.

Burns, J. M. (1979). Two excerpts from "Leadership." *Educational Leadership*, *36*(6), 380–383.

"Carnegie Project on the Education Doctorate (CPED)." Retrieved December 10, 2013, from http://cpedinitiative.org/about#sthash.n38DfYlA.dpuf

Caudle, T. C. (2014). *Distributed leadership: Developing college and career readiness through student empowerment* (Unpublished doctoral dissertation). University of Idaho, Moscow.

Cavazotte, F., Moreno, V., & Hickmann, M. (2012). Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance. *The Leadership Quarterly*, 23, 443–455.

Chambers, R. (1981). Rapid rural appraisal: Rationale and repertoire. *Public administration and development, 1*, 95–106.

Cohen, A. M., & Kisker, C. B. (2010). *The shaping of American higher education: Emergence and growth of the contemporary system*. San Francisco, CA: Jossey-Bass Publishers.

Conner, D. R. (1993). *Managing at the speed of change: How resilient managers succeed and prosper where others fail.* New York, NY: Villard Books.

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression & Anxiety (1091-4269)*, *18*(2), 76–82.

Connor, K. M., & Davidson, J. R. T. (2013). *Connor-Davidson Resilience Scale Manual*, August 5, 2013. Seabrook Island, SC.

Cook-Sather, A. (2002). Authorizing students' perspectives: Toward trust, dialogue and change in education. *Educational Researcher, 31*(4), 3–14.

Creswell. J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.

Den Hartog, D. N., Van Muijen, J. J. & Koopman, P. L. (1997) Transactional versus transformational leadership: an analysis of the MLQ. *Journal of Occupational and Organizational Psychology, 70*(1), 19–34.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method*. Hoboken, NJ: Wiley & Sons.

Drew, G. (2010). Issues and challenges in higher education leadership: Engaging for change. *Australian Educational Researcher (Australian Association for Research in Education), 37*(3), 57–76.

Drucker, P. F. (2005). Peter F. Drucker on self-leadership. *Leadership Excellence, 22*(6), 13–14.

Duke, N. K., & Beck, S. W. (1999). Education should consider alternative formats for the dissertation. *Educational Researcher, 28*(3), 31–36.

Edwards, T. (1891). *A dictionary of thoughts: Being a cyclopedia of laconic quotations from the best authors, both ancient and modern*. New York, NY: Cassell Publishing Company.

Ferguson, M. (1980). *The aquarian conspiracy: Personal and social transformation in the 1980s*. Los Angeles, CA: J. P. Tarcher, Inc.

Flach, F. (1988). *Resilience: Discovering a new strength at times of stress.* New York, NY: Fawcett Columbine.

Fowler, F. J, Jr. (2009). *Survey research methods*. Thousand Oaks, CA: Sage Publications.

Fulton-Calkins, P., & Milling, C. (2005). Community-college leadership: An art to be practiced: 2010 and beyond. *Community College Journal of Research & Practice, 29*(3), 233–250.

George, D., & Mallery, P. (2013). *IBM SPSS statistics 21step by step: A simple guide and reference (13th edition)*. Boston, MA: Pearson Education.

Gerber, B. L. (2000). Consideration of an alternative dissertation format. *Educational Perspectives.* In P.A. Rubba, J. A. Rye, P. F. Keig, & W. J. DiBiase (Eds.). Proceedings of the annual meeting of the Association for the Education of Teachers in Science (Akron). Retrieved January 17, 2014, from http://research.rem.sfu.ca/downloads/REM-802/Readings/PHD%20formats.docx

Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam Books.

Green, H., & Powell, S. (2005). *Doctoral study in contemporary higher education*. Maidenhead, England: Society for Research into Higher Education & Open University Press.

Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. New York, NY: Paulist Press.

Greenleaf, R. K., Frick, D. M., & Spears, L. C. (1996). *On becoming a servant-leader*. San Francisco, CA: Jossey-Bass Publishers.

Hagevik, S. (1998). Resilience required. *Journal of Environmental Health*, *60*(10), 37–38.

Henderson, N., & Milstein, M.M. (1996). *Resiliency in schools: Making it happens for students and educators.* Thousand Oaks, CA: Corwin Press.

Higgins, G. O. (1994). *Resilient adults: Overcoming a cruel past.* San Francisco, CA: Jossey-Bass Publishers.

Hildebrand, P. (1982). Summary of the Sondeo Methodology used by ICTA. In W. W. Shaner, P. F. Philipp, and W. R. Schmehl (Eds.), *Farming systems research and development: Guidelines for developing countries* (pp. 89–291). Boulder, CO: Westview.

Hooijberg, R., & Choi, J. (2000). From selling peanuts and beer in Yankee Stadium to creating a theory of transformational leadership: An interview with Bernie Bass. *Leadership Quarterly, 11*(2), 291–306.

IBM Corp. Released 2013. *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.

Isaacs, A. J. (2003). *An investigation of attributes of school principals in relation to resilience and leadership practices* (Doctoral dissertation). Retrieved from ProQuest.

Johnson, M. E., Hanna, D. E., & Olcott, D. (2003). *Bridging the gap: Leadership, technology, and organizational change for university deans and chairpersons*. Madison, WI: Atwood Publishing.

Jones, S., Lefoe, G., Harvey, M., & Ryland, K. (2012). Distributed leadership: A collaborative framework for academics, executives, and professionals in higher education. *Journal of Higher Education Policy & Management, 34*(1), 67–78.

Kanste, O., Miettunen, J., & Kyngäs, H. (2007). Psychometric properties of the Multifactor Leadership Questionnaire among nurses. *Journal Of Advanced Nursing*, *57*(2), 201–212.

Kerr, C. (2001). *The uses of the university*. Cambridge, MA: Harvard University Press.

Key, J. P. (1997). "Research Design in Occupational Education." Oklahoma State University. Retrieved January 17, 2014, from http://www.okstate.edu/ag/agedcm4h/academic/aged5980a/5980/critique.htm

Kirby, P. C., Paradise, L. V., & King, M. I. (1992). Extraordinary leaders in education: Understanding transformational leadership. *Journal of Educational Research*, *85*(5), 303–311.

Kouzes, J. M., & Posner, B. Z. (2003). *The five practices of exemplary leadership*. San Francisco, CA: Pfeiffer.

Leedy, P. D., & Ormrod, J. E. (2010). *Practical research: Planning and design (9th edition)*. Upper Saddle River, NJ: Pearson Education.

Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration, 38*(2), 112–129.

Lind, D. A., Marchal, W. G., & Mason, R. D. (2002). *Statistical techniques in business and economics (11th edition)*. Boston, MA: McGraw-Hill.

Lipman-Blumen, J. (1998). Connective leadership. *Change, 30*(1), 49–53.

Lipman-Blumen, J. (1996). *The connective edge: Leading in an interdependent world.* San Francisco, CA: Jossey-Bass Publishers.

Lowe, K. B., Kroeck, K. G. & Sivasubramaniam, N. (1996) Effectiveness correlates of transformational and transactional leadership: a meta-analytic review of the MLQ literature. *Leadership Quarterly, 7*(3), 385–425.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer–Salovey–Caruso Emotional Intelligence Test MSCEIT: Users' Manual.* Toronto, Ontario, Canada: Multi-Health Systems.

Miles, M. B., Huberman, A. M., Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook (3rd edition).* Thousand Oaks, CA: Sage Publications.

Moore, M. R., & Diamond, M. A. (2000). *Academic leadership: Turning vision into reality*. New York, NY: Ernst & Young Foundation.

Newell, L. D. (Writer), & Morton, R. O. (Director). (2013, January 27). Resilience [Broadcast #4350] In E. Payne (Producer), *Music and the spoken word*. Salt Lake City, UT: Bonneville Distribution.

Newell, L. D. (Writer), & Hunter, M. (Director). (2012, April 15). Accumulate knowledge and move forward [Broadcast #4309] In E. Payne (Producer), *Music and the spoken word*. Salt Lake City, UT: Bonneville Distribution.

Notario-Pacheco, B., Solera-Martinez, M., Serrano-Parra, M., Bartolomé-Gutiérrez, R., Garcia-Campayo, J., & Martinez-Vizcaino, V. (2011). Reliability and validity of the Spanish version of the 10-item Connor-Davidson Resilience Scale (10-item CD-RISC) in young adults. *Health and Quality of Life Outcomes, 9*(1), 63–68.

Palmer, P. J. (1990). *Leading from within: Reflections on spirituality and leadership*. Washington, DC: The Servant Leadership School.

Palmer, P. J. (2000). *Let your life speak: Listening for the voice of vocation*. San Francisco, CA: Jossey-Bass Publishers.

Palmer, P. J. (2008). On the edge: Have the courage to lead with soul. *The Journal of Staff Development, 29*(2), 12–16.

Patterson, J. (2001). Resilience in the face of adversity. *School Administrator, 58*(6), 18–24.

Peterson, K. D., & Deal, T. E. (1998). How leadership influence the culture of schools. *Educational Leadership, 56*(1), 28–30.

Petrov, G. (2006), "The Leadership Foundation research on collective leadership in higher education." *Leadership Matters 7*(11), 11.

"Professional practices doctorate: Professional practitioner opens new doors." Retrieved November 20, 2011, from http://www.uidaho.edu/ed/newsandevents/featuredstories/professionalpracticesdoctorate

Relken, N. A. (2014). *Examining the relationship between emotional intelligence and perceived leadership practices among college enrollment services administrators* (Unpublished doctoral dissertation). University of Idaho, Moscow.

"Resilient." 2013. In *Merriam-Webster.com*. Retrieved April 29, 2013, from http://www.merriam-webster.com/dictionary/resilient

Roueche, J. E., Baker, G. A., & Rose, R. R. (1989). *Shared vision: Transformational leadership in American community colleges*. Washington, DC: Community College Press, American Association of Community and Junior Colleges.

Sachiko, S., & Stolley, K. "White paper: purpose and audience." *The Purdue OWL. Purdue University Writing Lab*. West Lafayette, IN. Retrieved February 8, 2014, from https://owl.english.purdue.edu/owl/owlprint/546/

Senge, P. M., McCabe, N. H. C., Lucas, T., Kleiner, A., Dutton, J., & Smith, B. (2000). *Schools that learn: A fifth discipline field book for educators, parents, and everyone who cares about education.* New York, NY: Doubleday.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Doubleday.

Senge, P. M. (2005). Missing the boat on leadership. *Leader to Leader, 2005*(38), 28–30.

Sharp, V. F. (1979). *Statistics for the social sciences*. Boston, MA: Little, Brown.

Shields, C. M. (2010). Transformative Leadership: Working for Equity in Diverse Contexts. *Educational Administration Quarterly*, *46*(4), 558–589.

Staley, D. J., & Trinkle, D. A. (2011). The Changing Landscape of Higher Education. *Educause Review, 46*(1), 16–32.

Stordeur S., D'hoore W. & Vandenberghe C. (2001) Leadership, organizational stress, and emotional exhaustion among hospital nursing staff. *Journal of Advanced Nursing, 35*(4), 533–542.

Tanner, D. (2012). *Using statistics to make educational decisions*. Thousand Oaks, CA: Sage Publications.

Tejeda M.J., Scandura T.A. & Pillai R. (2001) The MLQ revisited: psychometric properties and recommendations. *Leadership Quarterly, 12*(1), 31–52.

Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times.* San Francisco, CA: Jossey-Bass Publishers.

Vaill, P. B. (1996). *Learning as a way of being: Strategies for survival in a world of permanent white water*. San Francisco, CA: Jossey-Bass Publishers.

Vollmer, J. (2010). *Schools cannot do it alone: Building public support for America's public schools.* Fairfield, IA: Enlightenment Press.

Willis, J., Inman, D., & Valenti, R. (2010). *Completing a professional practice dissertation: A guide for doctoral students and faculty*. Charlotte, NC: Information Age Pub.

Yu, X., & Zhang, J. (2007). Factor analysis and psychometric evaluation of the Connor-Davidson Scale (CD-RISC) with Chinese people. *Social Behavior & Personality: An International Journal*, *35*(1), 19–30.

Appendix A

Professional Practices Doctorate – University of Idaho Relationship

Appendix A

Professional Practices Doctorate – University of Idaho Relationship

The University of Idaho participates in the Carnegie Project on the Education Doctorate (CPED). The CPED goal is to reclaim the professional doctorate in education and to prepare educators for positions in their field. As a member of the consortium of the CPED, the University implemented the PPD, Ed.D. An objective of CPED is to be an organization that garners support while leading inter-institutional discussion about reclaiming the education doctorate. Since 2007, CPED has grown from twenty-five original members to now having 58 higher education institutions who have committed to redesigning the doctorate in education.

The CPED-University of Idaho relationship came to fruition when the 2011fall semester PPD, Ed.D. cohort began their studies. College of Education Associate Dean Jim Gregson, Ed.D (2011) declared, "The degree is part of a national movement to make education more powerful in its ability to address local problems that may have global applications" ("Professional Practices Doctorate," 2011). He also mentioned time has blurred the distinctions between the Ph.D. and the Ed.D. degrees. The PPD, Ed.D. focuses on sustaining a strong presence in the localized environment, whereas traditional research tends to focus more on a larger audience the PPD attempts to address local problems, which may have universal applications.

As indicated by its title, the PPD focuses on applied research in the workplace. The PPD endeavors to wed theory with application, while bridging the gap between academia and profession. This dissertation document aims to have a reader-friendly text strongly founded in theory and research methodology, but directed more towards application. Duke and Beck

(1999) argued the traditional dissertation document was lengthy in nature and on a single topic that was unsuccessful in fully preparing doctoral students for the "communicative aspects of educational research" (p. 31). Willis, Inman, and Valenti (2010) and Gerber (2000) asserted the following as postgraduate or practitioner skill sets strengthen by the PPD style of dissertation. They noted the following skills frequently necessary to be successful in the field: writing journal articles; communication with practitioners; writing for external funding; communication with the public; writing to influence policy; creating training and educational materials; writing to develop collaboration with groups such as patients, customers, clients, or parents (Willis, et al., 2010, pp. 45 – 46).

All professional practices doctorate programs vary to some degree across higher education institutions of learning. The variation it seems is inherently an interwoven component of the PPD by allowing CPED partner schools the agency to define and determine curriculum and structure. The Consortium, as taken from the CPED website (2013), "does not offer a prescription for professional practice preparation programs. Rather, we honor the local context of the school of education as well as those constituents who are served by our member programs" (Carnegie Project on the Education Doctorate). As a result, the consortium created a set of principles to inform partner universities in the structural design of their individual practice preparation program development.

Appendix B

Professional Practices Doctorate Characteristics

Appendix B

Professional Practice Doctorate Characteristics

- Courses prepare students for professional practice in the field.
- The content and skills students learn are broader and more interdisciplinary than traditional Ph.D. programs because professional practice requires a broader range of skills, expertise, and knowledge.
- The components of coursework, research, and fieldwork are more integrated and connected in PPD programs.
- Faculty in PPD programs typically include more practicing professionals than is typical of traditional Ph.D. programs
- The curriculum includes more relevant field experiences that prepare students for professional practice.
- PPD programs tend to rely on portfolios rather than qualifying or comprehensive exams for student assessment.
- PPD programs tend to emphasize 'more integration with the professional workplace' and this can often 'reduce the dominance of the university sector (the 'academy') and its tendency to privilege academic knowledge over professional knowledge' (Green & Powell, 2005, p. 88).
- 'There is a strong practice element that, in turn, is mediated by intellectual understanding and reflection' (p.90).
- Students in PPD programs are typically older, come from a wider range of backgrounds, pay their own program costs, and already have experience in their chosen profession.
- Students in PPD programs typically complete the doctorate part time while working full time and carrying family responsibilities.
- In recognition of the experience and expertise students can contribute to a doctoral program, PPD programs often accept students in cohorts that complete the program together and thus form a cooperating and collaborating group that provides support and encouragement to members of the cohort, and share expertise.
- Dissertations in PPD programs tend to be shorter and to focus on problems of practice.
- Dissertations in PPD programs are typically done 'in the field' and are likely to use methods or research and scholarship suited to the context of practice.
- PPD dissertations generally address a real world problem and may develop or use theory but the goal may not be theory development.

(Green & Powell, 2005 as cited in Willis, Inman, & Valenti, 2010, pp. 24–26)

Appendix C

Instrumentation Sample Questions

Appendix C

Instrumentation Sample Questions

Demographic Questions:

What is your gender?

What is your age?

How many years have you been employed with Brigham Young University-Idaho?

What is the highest level of education you have completed?

How many years have you been employed in higher education?

Multifactor Leadership Questionnaire (MLQ) Sample Questions:

2. I re-examine critical assumptions to question whether they are appropriate.
6. I talk about my most important values and beliefs.
9. I talk optimistically about the future.
10. I instill pride in others for being associated with me.
15. I spend time teaching and coaching.

Connor-Davidson Resilience Scale (CD-RISC) Sample Questions:

1. I am able to adapt when changes occur.
6. I try to see the humorous side of things when I am faced with problems.
8. I tend to bounce back after illness, injury, or other hardships.
14. Under pressure, I stay focused and think clearly.
18. I can make unpopular or difficult decisions that affect other people, if it is necessary.

Appendix D

Questions to Bring out Resilience

Appendix D

Questions to Bring out Resilience

(Allison, 2011, p. 81)

To Help Someone Learn from Loss

- What is the best opportunity this situation could lead to?
- What has this loss or challenge cleared up for you?
- How can you have a sense of humor about this?
- What are the best lessons here and how will you use them in the coming weeks?

To Encourage Action in the Face of Loss

- What is the new reality?
- What next milestone are you working toward?
- What can you do immediately to support the people who are affected the most?
- How can you show others this challenge will not get you down?
- What skills, habits, and knowledge do you have that will work here?
- What can you eliminate now? What are you willing to give up?

To Bring out Someone's Vision

- What is your new vision? How does it resist the "pull of the past"?
- What will you celebrate?
- What do you wish to let go of that is holding this project back?
- What about this challenge puts a bounce in your step?

When Progress has Plateaued

- Where have you seen the strongest momentum up to this point?
- What is still missing?
- How are your talents a plus in this situation?
- What requests could you make to move this forward?

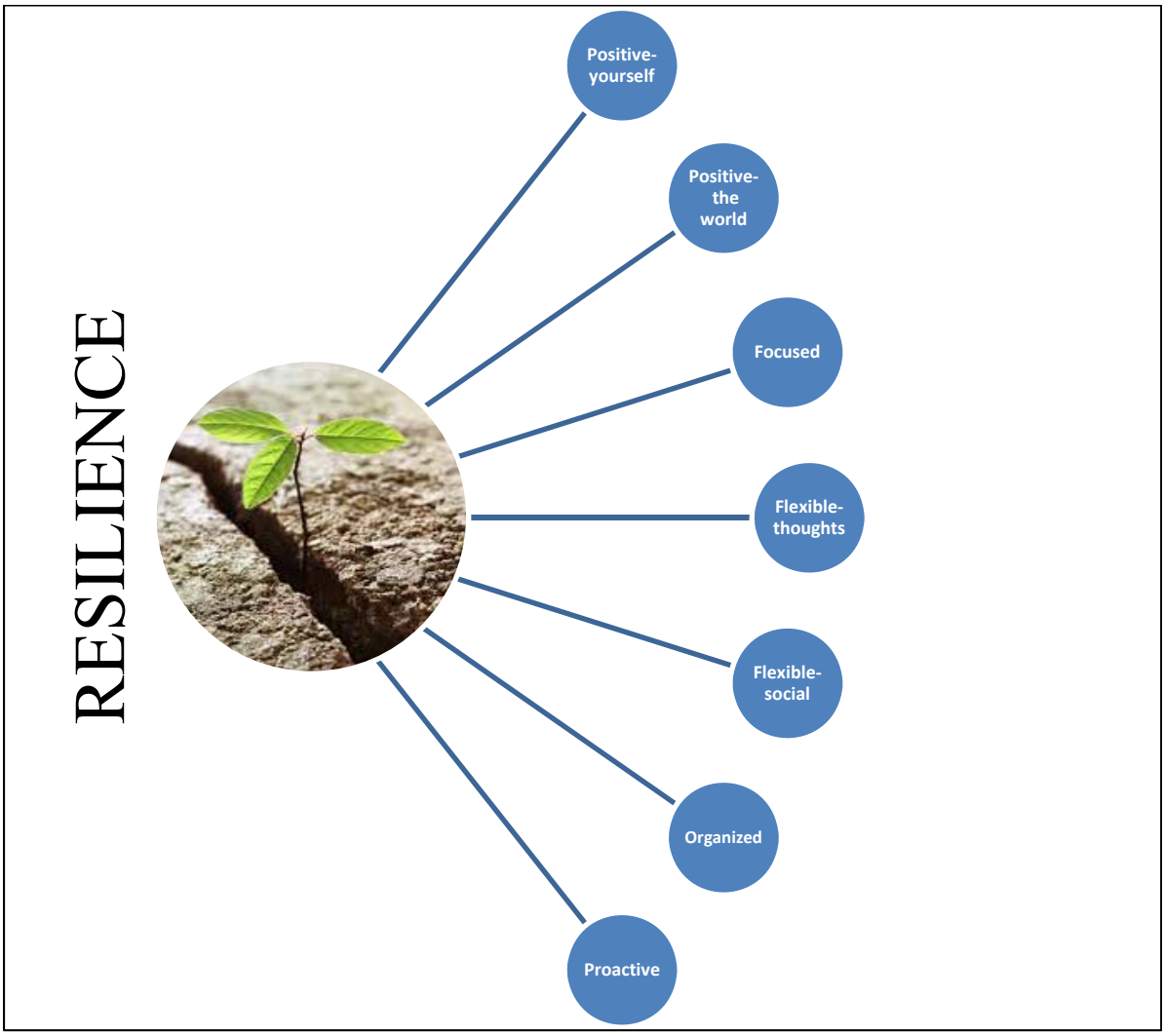
Appendix E

Dimensions Measured for in the “Personal Resilience Questionnaire”

Appendix E

Dimensions Measured for in the "Personal Resilience Questionnaire" *(PQR)*

(Conner, 1993)



Appendix F

Table Research Question I: Transformational Leadership and Resilience Correlation

Appendix F

Research Question I: Statistics Table

Table F1. The t-value of 9.052 with a Sig (p-value) of .000 reinforces the slope of the line is not zero; i.e., a correlation exists between the MLQ and the CD-RISC scores.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.716[a]	.512	.506	6.275

a. Predictors: (Constant), Transformational

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3226.994	1	3226.994	81.942	.000[b]
	Residual	3071.756	78	39.381		
	Total	6298.750	79			

a. Dependent Variable: ResilienceScore

b. Predictors: (Constant), Transformational

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.182	5.671		5.675	.000
	Transformational	16.456	1.818	.716	9.052	.000

a. Dependent Variable: ResilienceScore

Appendix G

Table Research Question II: Educational Attainment Variable

Appendix G

Research Question II: Statistics Table

Table G1. Calculations showing the lack of evidence to reject the second null hypothesis with a .647 p-value in regards to educational attainment.

Between-Subjects Factors

		N
Education	1.00	30
	2.00	50

Descriptive Statistics

Dependent Variable: ResilienceScore

Education	Mean	Std. Deviation	N
1.00	82.27	8.233	30
2.00	83.64	9.365	50
Total	83.13	8.929	80

Levene's Test of Equality of Error Variances[a]

Dependent Variable: ResilienceScore

F	df1	df2	Sig.
.159	1	78	.691

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Transformational + Education

Tests of Between-Subjects Effects

Dependent Variable: ResilienceScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3235.408[a]	2	1617.704	40.663	.000
Intercept	1224.087	1	1224.087	30.769	.000
Transformational	3200.045	1	3200.045	80.436	.000
Education	8.414	1	8.414	.211	.647
Error	3063.342	77	39.784		
Total	559080.000	80			
Corrected Total	6298.750	79			

a. R Squared = .514 (Adjusted R Squared = .501)

Appendix H

Table Research Question III: Higher Education Experience Variable

Appendix H

Research Question III: Statistics Table

Table H1. Statistical calculations showing the lack of evidence to reject the null hypothesis of higher education experience with a p-value of .510.

Group Statistics

	Experience	N	Mean	Std. Deviation	Std. Error Mean
ResilienceScore	1	48	83.67	8.952	1.292
	2	32	82.31	8.975	1.587

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
ResilienceScore	Equal variances assumed	.376	.541	.662	78	.510	1.354	2.045	-2.717	5.426
	Equal variances not assumed			.662	66.475	.510	1.354	2.046	-2.731	5.439

Appendix I

Table Research Question IV: Age Variable

Appendix I

Research Question IV: Statistics Table

Table I1. The significant notation here is the .876 p-value listed in the 'Age' row showing insufficient evidence to reject the null hypothesis.

Between-Subjects Factors

		N
Age	1	22
	2	31
	3	27

Descriptive Statistics

Dependent Variable: ResilienceScore

Age	Mean	Std. Deviation	N
1	83.41	10.559	22
2	84.00	8.287	31
3	81.89	8.391	27
Total	83.13	8.929	80

Levene's Test of Equality of Error Variances[a]

Dependent Variable: ResilienceScore

F	df1	df2	Sig.
.913	2	77	.406

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Age + Transformational

Tests of Between-Subjects Effects

Dependent Variable: ResilienceScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3237.657[a]	3	1079.219	26.795	.000	.514
Intercept	1269.073	1	1269.073	31.508	.000	.293
Age	10.663	2	5.331	.132	.876	.003
Transformational	3170.892	1	3170.892	78.726	.000	.509
Error	3061.093	76	40.278			
Total	559080.000	80				
Corrected Total	6298.750	79				

a. R Squared = .514 (Adjusted R Squared = .495)

Appendix J

Table Research Question V: Leadership Level Variable

Appendix J

Research Question V: Statistics Table

Table J1. The 'Leadership Level' row shows a .964 Sig. (p-value). Evidence the null hypothesis cannot be rejected; the relationship does not vary depending on leadership level.

Between-Subjects Factors

		N
LeadershipLevel	1	2
	2	11
	3	31
	4	36

Descriptive Statistics

Dependent Variable: ResilienceScore

LeadershipLevel	Mean	Std. Deviation	N
1	88.00	7.071	2
2	83.18	10.108	11
3	83.61	9.514	31
4	82.42	8.347	36
Total	83.13	8.929	80

Levene's Test of Equality of Error Variances[a]

Dependent Variable: ResilienceScore

F	df1	df2	Sig.
1.768	3	76	.160

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Transformational + LeadershipLevel

Tests of Between-Subjects Effects

Dependent Variable: ResilienceScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3238.288[a]	4	809.572	19.839	.000
Intercept	1131.012	1	1131.012	27.717	.000
Transformational	3165.279	1	3165.279	77.569	.000
LeadershipLevel	11.294	3	3.765	.092	.964
Error	3060.462	75	40.806		
Total	559080.000	80			
Corrected Total	6298.750	79			

a. R Squared = .514 (Adjusted R Squared = .488)

Appendix K

Informed Consent for Online Survey

Appendix K

Informed Consent for Online Survey

Hello, my name is Shane Wasden, a doctoral candidate in the University of Idaho cohort with [local university] faculty. My research centers on higher education leadership at [this university] with particular attention to resilience and transformational leadership. Working through the [Research Institute Director and the university Institutional Research & Assessment Officer], I am sending you this questionnaire. I am inviting you to participate in this research study by clicking on this link and completing the questionnaire because you are currently in a leadership role [with the university].

The questionnaire will require approximately 10-14 minutes to complete. All those who complete the leadership assessment will automatically be entered into a drawing for a *$50 gift card* to a local restaurant. Clicking on the survey link and completion of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact me at the number listed below. Thank you for your time.

Warm regards and happy holidays,
Shane

Shane T. Wasden
Doctoral Candidate
University of Idaho
Phone: ***-***-3365
Email: ********vandals.uidaho.edu

Note: Copies of the project will be provided to my [University of Idaho Major Professor; Research Institute; and the University]. If you choose to participate in this survey by simply clicking on the link below this email, please answer all questions as honestly as possible. All information is confidential. Participation is strictly voluntary and you may refuse to participate at any time. If you are not satisfied with the manner in which this study is being conducted, you may report (anonymously if you so choose) any complaints to the [University of Idaho, College of Education] (***) ***-9918.

Follow this link to the Questionnaire:
Take the Survey

Or, copy and paste the URL below into your internet browser:
https://uidahoed.qualtrics.com/WRQualtricsSurveyEngine/?Q_SS=0Swiv7fmlVKMwh7_bf33zSBaXKdrMa1&_=1

Follow the link to opt out of future emails:
Click here to unsubscribe

Appendix L

Copyright Permission for “Multifactor Leadership Questionnaire”

Appendix L

Multifactor Leadership Questionnaire (MLQ)

Copyright Permissions

For use by Shane Wasden only. Received from Mind Garden, Inc. on November 9, 2013

mind garden

www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material;

Instrument: ***Multifactor Leadership Questionnaire***

Authors: ***Bruce Avolio and Bernard Bass***

Copyright: ***1995 by Bruce Avolio and Bernard Bass***

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

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Appendix M

Copyright Permission for "Connor-Davidson Resilience Scale"

Appendix M

Connor-Davidson Resilience Scale (CD-RISC)

Copyright Permissions

Dear Shane:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the CD-RISC in the project you have described under the following terms of agreement:

1. You agree not to use the CD-RISC for any commercial purpose, or in research or other work performed for a third party, or provide the scale to a third party. If other off-site collaborators are involved with your project, their use of the scale is restricted to the project, and the signatory of this agreement is responsible for ensuring that all collaborators adhere to the terms of this agreement.

2. You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from unauthorized distribution or the possibility of modification.

3. Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.

4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.

5. A fee of $ 30 US is payable to Jonathan Davidson at 3068 Baywood Drive, Seabrook Island, SC 29455, USA, either by PayPal (at: mail@cd-risc.com), cheque, bank draft, international money order or Western Union. (Please note: An additional $16 fee is charged for bank wire transfers).

6. Complete and return this form via email to mail@cd-risc.com.

7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement and of payment, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-risc.com. We wish you well in pursuing your goals.

Sincerely yours,

Jonathan R. T. Davidson, M.D.
Kathryn M. Connor, M.D.

Agreed to by:

Shane T. Wasden 8/30/2013

Signature (printed) **Date**

Doctoral Student

Title

University of Idaho

Organization