Impact Glass: How Do Grit and Growth Mindset Impact Career Advancement for Female Heads of Independent Schools?

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IMPACT GLASS:

HOW DO GRIT AND GROWTH MINDSET IMPACT CAREER ADVANCEMENT FOR FEMALE HEADS OF INDEPENDENT SCHOOLS?

By

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A dissertation submitted to the faculty of

Lynn University

Donald E. and Helen L. Ross

College of Education

In partial fulfillment of the requirements for the degree

Doctor of Educational Leadership

Chair: Dean Kathleen Weigel, Ed. D

May 2015
LYNN UNIVERSITY

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Impact Glass:

How do grit and growth mindset impact career advancement for female heads in independent schools

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ABSTRACT

DONNA NORKELIUNAS: Impact Glass: How do grit and growth mindset impact career advancement for female heads of independent schools?

Are grit and growth mindset among the traits needed in order to obtain the position of head of school at an independent school? This study explored whether the non-cognitive traits, grit, which combines passion and perseverance for long-term goals and growth mindset, or the belief that one’s abilities are flexible entities that can develop and improve through effort, are characteristics common to, and predictive of female headmasters.

The data were collected through an online survey involving questions about grit and mindset along with demographic information. This study was designed to describe the nature and strength of the relationship between grit and growth mindset, and the career advancement of women in independent education.

The results of this study suggest that grit is related to success. This finding supports the need to find a way to help reduce the gender gap at this level of leadership. Understanding that grit and growth mindset are valuable and necessary traits can give insight to aspiring heads. If we are interested in seeing more women in leadership positions, we need to encourage the qualities that will enable them to be successful.
ACKNOWLEDGEMENTS

I am grateful to have been afforded this opportunity to grow professionally. It has been an honor to set goals, purposely reflect, and continuously improve with my colleagues in cohort four at Lynn University. I want to thank my classmates Wilson Onu, Al Farina, and Amy Moviel for their support, guidance, and interest in my topic. The Professors at Lynn University have impacted my life by challenging me and helping me develop both personally and professionally. I am especially grateful to Dr. William Leary, Dr. Adam Kosnitzky, Dr. Korynne Dunlop, and my committee chair, Dr. Kathleen Weigel. Your knowledge and experience helped guide me through this process.

I would like to thank Community School of Naples and the Board of Directors, Administration, and Lower School faculty and staff for the support and encouragement during this three-year journey. I am blessed to be surrounded by individuals who value education and are committed to continual improvement for the sake of our children.

This journey would not have been possible without the love, support, and patience from my family. My children Kristin, Kate, Jack, and Maddie have been my perpetual cheerleaders. Thank you to my mother, siblings, and so many members of my extended family members who believed in me during the busiest and most challenging moments. I especially want to thank my husband, John, for encouraging me to chase this dream. Your unconditional love, support, patience, and faith have been amazing. I appreciate all the sacrifices you have made in order for me to complete my work.

*I can do all things, through Christ who gives me strength* (Philippinas 4:13)
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CHAPTER 1

INTRODUCTION

Purpose of Study

The purpose of this study is to provide further insight into how aspiring female heads of school attain the highest level in educational leadership and whether they share common traits enabling them to overcome gender and social stereotypes. This study examined the relationship between career advancement for females in independent schools and two measurable traits associated with successful leaders -- grit, which is a trait that combines passion and perseverance for long term goals (Duckworth, 2006) and mindset which is the belief that one’s abilities are flexible entities that can develop and improve through effort (Dweck, 2006).

Statement of the Problem

The majority of faculty employed by the National Association of Independent Schools (NAIS) are women, yet women remain unable to achieve access to head of school leadership positions at the rate equal to their male colleagues (NAIS, 2009). Looking at gender trends in heads of NAIS schools over the past 20 years, it is evident that this position is male-dominated. The disparity between males and females is concerning considering disproportionate number of females who are teachers, which is considered the most likely stepping stone to become a head of school (NAIS, 2010). The 2014 NAIS statistics report stated that 67 percent of heads of school were male. The
problem of parity has been recognized in both the professional literature and program
initiatives, and analyzed by the NAIS, and it continues to exist (NAIS, 2009).

In the 2009 State of the School Leadership Report, the following was reported:

Overwhelmingly, heads of independent schools are Caucasian, male, and in their
fifties. There have been few changes with respect to the typical profile of a head from
seven years ago, when the 2002 leadership study was conducted

• Women tend to fill a majority of the administrative positions, but only make up a
  third of heads, and people of color still represent minimal number either in
  headships or administrative posts.
• The 2009 study also reveals that there is an aging population of school heads and
  school administrators. Since significant number of heads are planning to change
  jobs or retire in the next few years, schools may have a difficult time replacing
  their heads, especially since a majority of school administrators are not interested
  in pursuing the headship.

Comparing the 2002, 2009 reports, and the most current 2014 statistics from the
data analysis in school leadership system on the NAIS website, the percentage of female
heads remained unchanged. In the 2009 report, the number of surveyed administrators
who planned to obtain a headship was 22%, the number of female administrators who
planned to obtain headship was only 12%. With females occupying a large portion of
associate, assistant, and division head positions and with these positions being viewed as
a stepping stone to becoming a successful head, the lack of interest or desire to become
head by female administrators can create a void in the leadership pipeline similar to the
shrinking applicant pools for leadership positions in public schools (NAESP, 2003). As current heads change jobs and retire over the next few years, schools will need to fill their positions with qualified individuals, but without interest in the vast majority of female mid-tier leaders, the candidate pool may be limited. At a time where leadership attrition is increasing, this turnover threatens to “cut the legs out from under schools’ ability to improve” (Buckingham, Donaldson, & Marnik, 2006, p 37).

In the NAIS 2009 survey, responding women heads and administrators agreed that overall the Board of Trustees and search committees are reluctant to hire non-traditional heads and pipeline issues are top reasons why there are few female heads. “Studies on leadership development have proven that people in leadership positions gravitate toward successors that remind them of themselves.” (Feibelman & Haakmat, 2010 p.85). The heads who participated in NAIS survey in 2009 also identify an old boys’ network that works to hire and promote white men as a top factor for the recognized disparity-- 45% of female heads and 34% of female administrators identify this network as a significant factor in promotion (NAIS, 2009).

**Research Question**

The following question will guide this study: What is the nature of the common traits associated with female headmasters in independent schools?
Background

The perceived gendered nature of the independent school culture framed the primary purpose of the research. In 2009, in an effort to examine why women are less likely than their male colleagues to attain head of school positions following the completion of the aspiring heads fellowship, NAIS asked Belden Russonello & Stewart to conduct public opinion research among past participants in the program (Belden Russonello & Stewart for NAIS, 2010). There is a documented gender biased hierarchy in independent school leadership and although in the past twenty years women headships have increased by 10%, there has been no change in more than ten years (NAIS, 2014). The gender stereotype is not denied by NAIS as is stated in their report regarding how white male trustees are more likely to feel comfortable with white male leadership. (Belden Russonello & Stewart for NAIS).

Independent school headmaster’s background experience within the schools are multifaceted, often working first as teachers, department chairs, admissions officers, and then later as assistant or associate heads and divisions heads—suggesting there is a step system to move up the career ladder. Since 2003, The National Association of Independent Schools has offered a Fellowship for Aspiring School Heads, a one-year professional development program for individuals at NAIS member schools who wish to become heads of independent schools.

This 2009 report published by NAIS suggested there were several factors explaining the headship gender and color diversity challenge. For women, background and personal career decisions contributed to their lack of headship appointment.
Although the women in the Fellowship program shared some of the characteristics of successful candidates, for example, age and experience, they were less likely than the men to have risen to the rank of assistant head, an important precursor to getting the headship appointment. This research also suggested that the female participants in the Fellowship program had less confidence in their connections and interviewing skills, the reputation of the school where they have worked, and their ability to fit into a school’s culture. Other factors included urgency, ability or desire to move their families, and family commitment. The summary report says “…some independent schools are not ready for change; white men fit the traditional stereotype of what a head is supposed to look like. They say conservative white male boards of trustees are more likely to feel comfortable with white male leadership.” (Belden Russonello & Stewart for NAIS p. 4).

Hargreaves’ (2005) research on sustainable leadership states that women have made significant strides over the course of the last few decades, positively shifting to more leadership roles, yet as we examine women in leadership positions, we must carefully explore the cultures that foster and support static nature of their roles and the ongoing issues of gender stereotypes that women in leadership positions continue to face (Catalyst, 2010; Sanchez & Thornton, 2010; Chase & Bell 1990, Tallerico & Bount, 2004). The relationship between board of trustees and leadership appointments is significant in an independent school. The Board of Trustees act as the custodian of the school—they have fiduciary responsibility and also responsible for appointing the headmaster of the school, who in turn reports directly to the board (Feibelman & Haakmat, 2010). Headmaster appointments are often opportunities for school boards to maintain the integrity and culture of the past, ensuring preservation of long-standing
traditions for the future, but these appointments need to be thoughtful and tied to improvement plans (Hargreaves, 2005).

There is a link between school vision and cultural change that suggests a vision is not a static event, because the vision must change as culture changes (Senge, 1990). A school’s culture can be defined as the historically transmitted patterns of meaning that include the norms, values, beliefs, traditions and myths understood by the school community (Stolp and Smith, 1994). In independent education, one aspect of the head’s job is to provide vision and leadership, and there is a recognizable relationship between board appointed headmasters and the vision and culture of a school (NAIS, 2009). In a 2009 report it is noted that 82% of the heads considered managing the school’s climate and values as “heaviest” or “heavy” demand and 80% of the heads consider working with their school board of trustees as the “heaviest” or “heavy” demand (NAIS, 2009). Framing the context the research with this background information is important to understanding the relationship of the social and institutional norms that reinforce gender normalization of independent school leadership and the current leadership landscape.

**Definitions**

**Independent School**

For the purpose of this study, an independent school is defined as a member school of the National Association of Independent Schools. Member schools must be incorporated as nonprofit 501(b)3 organization with a self-perpetuating board of trustees (Small, 2001).
National Association of Independent Schools is the national membership association for independent school with about 1250 member school in the United States. Members must show proof of nonprofit status, be fully accredited by the proper educational regional association, have been in operation for at least five years and demonstrate a commitment to economic and ethnic diversity (NAIS, 2014)

**Head of School**

The term head of school refers to the head, chief executive officer and highest educational administrative role, of an independent school. The head serves the board of trustees (NAIS, 2014)

**Board of Trustees:** The board of trustees is the ultimate authority of an independent school with the fiduciary responsibility of oversight for the school and the responsibility of hiring and evaluating the head of school (NAIS, 2014)

**School Culture:** A school’s culture can be defined as the historically transmitted patterns of meaning that include the norms, values, beliefs, traditions and myths understood by the school community (Stolp and Smith, 1994).

**Grit**

The term grit is defined as “perseverance and passion for long-term goals”(Duckworth, 2007). Angela Duckworth, a psychologist at the University of Pennsylvania has developed a 12 item self-report grit test that measures grittiness on a scale of 1 to 5 (Duckworth, 2006).
Growth Mindset

A *mindset*, is a self-perception or “self-theory” that people hold about themselves. For the purpose of this study, growth mindset is the belief that one’s abilities are flexible entities that can be developed and improve through effort (Dweck, 2006).

Conceptual Framework

This study investigated the relationship between three theoretical frameworks, including -Eagly’s (2002) social role congruity theory, Dweck’s (2006) growth mindset theory, and Duckworth’s (2007) grit theory through the lens of independent school leadership. The Social Role Theory framed the study’s context in the culture of independent education, while the research explored whether traits, such as grit and growth mindset are related to the successful career advancement of female heads.

Social role and role congruity theories

Eagly, Johannesen-Schmidt and Van Engen (2003) described society’s definitions of male and female behavior as social role theory. Men are associated with agentic qualities, while women’s behaviors are more aligned with communal qualities. The very existence of socially shared gender stereotypes is of concern. The concern is magnified by research indicating a negative impact of social role theory on women in leadership roles because their actions do not align with the stereotypical expectation of others, creating tension in leadership dynamics (Eagly & Karau, 2002). This scenario is the
foundation of the role congruity theory in which women are perceived as poor leaders because their actions are not congruent with other’s expectations, or stereotypes.

Kruger’s (2008) work indicated that stereotypes serve as a major barrier for aspiring female leaders, noting that, “Women are said to be dependent, conformist, cooperative, passive, emotional, uncertain of themselves, kind, helpful, understanding, sensitive and weak, to name just a few of these preconceptions. Men are said to be independent, competitive, active, rational, sure of themselves, aggressive, dominant and strong.”(p.164)

**Non-Cognitive Traits**

Non-cognitive traits such as motivation, tenacity, and perseverance are essential traits for success in life (Duckworth et al, 2007; Dweck et al, 2011; Farrington, 2012; Peterson & Seligman, 2004). Often we overlook the importance of the non-cognitive traits and focus on cognitive abilities such as memory, attention, and other areas of intelligence. Grit is a trait studied by Duckworth and Peterson (2007) who redefined it as “perseverance and passion for long-term goals (Duckworth & Peterson, 2007). They refined the concept further by suggesting that grit also includes a certain degree of passion, zeal, or fervor. Mindset, like grit, has been shown to be predictive of success, often above and beyond other critical measures such as IQ and GPA. The concept of mindset is refined by Carol Dweck, who suggested that individuals can be categorized according to their implicit beliefs regarding the origin of ability and the belief that one’s abilities are flexible entities that can be developed and improve through effort (Dweck, 2006).
Significance of Study

Research focused on understanding the qualities and characteristics of the women who have achieved the prestigious headmaster appointment may help to provide tools for women who aspire to be heads of school and provide schools with the opportunity to develop women leaders as role models for their students, our future leaders. The early images of leadership that children witness can create paradigms for how they view the world and make decisions (Zirkel 2002). The researcher aims to uncover factors that may contribute to the elimination of gender disparities in school leadership positions—especially in the most influential and visible administrative roles. Creating schools whose leaders mirror the images of society and provide diverse role models for children is embedded in the mission of most schools. Addressing the issue of under-representation of women in top tier leadership positions in private education could support equity in the workplace, expanding unrestricted opportunities for all employees. Investigating the lack of parity between female and male heads of independent schools could help schools address challenging questions, creating a more inclusive and representative school structure. By uncovering factors attributed to career advancement, this research aimed to determine strategies that could increase the growth and retention of women in school administration.

Limitations

This study was limited to the independent school demographic in the United States. The survey participants included women in top-tier leadership roles in NAIS member schools in the 2014-15 school year. The researcher relied on self-reported data, which may have resulted in data which was biased based on recent events or personal
context (Leedy, 2013, Swartz, 1999). The primary limitation of this study was the small sample size. The sample size, along with the limited response rate (36% of female heads of NAIS schools responded), limited the validity and reliability of the data collected. Because the study was conducted with a small sample size, the results cannot be generalized to the entire female head of school population.

An overview on literature pertaining to major components of the study, namely the concept of the glass ceiling, social role theories, culture and leadership, grit, and growth mindset is provided in chapter two. In chapter three, a hypothesis is presented, suggesting that grit and growth mindset are not only traits that many female leaders possess, perhaps as a direct result of having overcome the challenges of the glass ceiling, but that they may also be valuable predictors of the future success of individual women who aspire to become heads of independent schools.
CHAPTER II

REVIEW OF LITERATURE

This chapter will provide an overview of literature pertaining to major components of the study including the concept of the glass ceiling, social role theories, culture and leadership, grit, and growth mindset—elements essential to understanding a women’s journey to top-tier leadership in independent education.

The Glass Ceiling

The glass ceiling is described as the invisible barrier that women face as they approach the top of corporate ladder (United States Department of Labor, 1995). The idea of the glass ceiling first appeared in the Wall Street Journal in 1986. A year later, Morrison, White, and Van Velsor examined the factors that determine a women’s success or failure in the corporate environment. Their work revealed how the executive environment is different for women and looked at the obstacles women faced climbing on the corporate ladder (Morrison, White & Van Velsor, 1987). Although in the past few decades, women have made enormous strides socially, politically and economically and their roles have evolved, there remains a disparity in many work environments, including educational leadership (U.S. Department of Labor 2010).

Shakeshaft’s work recognized the need to study gender inequity in educational administration. Her work reframed the study of women in education, shedding light on gender roles. In Women in Educational Administration, she outlined the history of gender roles in education in the United States and confirms the impact male-centered,
androcentric administration has had on our current educational culture in both teaching and administration (Shakeshaft, 1987). For years, education has been numerically dominated by women, but the highest leadership positions in education have remained occupied by males (Oplatka, 2006). In a field in which women professionals outnumber men, the notable lack of research examining the cultural and institutional norms that reinforce the feminine and masculine normalization of school leadership makes it challenging to evaluate the current leadership landscape (Skrla, 2003).

The gap between males and females in independent educational leadership is particularly concerning given that women make up the majority of employees in the independent school system. For over a decade the National Association of Independent Schools has promoted strategic initiatives to foster greater diversity within member schools. The literature written for aspiring independent school leaders acknowledges the disproportional number of women in leadership roles, yet the percentage of Caucasian male headmasters in independent schools remains virtually unchanged (NAIS, 2010). Despite the fact that more women are competing for positions formerly dominated by men, sexist patterns of hiring and promotion remain (Dana & Bourisaw, 2006).

The gendered nature of independent school culture can be best understood by looking through the lens of Eagly’s role congruity theory of prejudice toward female leaders (2002) and Swindler’s contemporary notion of culture (2006). Eagly and Karau (2002) determined that it is more difficult for women to attain leadership roles and to be successful in these positions because male images define the expectations for many people. Their research suggested that the stereotypes people perceive of men and women lead to unfavorable judgments of women in leadership roles. This theory proposed a
perceived incongruity between the female gender role and leadership roles, which lead to women being viewed less positively than men in leadership positions (Eagly & Karau, 2002). Further, Eagly and Karau (2002) determined evidence of prejudice towards women in leadership roles originating in an incongruity between stereotypical characteristics of women, which were more communal and the command and control characteristics often associated with men. In other words, if women engage in stereotypically male behaviors, they are evaluated more poorly than men because they are violating the expectations of their gender roles (Ritter & Yodder, 2004).

The notion of culture comes from sociologist Swidler (1986). Her work suggested that culture is a dynamic “tool kit” that individuals use to construct strategies of action during settled and unsettled periods of time. From this perspective, people do not just live within a culture, but acquire attributes from that culture to inform their behavior and decision-making. Swindler concluded, “Strategies of action are cultural products; the symbolic experiences mythic lore, and ritual practices of a group or society create models and motivations, ways of organizing experience and evaluating reality, modes of regulating conduct, and ways of forming social bonds which provide resources for constructing strategies of action.” (p. 284) This approach suggested that people selectively use culture to inform or justify behavior rather than being passively affected by it. Cultural sociologists are generally in agreement that culture is simultaneously constraining and enabling (Alexander, 2003), suggesting culture affects social existence including individual’s behaviors, choices, and tendencies. These cultural influences can be oppressive, but are also subject to change and transformation based on lived realities. Research for examining women’s leadership choices related to tensions between the
cultural mythology of individual achievement and women’s experiences of gender discrimination and strategies women employ during settled and unsettled periods of their professional lives has used this cultural framework as a model (Brunner, 2000, Chase, 200; Skrla, 2000). Research has demonstrated the relationship between leadership conceptions and culture, identifying effective leaders as culturally masculine (Eagly & Carli, 2007; Koenig, Eagly, Mitchell & Ristikari, 2011), validating the idea that the independent school culture may be a significant barrier in career opportunities for women.

In an independent school, the governing Board of Trustees appoints the head of school, the highest administrative role in the school. The head is responsible for all aspects of the school from vision and leadership to management the school’s climate and values, and collaborating with the board of trustees. Male dominance in educational leadership may be looped in a vicious cycle, as men are likely to perpetuate the status quo by recruitment of males with the same leadership styles, attitudes and philosophies (Ragland, 1995; Oplatka 2006). Essentially, the board of trustees and the board’s appointment, the head, impacts the tone, culture, and decisions in the school. Social role congruity along with school cultures founded on the acceptance of gender roles may be contributing to the difficulty women are experiencing rising to top tier leadership in independent schools.

Over the course of the last few decades, new laws began to shield women from the restrictive effects of gender-based bias in the workplace, but women continue to face barriers to career advancement that men do not typically experience. The barriers to achieving top tier leadership positions for women are both internal and external. The
internal barriers are perceptions women have and decisions that women make about their careers. External barriers are the factors that impact a woman’s career advancement outside of her control (Oplatka & Tamir, 2009; Shakeshaft, 1989; Young & McLeod, 2001). In order to deepen their understanding of successful women, Simpson and Altman (2000) examined the careers of highly successful women as opposed to moderately successful women. In their research they found that while young women were able to override “lesser barriers” by the time women reached the upper levels of senior management, they encountered more “intractable barriers” (Simpson & Altman, 2000 p. 195). Their study concluded that the glass ceiling is time-bounded, occurring at a later stage of a women’s career, when she approaches the top levels of management. This study is valuable as we investigate and focus on the strategies and experiences that can lead to career achievements and seek to understand why some women obtain headmaster appointments in independent education while others never progress beyond the middle management level.

Non-Cognitive Traits

Non-cognitive traits such as grit, tenacity, and perseverance have been linked to student success in a variety of school settings (Duckworth et al, 2007; Dweck et al, 2011; Farrington , 2012; Peterson & Seligman, 2004). In February of 2013 the U.S. Department of Education released draft of a document called, Promoting Grit, Tenacity, and Perseverance: Critical Factors for Success in the 21st Century. The purpose of this brief was to investigate how to best prepare children and adolescents to thrive in the 21st century, especially the growing movement to explore the potential of the “non-cognitive”
factors—attributes, dispositions, social skills, attitudes, and intrapersonal resources that high-achieving individuals draw upon to accomplish success. A growing body of research suggested that these factors can be considered just as important as intellectual abilities for success. The researcher’s intent was to explore the impact that non-cognitive traits have on career advancement for women educators and whether these traits were potential factors to increasing success for women.

**Grit**

Duckworth and Peterson (2007) built on the definition of grit by describing this trait as a lasting and unwavering dedication to a specific objective. They refined the concept further by suggesting that grit also includes a certain degree of passion, zeal of fervor. They define grit as “perseverance and passion for long-term goals” (Duckworth & Peterson, 2007), p. 1087). Duckworth and Peterson (2007) suggested that grit entails “working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress (p 1088).” For the gritty individual, success is a marathon and requires great determination and stamina. Whereas some individuals may change trajectories or abandon their goals at the first sign of boredom or disappointment, the gritty individual will persevere and stay the course (Duckworth & Peterson, 2007).

Persistence and Perseverance are common elements of grit and are best defined as the voluntary continuation of a goal-directed action in spite of obstacles, difficulties, or discouragement (Peterson & Seligman, 2004). Measuring how long someone works at a task does not sufficiently capture the essence of perseverance because continuing to perform something that is fun or rewarding does not require one to overcome setbacks. In
order to persevere, an individual cannot be easily placated and must relentlessly pursue his/her desired objectives.

Passion is another key element of grit. It is referred to as “the lynchpin of grit” (Doskoch, 2005). Johnson and Indvik (1999) suggested that as organizations have shifted from hierarchical structures to more collaborative structures, they are seeking employees who will bring commitment and passion to the job. Research has determined that gritty individuals demonstrate a distinct focus on their goals and act passionately to achieve the targets they choose to pursue.

Much of the recent literature that addresses grit is primarily concerned with identifying non-cognitive traits that contribute to an individual’s success. Dweck (2006) studied the biographies of prominent, reputable leaders and thinkers and found that non-cognitive traits seemed to play a role in their lasting success. Simonton (1999), highlights the fact that many well-known geniuses were ordinary children who were extremely passionate about pursuing certain goals. These individuals were often obsessed with their goals, but their preoccupation resulted in them making enormous contributions as a result of their passion, persistence, and grit (Simonton, 1999, Dweck, 2002). These findings are supported by a growing body of evidence that suggest an individual’s grit may be a good predictor of success. The most explicit evidence that an individual’s grit can be used as a predictor of his or her success come from the work of Angela Duckworth.

In 2006, Angela Duckworth and her colleagues developed a self-report questionnaire called the Grit Scale, designed to validate the measurement of grit. In order to be able to measure grit, and fully explore its impact, she developed a measurement that
met four basic criteria: “evidence of psychometric soundness, face validity for adolescents and adults pursuing goals in a variety of domains, low likelihood of ceiling effects in high-achieving populations, and most importantly, a precise fit with the construct of grit: (Duckworth & Peterson, 2007, p.1089).

Once they had validated the Grit Scale, Duckworth and her colleagues used it in a group of studies designed to test the hypothesis that grit may be as essential to high achievement as intelligence and might be more important than similar traits like self-control and conscientiousness in recognizing exceptional individuals (Duckworth & Peterson, 2007). The results of these studies concluded that the presence of grit does indeed predict a variety of success measurements beyond IQ and conscientiousness.

Duckworth and Peterson (2007) stated that “collectively, these findings suggest that the achievement of difficult goals entails not only talent but also the sustained and focused application of talent over time (p.1087).”

In one study Duckworth and her colleagues collected data on more than 1,500 adult participants, who were asked to indicate their age and level of education (Duckworth & Peterson, 2007). In this study, success is defined as the highest level of education the individuals were able to achieve. The data points collected were then compared to participants’ individual grit scores. As predicted, the more highly educated adults were grittier than their less educated peers.

A second study done by Duckworth and her colleagues considered the association between grit and cumulative GPA while controlling for general mental ability or intelligence—as measured by SAT scores—at an elite undergraduate university. The
results of this study demonstrated that gritty students outperformed their less gritty peers (Duckworth & Peterson, 2007).

A third study expanded the scope beyond pure academic achievement by considering whether grit was predictive of cadet retention at West Point, the United States Military Academy. More than 1,200 freshmen cadets completed the Grit Scale upon arrival at West Point in 2004 (Duckworth and Peterson, 2007). The grit data was compared to other data collected by West Point, such as Whole Candidate Score (a weighted average of SAT scores, class rank, demonstrated leadership ability, and physical aptitude) which is used in their rigorous admissions process (Duckworth & Peterson, 2007). The results of the study suggested that grit predicted whether a candidate would survive his/her first summer as a cadet better than any other known predictor. Additionally, grit was more predictive than both a cadet’s first year GPA and his or her Military Performance Score, a combined measure of performance ratings and grades (Duckworth & Peterson, 2007). The results of this study demonstrate that grit is correlated not only of success in a traditional academic environment, but also of success in a challenging environment in which success is defined not only in terms of pure academic performance.

Deliberate practice often leads to expert performance and that expert performance is difficult to achieve without deliberate practice to pave the way (Gladwell, 2008). If grit can predict and individual’s willingness to engage in deliberate practice, it seems likely that it can also predict those who are likely to excel in other areas, including the workplace.
Although increasing attention is being given to the effects of non-cognitive skills like grit, the importance of such skills in the prediction of workplace success remains largely unexplored.

**Growth Mindset**

Like grit, growth mindset has been shown to be predictive of success, often above and beyond other critical measures such as IQ and GPA. The concept of mindset has been refined by Dweck (2006), who suggests that individuals can be categorized according to their implicit beliefs regarding the origin of ability. Individuals who believe that ability is innate are said to have a “fixed” mindset, also referred to as an entity theory of intelligence (Blackwell, Trzesniewski, Dweck, 2007). Dweck (2002) argues that these individuals are “stubbornly” wedded to the idea that accomplishment, especially outstanding accomplishment is about endowment. “They ignore the fact that Mozart, Darwin, Michael Jordan, and Tiger Woods all practice feverishly and single-mindedly for years, and instead believe that they were born with one-in-a-million ability” (p. 39). Collectively, individuals with a fixed mindset have a tendency to overlook the years of commitment and training that led to such achievements.

In a fixed mindset, people believe that traits, like their intelligence and talent, are set and cannot be changed. They do spend time or effort trying to develop their intelligence or talent. They also believe that effort does not have a great impact on success—they believe talent is more important than effort. In a growth mindset, people believe that their most basic abilities can be developed through hard work and effort—
basic intelligence and talent are just the starting point. This view creates a desire to learn and a resilience that is essential for great accomplishment (Dweck, 2006).

Individuals who believe that ability is developed and enhanced through hard work and learning are said to have a “growth” mindset or an incremental theory of intelligence (Blackwell, Trzesniewski, Dweck, 2007). Individuals may not necessarily fall into one of these categories and many people have different mindsets in different domains of their lives. Dweck linked academic tenacity to mindset concluding that students with tenacity had the ability to look beyond short-term concerns to higher order goals and were able to overcome challenges and setbacks to persevere toward these goals (Dweck, 2006).

Although there is no evidence about how we can build a growth mindset culture, there is a theory of planned behavior the offers a useful clue (Ajzem, 1991). The theory is supported Reeve and Assor (2011) in their adjusted version of this framework used for building a growth mindset culture. The theory of planned behavior assumes that effectively executing certain desired behavior happens when individuals are autonomously motivated for the desired behavior. There are three requirements necessary to achieve this growth. First, it is required that individuals feel they have influence over the behavior and they can perform the behavior. Second, they need to have a positive attitude with respect to the behavior. Third, it is necessary that the growth mindset is the dominant norm in the organization. “If organizations can build a culture in which the growth mindset represents the normal way of thinking this is likely to have many benefits, both for individuals and for the organization as a whole. A fixed mindset culture encourages internal competition, defensiveness and an emphasis on judging
people, whereas a growth mindset culture encourages cooperation, openness and an emphasis on learning (Visser, 2011).”

Organizational mindset and the impact it has on leadership and culture is connected to the idea of people continually expanding their capacity to achieve desired results (Senge, 2006). Learning in this context has a specific meaning which Senge terms “metanoia,” a Greek work meaning a shift in mind (Senge, 2006). Senge defines a learning organization as one that is continually expanding its capacity to create its future and where people at all levels are collectively learning how to learn together (Senge, 2006). Whereas Dweck studied individual growth, Senge studied organizational growth, each of their work is framed in a mindset theory with capacity building as an end result (Dweck, 2006, Senge, 2006).

Dweck’s research determined that while individuals may not be consciously aware of their own mindset, it can be easily discerned based on their behavior. In order to determine an individual’s dominant mindset, Dweck developed a 16 question mindset quiz in which participants will use a traditional likert scale to agree or disagree with a series of predetermined fixed and growth mindset statements. An individual’s dominant theory of intelligence can be determined based on the extent and number of fixed or growth mindset statements with whom he/she agrees.
Women and Leadership

Studies on women in leadership suggest that women are more apt than men to be torn between the demands of work and family responsibilities. (Belden Russonello & Stewart, 2010; Tallerico, 2000; Young & McCleod, 2001). Gender socialization, belief in meritocracy, and the influence of patriarchy create a cycle of discrimination in school leadership, which supports both the persistence and existence of gender barriers (Hoff & Mitchell, 2008). Referring to education in past decades, Hargreaves postulated “It was rational, linear, hierarchical, secretive, and controlling. It was leadership too often lacking in mission, and almost always bereft of passion. This was a world of “power over” rather than “power with” of transactional rather than transformational leadership.” (Hargreaves, 2005) In her study of independent school heads Ostos (2012) suggested that female heads’ leadership styles are naturally drawn to focus on relationships demonstrating a more transformational leadership style than that of their male counterparts. This study which focused on NAIS member schools also concluded that male heads ascended to top-tier leadership positions more quickly than women (Ostos, 2012) and males’ leadership styles are more transactional (Eagly et al, 2003, Ostos, 2008).

Although Hargreaves’ (2005) position on sustainable leadership suggested that women have made significant strides over the course of the last few decades, positively shifting to more leadership roles, we need to continue to examine women in leadership positions and explore the cultures that foster and support the nature of their roles, the issues of gender stereotypes that women in leadership positions face, and the leadership styles that are supported in the overarching school culture. (Catalyst, 2010; Sanchez &

The discussion of the literature for the purpose of this study addressed the glass ceiling, social roles, grit, and mindset which are all elements essential to understanding a women’s journey to top-tier leadership in independent education.
CHAPTER III

METHODOLOGY

This chapter focuses on the conceptual framework, the research questions, and the research design—including the methods used to collect the data, select participants, and interview the subjects.

Purpose of this study

The purpose of this study was to explore whether the non-cognitive traits, grit, which combines passion and perseverance for long-term goals and growth mindset or the belief that one’s abilities are flexible entities that can develop and improve through effort, are characteristics common to, and predictive of female headmasters. This study explored the relationship between these two measurable variables and the career progression of females who have been appointed to the head of school position in an NAIS independent school, providing insight into the common traits needed to overcome gender stereotypes in independent school leadership.

This study’s purpose was to describe the nature of grit, which combines passion and perseverance for long-term goals (Duckworth, 2006), and growth mindset, defined as self-perception (Dweck, 2006), culture, social roles, and career advancement of women in independent education when controlling for other factors that have been known to contribute to top-tier leadership appointments such as degree attained, family history, and work history. Female school leaders in schools who are members of NAIS were studied.
Research Question

What is the nature of the common traits associated with female headmasters in independent schools?

Setting

This study was designed to investigate whether there is a relationship between common traits associated with the career progression of female headmasters in independent schools. All participants in the study were women headmasters at NIAS co-educational PreK-grade 12 day schools located in the United States of America.

Subjects

The researcher selected participants in this descriptive study based on criteria which included female heads of NAIS member independent schools in the United States of America. Only female heads of co-ed PreK-grade 12 institutions were included in this research.

Sampling Procedures

The researcher used a non-sampling method, which allowed the researcher to ask a group of participants for a particular purpose (Fraenkel, Wallen, Hyun, 2012). The researcher asked female heads of co-educational, Pre-Kindergarten through twelfth grade NAIS member independent schools in the United State to participate in this study. The online database revealed 246 Pre-Kindergarten-twelfth grade schools reporting for the
2014-15 school year. Of those schools, 184 heads were males and 62 heads were females. After data-mining, a total of 49 surveys were emailed to female heads.

**Research Design**

In order to explore the connection between grit, a growth mindset, and career progression for aspiring female heads in independent education, this study was descriptive in nature, drawing on both methods of data collection and analysis. Feedback from female top-tier administrators gave the researcher a perspective on this issue at hand (Leedy, 2013).

The researcher investigated whether independent variables including grit, growth mindset, school size, degree attained, years of experience, marital status, number of children, and gender of leadership appointing the position contributed to their career advancements. The researcher did not include male heads of school in this study and narrowed the study to include only co-educational day schools educating grades PreK-12. Stand alone primary schools, middle schools and upper schools, along with boarding schools and gender specific schools were not included in this study. All surveys were self-reported which was a limitation the researcher considered when analyzing the data (Leedy, 2013).

The study tested the hypotheses that both grit and growth mindset contribute to a successful career progression for female heads. This research allowed for an exploration of the nature of the variables (Leedy, 2013). The results allowed for the researcher to make generalizations about traits women, who aspire to be heads of independent schools in the United States, possess in order to advance.
Instrumentation

The data needed to answer the research question were drawn from a survey and personal interviews. The survey included instruments validated to ascertain Grit (Duckworth, 2006) and Growth Mindset (Dweck, 2006) along with a demographic and descriptive survey. The quantitative data collected was obtained from the Grit Scale (Appendix B) which consists of twelve questions about how an individual handles obstacles and challenges and a Growth Mindset Instrument (Appendix C), which is an instrument about one’s attitude towards their ability to grow. The Grit survey asked participants to respond to a statement using predetermined answers: Very much like me, mostly like me, somewhat like me, not much like me, and not like me at all. Statements included, “I have overcome setbacks to conquer an important challenge,” and “I often set a goal, but later choose to pursue a different one.” The Mindset Survey also asked participants to respond to a statement. Predetermined responses for this survey included: Strongly agree, agree, mostly agree mostly disagree, strongly disagree. Statement included, “Your intelligence is something very basic about you that you can’t change very much,” and “No matter how much intelligence you have, you can always change it quite a bit.”

Data Collection Procedures

The participants were sent an email invitation explaining the purpose of the research (APPENDIX A) and containing a link to a confidential, online survey requesting their voluntary participation. The research was conducted in July 2015 with NAIS school top-tier female administrators via electronic mail, which included link to
Survey Monkey. The email addresses were public information and were acquired through internet mining of individual school websites using a NAIS list of member schools as a guide.

The participants were asked to complete surveys within two weeks of the initial request and a reminder email, which included the link, was sent out after ten days. This research relied on self-reported data, which may have resulted in data which is biased based on recent events or personal context (Leedy, 2013, Swartz, 1999). As Podsakoff and Organ (1986) suggested, when we ask people to report on personality traits or other measures, which cannot be verified through other sources, there is a risk inaccurate data. This data was collected at one setting, which eliminated any threat to attrition, but the consideration of professional demands may have led to a weakness in subject participation, as time commitments may be viewed as constraining, limiting participation.

Pilot Study

In order to fine tune the research questions and ensure they were developed to elicit responses relevant to the research, the questions were piloted in June 2015 with volunteers from the doctoral program at Lynn University and other independent school educators. The results of the pilot study validated the questions were clear and concise. The pilot study also validated the purpose of the survey, which was to provide the feedback necessary to address the research question. The pilot participants also indicated that the survey was easily accessible and was easily completed in one sitting, taking approximately fifteen minutes.
Data Analysis Procedures

The quantitative data was collected and, because of the small sample size, data was imported into an excel spreadsheet for statistical analysis. The descriptive, non-experimental study, allowed for the opportunity to draw connections between the data collected--finding patterns, themes and discrepancies. Chapter four will provide a detailed analysis of the survey questions, which included the grit survey, mindset survey, and demographic information. Chapter five provides conclusions and makes recommendations for future research.

Ethical Considerations

This was a descriptive, non-experimental study. The surveys were anonymous and there was no relationship between the researcher and the survey participants. To maintain the confidentiality of the participants in this study, each participant was assigned a number for their survey. The school in which the participant was employed remained anonymous and all records and information obtained during the research process was kept securely on the researcher’s password protected computer.
CHAPTER IV

RESULTS

Summary of Analysis

The purpose of this Chapter is to review the results of the research used to investigate whether the non-cognitive traits, grit, which combines passion and perseverance for long-term goals, and growth mindset or the belief that one’s abilities are flexible entities that can develop and improve through effort, are characteristics common to female headmasters.

The study was piloted in July 2015 by members from cohort four at Lynn University and other independent school educators, and feedback from the pilot study validated the questions were clear and concise. After the survey was tested, the online survey, which consisted of three components, including the Grit Survey (see Appendix A), the Growth Mindset Survey (see Appendix B), and a Demographic Survey (see Appendix C) was emailed to forty-nine female headmasters at independent schools. This study was designed to explore the measureable variables in females who have been appointed to the head of school position in an NAIS school in order to investigate the question: What is the nature of the common traits associated with female headmasters in independent schools?

The research results are divided into five sections. The first section focuses on the demographic data collected, the second is a detailed explanation of the responses to grit questions and how they correlate to other variables, the third section details the
mindset questions and the relationship, the fourth section describes the combined nature of the collective data, and the final section describes some of the social and cultural information gained from the survey.

Results of the Study – Part 1

Summary of Participants

The 2014-15 NAIS data reported sixty-two female heads. From that number, forty-nine emails were collected. The variation in the number of actual heads listed and the number of emails collected is attributed to position turnover and the inability to retrieve email data by the researcher.

The online survey was sent to forty-nine female heads of school in schools belonging to the National Association of Independent Schools, as described in chapter three. Seventeen individuals responded, resulting in a response rate of roughly 34%. While the response rate is lower than one might expect, a review of literature suggests that a typical response rate from a group is 34.6% (Cook, Heath and Thompson, 2000).

Of the participants that responded, 100% completed the survey in its entirety. Participants’ ages varied between 39-68 years of age (M=53, SD 9.09). The respondents were overwhelmingly identified ethically as white (94%).

The participants worked at independent school of different sizes, but the majority of the participants worked at independent schools with enrollment of 700+ students (47.06%). 29.41% respondents worked at schools with enrollment between 301-300, 17.88% worked at schools between 501-700, and 5.88% with enrollment under 200.

The vast majority of respondents were married (81.25%). The other respondents were divorced (12.56%) or single (12.58%). Most of the participants also were mothers.
78.59% had 1-2 children, 17.65% had 3 or more children, and 11.76% did not have children.

The majority of the female heads surveyed pursued advanced degrees, with 70.58% of the participant holding a master’s degree, 23.63% obtaining doctorates. Heads of school who responded to the survey indicated a high rate of experience in the field of education (mean 26.5 years). Experience at their current school ranged from newly hired to twenty years, with an average of seven years at their current school.

Table 1 illustrates the demographic data of the study participants. In this research, demographic data variables included age, race, degree attained, years in education, and size of school.

Table 1
Demographic Information

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>Age</th>
<th>School Size</th>
<th>Race</th>
<th>Degree</th>
<th>Years In ED</th>
<th>Years at School</th>
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<td>Degree</td>
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<td>20 years</td>
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<td>Degree</td>
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<td>Degree</td>
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<td>2</td>
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<td>Degree</td>
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<td>Degree</td>
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<td>Master’s Degree</td>
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<tr>
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<td>700</td>
<td>White</td>
<td>Degree</td>
<td>26</td>
<td>2</td>
</tr>
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</table>
Results of the Study—Part 2

Summary of Grit Survey
This section will focus on the Grit survey and the relationship between the participants grit scores and other variables. Duckworth and Peterson (2007) build on the definition of grit by describing this trait as a lasting and unwavering dedication to a specific objective. They refined the concept further by suggesting that grit also includes a certain degree of passion, zeal of fervor. They defined grit as “perseverance and passion for long-term goals” (Duckworth & Peterson, 2007), p. 1087). Duckworth and Peterson (2007) suggested that grit entails “working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress (p 1088).” For the gritty individual, success is a marathon and requires great endurance and stamina. Whereas some individuals may change trajectories or abandon their goals at the first sign of boredom or disappointment, the gritty individual will persevere and stay the course (Duckworth & Peterson, 2007).

Persistence and Perseverance are common elements of grit and are best defined as the voluntary continuation of a goal-directed action in spite of obstacles, difficulties, or discouragement (Peterson & Seligman, 2004). Measuring how long someone works at a task does not adequately capture the essence of perseverance because continuing to perform something that is fun or rewarding does not require one to overcome setbacks. In order to persevere, an individual cannot be easily subdued and must relentlessly pursue his/her desired objectives.

Passion is another key element of grit. It is referred to as “the lynchpin of grit”(Doskoch, 2005). Johnson and Indvik (1999) suggest that as organizations have shifted from hierarchical structures to more team-based structures, they are seeking
employees who will bring commitment and passion to the job. Research suggests that gritty individuals demonstrate a distinct focus their goals and a passion for the targets they choose to pursue.

In this study, all seventeen participants had a grit score between 3 and 5, with a mean of 3.96 and standard deviation of .490. When participants were asked if they had overcome setbacks to conquer an important challenge 41.18% answered “Very much like me” and 52.94% answered “Mostly like me”. This data affirmed that 94.12% of female heads have the ability to overcome challenges. 82.35% of the participants indicated that setbacks did not discourage them. When the participants were asked to respond to the statement “I have been obsessed with a certain idea, but later lost interest.” 76.47% indicated that this statement is “not much like me” or “not like me at all”. 100% of the participants described themselves as “hard workers” and “diligent”.

Setting and sticking to goals was a strong trait observed in the results only 5.88% indicated that the statement “I often set a goal but later choose to pursue a different one” was “very much like me”. All the other participants indicated the ability to stick to goals they set for themselves. Therefore, it is not surprising that 88.23% indicated that they do not have difficulty maintaining their focus on projects that take more than a few months to complete. 82.35% of the women indicate they tend to “finish what they begin.” This data correlated to the participants response to a survey question asking if they had ever achieved a goal that took years of work, in which 76.47% indicated this was either “mostly” or “very much like me”.
**Grit and other variables**

In order to determine whether there is a relationship to a female head’s grit scores and other variables, the researcher compared the results of the grit scores with demographic data collected.

Table 2 illustrates the relationship between a female head’s age and the score she received on the Grit Survey. The given data suggests an insignificant relationship.

Table 2

Grit Score and Age of Female Head of School
Table 3 illustrates the relationship between grit and degree attained. The four participants who attained the highest degree also obtained a score over 4.0 on the scales. Validating the level of commitment and grit one must have in order to complete the highest degree.

Table 3

Grit Score and Degree

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>Grit</th>
<th>Degree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>4.2</td>
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</tr>
<tr>
<td>2</td>
<td>4.3</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>3</td>
<td>4.3</td>
<td>Doctoral/MD/JD</td>
</tr>
<tr>
<td>4</td>
<td>4.4</td>
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</tr>
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<td>Master's Degree</td>
</tr>
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<td>6</td>
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<td>Doctoral/MD/JD</td>
</tr>
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<td>7</td>
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<tr>
<td>17</td>
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<td>Master's Degree</td>
</tr>
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</table>
Table 4 illustrates the relationship between grit and years in education. Similar to age comparison, no strong correlation between these two traits can be described.

Table 4

Grit Score and Years in Education

<table>
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<tr>
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Results of the study – Part 3

The Mindset Survey

This section focuses on the Mindset Survey and explores the relationship with scores attained and other variables. Carol Dweck’s research focused on the idea that while individuals may not be consciously aware of their own mindset, it can be easily discerned based on their behavior. In order to determine an individual’s dominant mindset, Dweck developed a 16 question mindset quiz in which participants will use a
traditional five point likert scale with a series of predetermined fixed and growth mindset statements. An individual’s dominant theory of intelligence can be determined based on the extent and number of fixed or growth mindset statements with whom he/she agrees.

Although according to the Mindset survey, all women had a dominant growth mindset, which is measured by analyzing questions and coding values for certain questions, which correlate to either a fixed or growth mindset. In this survey, the maximum mindset score is 35, but when calculating a mindset score, the lower score indicates the strength of one’s dominant mindset. In this research the mean was 12.66 with a standard deviation of 2.1.

Mindset answers varied more than grit answers, but there were certain areas of mindset that were strongly aligned with the collective sample. Most participants’ attitudes towards feedback were similar. When survey participants responded to the statement “I appreciate when people give me feedback about my performance, 82.35% were in agreement with this statement and from them 29.41% strongly agree. None of the participants “strongly agreed” to the statement, “You are a certain kind of person, and there is not much that can be done to really change that.” The participants overwhelmingly (100%) felt that trying new things for them was not stressful.

Individual attitude towards intelligence was a component of the growth mindset survey. 82.95% mostly to strongly agreed that no matter how much intelligence you have, you can always change it quite a bit and 100% mostly to strongly agreed that “the harder you work at something, the better you will be at it.” Similarly, 100% mostly disagreed to strongly disagreed that truly smart people do not need to try hard. 94.12% of
the participants felt that an important reason they do their work is because they like to learn new things.

**Mindset and other variables**

Table 5 illustrates the relationship between mindset scores and age. Stronger growth mindset is demonstrated by lower scores.

Table 5

Mindset Score and Age of Female Heads of School
Table 6 illustrates the relationship between mindset and degree attained. Four of the participants completed their Doctorate and out of those candidates two received the strongest mindset score from the group—scores of 7 and 8. One of the participants with a doctorate had skipped one question, which disqualified her score. The two strongest scores were from the participants with doctorate degrees, which could suggest a correlation.

Table 6
Mindset Score and Degree

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>Mindset</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>Doctoral/MD/JD</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>Bachelor's Degree</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>Doctoral/MD/JD</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>9</td>
<td>16</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>10</td>
<td>13</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>13</td>
<td>n/a</td>
<td>Doctoral/MD/JD</td>
</tr>
<tr>
<td>14</td>
<td>11</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>15</td>
<td>8</td>
<td>Doctoral/MD/JD</td>
</tr>
<tr>
<td>16</td>
<td>14</td>
<td>Master's Degree</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>Master's Degree</td>
</tr>
</tbody>
</table>
Results of the Study– Part 4

Nature of the Grit and Mindset

The section looks at the composite grit and mindset scores. Individuals who believe that ability is developed and enhanced through hard work and learning are said to have a “growth” mindset or an incremental theory of intelligence (Blackwell, Trzesniewski, Dweck, 2007). Dweck linked academic tenacity to mindset concluding that students with tenacity had the ability to look beyond short-term concerns to higher order goals and were able to withstand challenges and setbacks to persevere toward these goals (Dweck, 2006). This section explores the relationship between the participant’s grit and mindset scores in order to determine weather there is a potential correlation between the two.

Compared to the Grit scores, there was more variation with regards to the growth mindset scores.

Table 7 illustrates the mean grit and mindset scores for the seventeen participants. The mindset scores vary more than the grit scores.

Table 7

Grit and Mindset Mean Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grit Score</td>
<td>1</td>
<td>5</td>
<td>3.96</td>
<td>.49</td>
</tr>
<tr>
<td>Mindset Score</td>
<td>1</td>
<td>35</td>
<td>12.66</td>
<td>2.1</td>
</tr>
<tr>
<td>Valid N</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8 illustrates the correlation between grit and mindset within the individual scores. This table indicates a relationship between the participant who scored highest on the grit survey and who has the strongest growth mindset.

Table 8
Correlation Between Grit Scores and Mindset Scores
Results of the Study — Part 5

Social and Cultural Variables

A School’s culture or climate can be defined as the historically transmitted patterns of meaning that include the norms, values, beliefs, traditions and myths understood by the school community (Stolp and Smith, 1994). There is a link between school vision and cultural change that suggests a vision is not a static event, because the vision must change as culture changes (Senge, 1990). In independent education, one aspect of the heads job is to provide vision and leadership. There is a recognizable relationship between board appointed headmasters and the vision and culture of a school (NAIS, 2009). In a 2009 report it is noted that 82% of the heads considered managing the school’s climate and values as “heaviest” or “heavy” demand and 80% of the heads consider working with their school board of trustees as the “heaviest” or “heavy” demand (NAIS, 2009). Framing the current study with this background information is important as this research connects the social and institutional norms that reinforce gender normalization of independent school leadership in order to better understand the current leadership landscape.

The culture of the school is often related to the leadership style of the administration. In her study of independent school heads Ostos (2012) suggested that female head’s leadership styles are naturally drawn to focus on relationships demonstrating a more transformational leadership style than that of their male counterparts. This study which focused on NAIS member schools also concluded that male heads ascended to top-tier leadership positions more quickly than women (Ostos, 2012) and males’ leadership styles are more transactional (Eagly et al, 2003, Ostos,
In order to gain some insight into the culture of the school as it related to its female leader, the participants were asked about their leadership style. 41% of the participants believed they were transformational leaders, while 35% viewed themselves as servant leaders.

Table 9 illustrates the leadership style of the participants, showing that 76% view themselves as servant or transformational leaders.

Table 9
Leadership Style of Female Heads of School

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Leadership Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Transformation</td>
</tr>
<tr>
<td>2</td>
<td>Transformation</td>
</tr>
<tr>
<td>3</td>
<td>Other (please specify)</td>
</tr>
<tr>
<td>4</td>
<td>Servant</td>
</tr>
<tr>
<td>5</td>
<td>Transactional</td>
</tr>
<tr>
<td>6</td>
<td>Servant</td>
</tr>
<tr>
<td>7</td>
<td>Transformation</td>
</tr>
<tr>
<td>8</td>
<td>Servant</td>
</tr>
<tr>
<td>9</td>
<td>Transformation</td>
</tr>
<tr>
<td>10</td>
<td>Servant</td>
</tr>
<tr>
<td>11</td>
<td>Transformation</td>
</tr>
<tr>
<td>12</td>
<td>Transactional</td>
</tr>
<tr>
<td>13</td>
<td>Other (please specify)</td>
</tr>
<tr>
<td>14</td>
<td>Transformation</td>
</tr>
<tr>
<td>15</td>
<td>Transformation</td>
</tr>
<tr>
<td>16</td>
<td>Servant</td>
</tr>
<tr>
<td>17</td>
<td>Servant</td>
</tr>
</tbody>
</table>

The Board of Trustees, as custodians of the school, are responsible for hiring and evaluating the headmaster; therefore they may or may not influence the gender disparity.
perceptions. The notion of the “boys club” (NAIS, 2009) appears to be rooted in the independent school culture, thus possibly supporting a perpetual hiring cycle of white male headmasters. The participants were asked about their journey to headship in order to gather some insight into perceived social roles in the hiring process. 41.18% of the participants indicated that at one point in their journey they had applied for a head of school position in which they were not chosen. In 87.50% of these situations, the board president, in charge of the hiring decision, was male. When asked if the previous head of their school was male or female 70.59% of the participants indicated the previous head was male, while 29.41% of the participants indicated the head was female.

Studies on women in leadership suggest that women are more apt than men to be torn between the demands of work and family responsibilities. (Belden Russonello & Stewart, 2010; Tallerico, 2000; Young & McCleod, 2001). This survey indicated that 88.3% of the female participants had children.
Table 10 illustrates the data comparing the number of children for each participant compared to their grit, mindset, and degree attained.

Table 10
Number of Children in Relation to Grit, Mindset, and Degree

<table>
<thead>
<tr>
<th>Respondent #</th>
<th>Number of Children</th>
<th>Grit</th>
<th>Mindset</th>
<th>Degree</th>
<th>Column1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 or 2</td>
<td>4.2</td>
<td>20</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1 or 2</td>
<td>4.3</td>
<td>14</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1 or 2</td>
<td>4.3</td>
<td>14</td>
<td>Doctoral/MD/JD</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1 or 2</td>
<td>4.4</td>
<td>13</td>
<td>Bachelor's Degree</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1 or 2</td>
<td>4.2</td>
<td>12</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3 or more</td>
<td>4.2</td>
<td>7</td>
<td>Doctoral/MD/JD</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1 or 2</td>
<td>4.5</td>
<td>12</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3 or more</td>
<td>3.5</td>
<td>14</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>3 or more</td>
<td>3.8</td>
<td>16</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1 or 2</td>
<td>3.6</td>
<td>13</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>3.3</td>
<td>12</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1 or 2</td>
<td>3.8</td>
<td>13</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1 or 2</td>
<td>4.4</td>
<td>n/a</td>
<td>Doctoral/MD/JD</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1 or 2</td>
<td>4.1</td>
<td>8</td>
<td>Doctoral/MD/JD</td>
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</tr>
<tr>
<td>15</td>
<td>1 or 2</td>
<td>3.5</td>
<td>14</td>
<td>Master's Degree</td>
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</tr>
<tr>
<td>16</td>
<td>0</td>
<td>3.3</td>
<td>14</td>
<td>Master's Degree</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>1 or 2</td>
<td>3.5</td>
<td>17</td>
<td>Master's Degree</td>
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</tr>
</tbody>
</table>

**Chapter Summary**

The purpose of this chapter was to present the finding that emerged from the analysis of the data collected from an online survey. Analysis demonstrated that there were commonalities that female headmasters in independent schools share. The non-cognitive, measurable trait, grit, was strong in all the candidates, suggesting there is value in understanding how attaining this trait can impact a women’s career aspirations. Social and cultural and demographic data was explored. The significance of these comparisons
varied. Conclusions regarding the data collected and discussions for future research are offered in chapter five of this dissertation.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

This study investigated the relationship between three theoretical frameworks, including -Eagly’s (2002) social role congruity theory, Dweck’s (2006) growth mindset theory, and Duckworth’s (2007) grit theory, through the lens of independent school leadership. The Social Role Theory framed the study’s context in the culture of independent education, while the research explored whether traits, such as grit and growth mindset, are related to the successful career advancement of female heads.

In order to explore the connection between grit, a growth mindset, and career progression for female heads in independent education, this study was descriptive in nature, drawing on both methods of data collection and analysis. The study was designed to investigate whether independent variables, including grit, growth mindset, school size, degree attained, years of experience, marital status, number of children, and gender of leadership appointing the position, contributed to career advancements for female administrators. The study tested the hypotheses that both grit and growth mindset contribute to a successful career progression for female heads. This research allowed for an exploration of the nature of the variables (Leedy, 2013). Based on the results, generalizations were made about traits women, who aspire to be heads of independent
schools in the United States, possess in order to advance.

The perceived gendered nature of the independent school culture framed the primary purpose of the research. The majority of faculty employed by the National Association of Independent Schools (NAIS) are women, yet women remain unable to achieve access to head of school leadership positions at the rate equal to their male colleagues (NAIS.2009). Looking at gender trends in heads of NAIS schools over the past twenty years, it is evident that this position is male-dominated. The disparity between males and females is concerning considering disproportionate number of females who are teachers, which is considered the most likely stepping stone to become a head of school (NAIS, 2010). The 2014 NAIS statistics report states that 67 percent of heads of school were male. The problem of parity has been recognized in both the professional literature and program initiatives, and analyzed by the NAIS, and it continues to exist (NAIS, 2009).

There is a documented gender biased hierarchy in independent school leadership and in the past twenty years women headships have increased by only 10%. More significantly, there has been no change in these numbers in more than ten years (NAIS, 2014). This study was designed to explore the measureable variables in females who have been appointed to the head of school position in a NAIS school in order to investigate the question: What is the nature of the common traits associated with female headmasters in independent schools? The non-cognitive traits, mindset and grit were studied in order to explore their influence on career advancement. This section will review the central finding of this study and offer further analysis and discussion of the results. This chapter describes perceived and documented social and cultural aspects of
independent schools, while exploring the results of the grit survey and mindset survey. The chapter will also review limitations and provide recommendations for further research.

**Summary of Results**

This is an important and exciting time for female administrators and we must take this opportunity to support aspiring female leaders. The comprehensive review of the research literature indicated there is a strong theoretical and practical base for making powerful and impactful advances in the education field. Hargreaves’ (2005) research on sustainable leadership suggested that women have made significant strides over the course of the last few decades, positively shifting to more leadership roles. As we examine women in leadership positions, we must consider exploring the cultures that foster and support static nature of their roles and the ongoing issues of gender stereotypes that women in leadership positions continue to face (Catalyst, 2010; Sanchez & Thornton, 2010; Chase & Bell 1990, Tallerico & Bount, 2004).

In the NAIS 2009 survey, responding women heads and administrators agreed that overall the Board of Trustees and search committees are reluctant to hire non-traditional heads. “Studies on leadership development have proven that people in leadership positions gravitate toward successors that remind them of themselves.” (Feibelman & Haakmat, 2010 p.85). The gender stereotype was not denied by NAIS as is stated in their report regarding how white male trustees are more likely to feel comfortable with white male leadership. (Belden Russonello & Stewart for NAIS). The summary report says “…some independent schools are not ready for change; white men
fit the traditional stereotype of what a head is supposed to look like. They say conservative white male boards of trustees are more likely to feel comfortable with white male leadership.” (Belden Russonello & Stewart for NAIS p. 4).

The researcher challenged and tested the above statement by asking questions about social role, leadership, and school culture to female heads who agreed to be research participants. The study participants were asked about their journey to headship in order to gather some insight into perceived social roles in the hiring process. 41.18% of the participants indicated that at one point in their journey they had applied for a head position, but were not chosen as the final candidate. In 87.50% of these situations, the board president, in charge of the hiring decision, was male. When asked if the previous head of their school was male or female 70.59% of the participants indicated the previous head was male, while 29.41% of the participants indicated the head was female.

Headmaster appointments are often opportunities for school boards to maintain the integrity and culture of the past, ensuring preservation of long-standing traditions for the future, but these appointments need to be thoughtful and tied to improvement plans (Hargreaves, 2005). A preliminary conclusion may suggest that schools continue to be challenged with change in leadership roles.

Studies on women in leadership suggest that women are more apt than men to be torn between the demands of work and family responsibilities. (Belden Russonello & Stewart, 2010; Tallerico, 2000; Young & McCleod, 2001). This 2009 report published by NAIS suggested there were several factors explaining the headship gender diversity challenge. According to the report, for women, background and personal career
decisions contributed to their lack of headship appointment. Other factors included urgency, ability or desire to move their families, and family commitment. Again, to challenge this data, this researcher included a question on children. The survey indicated that 88.3% of the female heads had children, which suggests that female’s who aspire to be heads of school are also willing to juggle their career and family responsibilities.

Women often list grit as a personal attribute when asked to describe the traits that led to their success. (Hogan & Larkin-Wong, 2013). The most significant finding in this study is that grit is a common trait shared by top tier female administrators in NAIS schools. In this study, all seventeen participants had a grit score between 3 and 5, with a mean of 3.96 and standard deviation of .490. This study also implies there is a strong correlation between the grit scores and career advancement for female leaders in independent schools, suggesting that the grit is related to achievement. The relationship between a female head’s age and the years she has been involved in education was insignificant, so grit is not necessarily a trait acquired through experience, nor is it a trait associated with a generational attitude. The relationship between grit and degree attained implies that there is a correlation between the two variables. The four participants who completed the highest degree, a doctorate, also obtained a score over 4.0 on the scales. This correlation validates the level of commitment and the grit one must have in order to complete the highest degree.

A growth mindset, or the belief that one’s abilities are flexible entities that can be developed and improve through effort, is a trait that many highly successful individuals rely on to navigate challenging situations (Tough, 2011). In this study, mindset answers
varied more than grit answers, but there were specific areas of mindset that were strongly aligned with the collective sample. For example, most participants appreciated feedback about their performance and believed that all individuals have the capacity to change or grow. The majority of participants also expressed a willingness to take acceptable risks, and this risk taking behavior did not cause them undo stress.

Like grit, the relationship between age and mindset scores indicated no direct or strong correlation. Yet, the relationship between mindset and degree attained seems to have some correlation. The two strongest growth mindset scores received were scores of 7 and 8. Four of the participants obtained their Doctorate and out of those candidates, the two strongest scores belonged to two participants with doctorate degrees, which could suggest a correlation.

The mindset scores varied more than the grit scores, demonstrating a stronger connection between grit and career progression in the female heads of independent schools. When doing an individual analysis, participant number six stood out consistently in all areas. She scored highest on the grit survey and had the strongest growth mindset. She also had attained the highest degree.

**Limitations of the Data**

The primary limitation of this study was the small sample size. The sample size, along with the limited response rate (36% of female heads of NAIS schools responded), limited the validity and reliability of the data collected. The consideration of professional demands may have led to a weakness in subject participation, as time commitments may be viewed as constraining, limiting participation. Because the study was conducted with
a small sample size, the results cannot be generalized to the entire female head of school population. The researcher relied on self-reported data, which may result in data which is biased based on recent events or personal context (Leedy, 2013, Swartz, 1999). As Podsaskoff and Organ (1986) suggested, when people are asked to report on personality traits or other measures, which cannot be verified through other sources, there is a risk of inaccurate data. This data was collected at one setting, which eliminated any threat to attrition. Repeating this study with a larger sample, including male heads of school, is recommended.

Implications for Future Research and Practice

Although further investigation is warranted, the results of this study seem to suggest that it is possible that grit could be a predictor of success for female educational leaders. In order to validate the findings, future research should include expanding on the population and increasing participation, which would allow the researcher to investigate traits and characteristics through a broader lens. Adding a qualitative, personal interview, component to this study would provide a deeper understanding of how women headmasters experience their leadership roles in independent schools. The purpose of establishing a qualitative phase of this study would be to gain insight into the experiences of female heads as educational leaders, affording them the opportunity to share their journeys to headship, their opinions on the role of head of school, and offer insight and advice to future females aspiring to be heads of school. For example, participant number six had the highest grit score, the strongest mindset, the highest degree, she was also the
youngest participant and had the most children. It would be interesting to document her journey to headship in order to determine what variables played the biggest role in her success.

Further investigating why women are not serving in heads of school positions in larger numbers needs to include the role compensation and benefits play in determining a female administrator’s journey. Is the ability or desire to relocate tied directly to compensation packages offered to female employees? It could be that pursuing and remaining in headship is less financially rewarding for women than it is for their male peers. A 2012 report from the American Association of University states that although women are better educated, earning more than half of all college degrees, they consistently earn 23% less than men on average (Corbett & Hill, 2012). This data is aligned with NAIS data stating the median head’s salary for men exceeds median head’s salary for women by 21%. (NAIS, 2013).

Including other contributing factors, like salary and compensation, in the survey may reveal underlying causes to women’s perceived lack of ability or desire to relocate to further their career.

This research did not focus on color diversity, but the data collected supported the lack thereof in the female heads that participated in the survey. 98% of the female heads indicated their race as white. Only one participant indicated “other”. These findings suggest that this is a topic that should be further investigated in a future study.

Overcoming barriers may be essential to career growth for women. Understanding what traits benefit women as they navigate the social and cultural obstacles faced in the workplace may be the key to developing aspiring female leaders.
Experts believe that grit and mindset can be learned and developed given the right conditions. The surveys confirmed that there were aspects of growth mindset in all of the survey participants. The women heads all felt that feedback was essential to growth and did not hesitate to take acceptable risks. This data, coupled with recent research regarding the impact growth mindset is perceived to have on teaching quality (Balossi & Hernadez, 2015), warrants exploring how independent school leaders can use grit and mindset in school-wide professional development and recruiting. Grit and Mindset are powerful and potentially critical traits, and if we want our future educational leaders to be successful practitioners we need to make sure that they know as much about them as early in their careers as possible.

**Conclusion**

Are grit and mindset among the traits necessary to obtain the position of head of school at an independent school? Although increasing attention is being given to the effects of non-cognitive skills like grit, the importance of such skills in the prediction of workplace success remains largely unexplored. The results of this study suggest that grit is related to success. The findings in this study are supported by a growing body of evidence that suggests an individual’s grit may be a good predictor of success. Understanding that grit is a valuable and necessary trait can give insight to aspiring female heads. If we are interested in seeing more women in leadership positions, we need to encourage the qualities that will enable them to be successful. We can cultivate and nurture future female leaders by developing programs that give women tools and strategies that may help them withstand challenges and overcome workplace obstacles.
Determining the potential impact non-cognitive traits have on career progression in female educators can help schools gain insight into professional development opportunities for future leaders. The independent school institution is seemingly firmly secured with impenetrable impact glass, now may be the time to give women the key to the front door.
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APPENDIX A

LETTER TO PARTICIPANTS
Invitation to Participate in Electronic Survey
E-mail message

Dear <Head of School>,

As part of a Doctoral Program in Educational Leadership, I am conducting a study of Independent School Heads. The purpose of my study is to explore the relationship between grit, growth mindset, and the career trajectory of women in top tier leadership roles in Independent Schools.

I intend to examine the shared characteristics and competencies of females who manage to succeed and are appointed to head of school positions in independent schools.

Your participation will require approximately twenty minutes to complete an online survey. The survey is divided into three sections. The first section is a demographic survey asking general questions about you and your school. The second and third sections will ask you to complete the “Grit Scale” developed by Dr. Angela Duckworth, and the “Growth Mindset” scale, developed by Carol Dweck.

Your survey responses will be kept confidential, available only to me, Donna Norkeliunas, Principal Researcher, for analysis purposes. Upon completion of the survey, I will assign a unique identification number and your name will be deleted from the database. Results from the survey will be aggregated to the group level and no names or identifiable information will be used.

Although there is no direct benefit or compensation paid to you for participating in this study, your participation will enhance the research informing independent school leadership. Your participation in the study is completely voluntary, and there are no penalties or consequences of any kind if you decide you do not want to participate.

If you have questions about the study, you may direct them to me, Donna Norkeliunas at [email] .

To complete the online survey, please click on the attached link.

Donna Norkeliunas
Ed.D Candidate
Lynn University
APPENDIX B

GRIT SURVEY
Grit Survey
Directions: Here are a number of statements that may or may not apply to you. For the most accurate score, when responding, think of how you compare to most people—not just the people you know well, but most people in the world. There are no right or wrong answers, so just answer honestly.

1. I have overcome setbacks to conquer an important challenge.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

2. New ideas and projects sometimes distract me from previous ones.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

3. My interests change from year to year.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

4. Setbacks don’t discourage me.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

5. I have been obsessed with a certain idea or project for a short time but later lost interest.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

6. I am a hard worker
7. I often set a goal but later choose to pursue a different one.
   □ Very much like me
   □ Mostly like me
   □ Somewhat like me
   □ Not much like me
   □ Not like me at all

8. I have difficulty maintaining my focus on projects that take more than a few months to complete.
   □ Very much like me
   □ Mostly like me
   □ Somewhat like me
   □ Not much like me
   □ Not like me at all

9. I finish whatever I begin
   □ Very much like me
   □ Mostly like me
   □ Somewhat like me
   □ Not much like me
   □ Not like me at all

10. I have achieved a goal that took years of work.
    □ Very much like me
    □ Mostly like me
    □ Somewhat like me
    □ Not much like me
    □ Not like me at all

11. I become interested in new pursuits every few months.
    □ Very much like me
    □ Mostly like me
    □ Somewhat like me
    □ Not much like me
    □ Not like me at all

12. I am diligent.
    □ Very much like me
    □ Mostly like me
    □ Somewhat like me
☐ Not much like me
☐ Not like me at all

Duckworth et al., 2007).
APPENDIX C

MINDSET SURVEY

For each question below, indicate where you “are” on the scale.

1. Your intelligence is something very basic about you that you can’t change very much.
   - [ ] Strongly agree (1)
   - [ ] Agree (2)
   - [ ] Mostly agree (3)
   - [ ] Mostly disagree (4)
   - [ ] Strongly disagrees (5)

2. I appreciate when people, parents, coaches, teachers give me feedback about my performance.
   - [ ] Strongly agree (1)
   - [ ] Agree (2)
   - [ ] Mostly agree (3)
   - [ ] Mostly disagree (4)
   - [ ] Strongly disagrees (5)

3. Human beings are basically good, but sometimes make terrible decisions.
   - [ ] Strongly agree (1)
   - [ ] Agree (2)
   - [ ] Mostly agree (3)
   - [ ] Mostly disagree (4)
   - [ ] Strongly disagrees (5)

4. You are a certain kind of person, and there is not much that can be done to really change that.
   - [ ] Strongly agree (1)
   - [ ] Agree (2)
   - [ ] Mostly agree (3)
   - [ ] Mostly disagree (4)
   - [ ] Strongly disagrees (5)

1. Music talent can be learned by anyone.
   - [ ] Strongly agree (1)
   - [ ] Agree (2)
   - [ ] Mostly agree (3)
   - [ ] Mostly disagree (4)
   - [ ] Strongly disagrees (5)
6. Trying new things is stressful for me and I avoid it.
   □ Strongly agree (1)
   □ Agree (2)
   □ Mostly agree (3)
   □ Mostly disagree (4)
   □ Strongly disagrees (5)

7. You can do things differently, but the important parts of who you are can’t really be changed.
   □ Strongly agree (1)
   □ Agree (2)
   □ Mostly agree (3)
   □ Mostly disagree (4)
   □ Strongly disagrees (5)

8. Some people are good and kind, and some are not – it’s not often that people change.
   □ Strongly agree (1)
   □ Agree (2)
   □ Mostly agree (3)
   □ Mostly disagree (4)
   □ Strongly disagrees (5)

9. No matter how much intelligence you have, you can always change it quite a bit.
   □ Strongly agree (1)
   □ Agree (2)
   □ Mostly agree (3)
   □ Mostly disagree (4)
   □ Strongly disagrees (5)

10. The harder you work at something, the better you will be at it.
    □ Strongly agree (1)
    □ Agree (2)
    □ Mostly agree (3)
    □ Mostly disagree (4)
    □ Strongly disagrees (5)

11. Truly smart people do not need to try hard.
     □ Strongly agree (1)
     □ Agree (2)
     □ Mostly agree (3)
     □ Mostly disagree (4)
     □ Strongly disagrees (5)
12. An important reason why I do my school work is that I like to learn new things.
☐ Strongly agree (1)
☐ Agree (2)
☐ Mostly agree (3)
☐ Mostly disagree (4)
☐ Strongly disagrees (5)

APPENDIX D

DEMOGRAPHIC SURVEY
Completing this demographic survey is voluntary and should take approximately five minutes. Please remember that there are no right or wrong answers.

Identification Number ___________

Demographic Information
Age ________
Gender: Female
Current Position________________________________________

Size of School (Check all that apply)

☐ 0-200      ☐ 201-300      ☐ 301-500
☐ 501-700     ☐ 700+

Other _______________________

Your Race (Check)

☐ White       ☐ Asian       ☐ American Indian or Alaskan Native
☐ Black or African American ☐ Native Hawaiian Other Pacific Islander ☐ Other _________________

Marital Status (Check)

☐ Married      ☐ Single      ☐ Divorced
☐ Widowed      ☐ Other______________

Number of Children (Check)

☐ 0          ☐ 1-2         ☐ 3 or more
Level of Education (Please indicate highest level of education, you may choose from the box below)

☐ Bachelor’s Degree       ☐ Master’s Degree       ☐ Doctoral/MD/JD
☐ Other

How many years have you been working in education?___________________________

How many years have you worked as a head in your current school?________

How many years have you been at your current school?________

Have you ever applied for a head position, but didn’t get it?____________

If so, do you remember if the board president at the time of hiring was male or female?__________________________________________________________

If you are currently a head of school, were you hired by a board with a male or female president?__________________________________________________________

Was you’re the previous head at the school you are employed male or female?________

How would you describe your desire to become a head of school?

☐ It was my ultimate professional goal
☐ It want something I wanted very much
☐ It was something I wanted to achieve, but other professional goals were/are more important to me
☐ It was not that important to me
☐ It was something I was never interested in

How do you define your leadership style?

☐ Transactional
☐ Transformational
☐ Servant
☐ Other ___________________
☐ Unknown

Are you willing to participate in a brief interview with the researcher?

☐ Yes
☐ No

If yes, please provide your name and contact information.
APPENDIX E

INFORMED CONSENT FORM

PROJECT TITLE:
HOW DO GRIT AND GROWTH MINDSET IMPACT CAREER ADVANCEMENT FOR FEMALE ASPIRING HEADS OF INDEPENDENT SCHOOLS?

Project IRB Number: 2015-007
Lynn University 3601 N. Military Trail Boca Raton, FL 33431

I, Donna Norkeliunas, am a doctoral student at Lynn University. I am studying Educational Leadership in the Ed.D. program. One of my degree requirements is to conduct a research study.

DIRECTIONS FOR THE PARTICIPANT

As one of NAIS top-tier female administrators, you have been selected to participate in this study. Please read this carefully. This form provides you with information about the study. The Principal Investigator, Donna Norkeliunas, will answer all of your questions. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You are free to ask questions at any time before, during, or after your participation in this study. You acknowledge that you are at least 18 years of age, and that you do not have medical problems or language or educational barriers that precludes understanding of explanations contained in this authorization for voluntary consent.

PURPOSE OF THIS RESEARCH STUDY:
The purpose of this study is to explore whether the non-cognitive traits, grit, which combines passion and perseverance for long-term goals and growth mindset or the belief that one’s abilities are flexible entities that can develop and improve through effort, are characteristics common to, and predictive of female headmasters. This study will explore the relationship between these two measureable variables and the career progression of females who have been appointed to the head of school position in an NAIS independent school, providing insight into the common traits needed overcome gender stereotypes in independent school leadership.

This study attempts to describe the nature and strength of the relationship between grit, which combines passion and perseverance for long term goals (Duckworth, 2006), and growth mindset, defined as self perception (Dweck, 2006), culture, social roles, and career advancement of women in independent education when controlling for other factors that have been know to contribute to top-tier leadership appointments such as degree attained, family history, and work history. Female school leaders in schools who are members of NAIS will be studied.
This study is designed to investigate whether there is a relationship between common traits associated with the career progression of female headmasters in independent schools. All participants in the study will be women headmasters at NIAS co-educational PreK-grade 12 day schools located in the United States of America. The qualitative approach will allow the researcher to study events within their real-world context—including the culture of people and an organizations (Yin, 2011). It also allows the researcher to explore issues more deeply by looking at the characteristics or qualities that cannot be reduced to numerical values, but can produce detailed data on a limited group of people (Leedy, 2013). This approach will be inductive letting the data lead to the emergence of concepts (Yin, 2011) and the information gathered will be helpful for refining, testing, and validating emerging theories and hypothesis.

**PROCEDURES:**
This link is confidential and the IP address has been dismantled. If you would like to participate in this study, you will need to submit your consent by clicking the “agree” button after reading this consent form. Upon your consent, you will proceed to the survey. Upon completion of the survey, you will be asked to voluntarily participate in an interview. This portion of the research is optional and only participants who express a willingness to interview will be contacted. You will be asked to complete surveys within two weeks of the initial request and a reminder email, which will include the link, will be sent out after ten days.

If you choose not to participate in this study, you may click the “disagree” button at the bottom of this page.

**Interviews**
You will be asked to provide your insights to five open-ended questions that are relevant to this study. The open-ended interview should take about 30 minutes to complete.

**Audio Tapes**
All interviews will be audiotaped. Audiotaping will allow the researcher to accurately document your words during the interviews. It will also allow the researcher to study the content of the interviews at a later time during the study. If you choose to participate in the interviews, your name will be changed to preserve your identity. Only the researcher will have access to the audiotapes. The researcher will listen to and transcribe all audiotapes verbatim.

**Voluntary Nature of Participation**
Your participation is completely voluntary. You may choose to decline participation and/or withdraw from participation at any time during the research study. There will be no penalty for doing so.

**Risks or Discomforts**
There are no foreseeable risks to you or any participants. The benefits of the study, outweigh the risks, if any.

**Benefits of the Study**
The benefit of this study will be to provide insight into how aspiring female heads of school attain the highest level in educational leadership and whether they share common traits enabling them to overcome gender and social stereotypes. This study will examine whether there is a relationship between career advancement for females in independent
schools and two measurable traits associated with successful leaders -- grit, which is a trait that combines passion and perseverance for long term goals (Duckworth, 2006) and mindset which is the belief that one’s abilities are flexible entities that can develop and improve through effort (Dweck, 2006).

**Compensation and Injury**

There is no compensation or payment for participating in this study. Participation in this study is not expected to cause any physical or psychological injury.

**Copy of Informed Consent**

By agreeing to the submission of this consent form and proceeding to the survey, you have given the researcher permission to access your survey responses. If you do not wish to participate, please click “I do not agree” and you will exit the survey link.

**CONFIDENTIALITY**

Every effort will be made to maintain confidentiality. Your identity in this study will be treated as confidential. Only the researcher Donna Norkeliunas will know who you are. During the Interview you will be given a fictitious name. Data will be coded with that fictitious name.

Interview data, including the audio recordings will be coded so that there is no personally identifying information. They will be heard only for research purposes by the investigator, Donna Norkeliunas and faculty advisor Dr. Kathleen Weigel. They will be transcribed and coded. At the end of the study, all audio-tapes will be destroyed in a responsible manner.

All the data gathered during this study will be kept strictly confidential by the researcher. Data will be stored in password enabled locked files in the researchers computer and destroyed at the end of the research.

All information will be held in strict confidence and will not be disclosed unless required by law or regulation.

**RIGHT TO WITHDRAW:** You are free to choose whether or not to participate in this study. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate.

**CONTACTS FOR QUESTIONS/ACCESS TO CONSENT FORM:** Any further questions you have about this study or your participation in it, either now or any time in the future, will be answered by Principal Investigator, Donna Norkeliunas who may be reached at [contact information] and Dr. Kathleen Weigel, Faculty Advisor who can be reached at [contact information]. For any questions regarding your rights as a research subject, you may call Dr. Farideh Farazmand, Chair of the Lynn University Institutional Review Board for the Protection of Human Subjects, at [contact information]. If any problems arise as a result of your participation in this study, please call the Principal Investigator, Donna Norkeliunas, and the faculty advisor, Dr. Kathleen Weigel, immediately. A copy of this consent form will be given to you.

**AUTHORIZATION FOR VOLUNTARY CONSENT:**

I have read and understand this consent form. I have been given the opportunity to ask questions, and all my questions have been answered to my satisfaction. I have been
assured that any future questions that may arise will be answered. I understand that all aspects of this project will be carried out in the strictest of confidence, and in a manner in which my rights as a human subject are protected. I have been informed of the risks and benefits. I have been informed in advance as to what my task(s) will be and what procedures will be followed.

I voluntarily choose to participate. I know that I can withdraw this consent to participate at any time without penalty or prejudice. I understand that by clicking “agree” at the bottom of this form I have not waived any of my legal rights. I further understand that nothing in this consent form is intended to replace any applicable Federal, state, or local laws.

If I choose to voluntarily agree to be interviewed by answering “yes” on the last question of the survey, I understand that I can withdraw this consent to participate at any time without penalty or prejudice. I understand that by clicking “I agree”, I have not waived any of my legal rights. I further understand that nothing in this consent form is intended to replace any applicable Federal, state, or local laws. I understand that I will receive a copy of this form.