

PRINCIPAL PERSONALITY AND LEADERSHIP:
AN EXPLORATORY STUDY ON PRINCIPAL PERSONALITY AND LEADERSHIP
BEHAVIOR USING THE FIVE-FACTOR MODEL AND TRAIT ACTIVATION
FRAMEWORK

By

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ABSTRACT

PRINCIPAL PERSONALITY AND LEADERSHIP: AN EXPLORATORY STUDY ON PRINCIPAL PERSONALITY AND LEADERSHIP BEHAVIOR USING THE FIVE-FACTOR MODEL AND TRAIT ACTIVATION FRAMEWORK

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This dissertation is a mixed-methods exploratory study on the relationship between principal personality and principal behavior. The study used the Five-Factor Model to analyze the principal position to determine if there might be links between a principal's personality and their thoughts and behaviors. This study used survey and interview data from principals in Michigan to identify possible relationships and provide an outline with which to study principal personality and leadership behaviors in the future. This paper also contributes to the Trait Activation Framework with a focus on the education leadership position. Findings show that the principal sample represented higher Agreeableness and Conscientiousness, which aligns with previous research, which suggests higher consensus building and focus on accomplishing goals would appear in leadership positions such as the principal position. The findings showed many similarities in attitudes and prioritization across the principal sample with a primary focus on students, supporting teachers, building trust, using teacher teams, and the need for mentors and other colleagues to support new principals. Finally, the findings suggest that personality traits may factor into how principals strategize to gather information for decision making and implementation of those decisions.

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Chapter 1: Introduction

Over the past few decades, researchers, lawmakers, and district leaders have focused on principal leadership as a means of improving student outcomes. Principals play a major role in the rational, natural, and open systems perspectives of the school organization (Scott, 2007). There is growing alignment and consensus regarding what makes an effective principal, and the leadership behaviors that link to student academic improvement. However, superintendent and district leaders still have difficulties in finding, training, and retaining effective school leaders (Rammer, 2007). When a district hires a highly qualified principal, the principal may require individualized attention to align the candidate's behaviors with the school's culture and be provided with the proper training, professional development, and support to become an effective principal. Research should continue to focus on school principals and study what contributes to the development of effective school principals.

Robert Tett and Dawn Burnett (2003) provide a conceptual framework that both the workplace environment and underlying personality traits of the individual contribute to workplace behavior. Their research also suggests that there are underlying traits that become 'activated' under situational demands that cause behavior that is then either discouraged or reinforced by rewards from the environment. This Trait Activation conceptual framework may provide additional insight into the formation of behaviors in the principal position. A principal's personality or, as defined in this dissertation, "an individual's more consistent patterns of thoughts, feelings, and tendencies that develop from multiple factors over the life of the individual," (McCrae, 2002) might impact an individual's leadership strategies, behaviors, and learning. Personality research could be beneficial in educational administration research by

enhancing the understanding of how the situations faced by the individual in the principal position might interact with the personality of the principal.

The Five-Factor Model (often called the 'big five traits') measures five traits that represent the personal differences between people. The model was developed empirically from seeking to find the 'lowest common denominator' among personality words across all languages (Howard & Howard, 1995). Five traits were found to be the fewest number of trait dimensions possible that encompass individual personality differences. These five traits include Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. An overview of the five traits, their definitions, and brief descriptions are included in Appendix A (Table 9) and will be discussed further in the literature review. The model has become more popular to use in the psychology and leadership fields. A survey of university classes that use a personality assessment as part of the curriculum for organizational behavior, principles of management, freshman experience, and other courses found that 40% of those courses use the Five-Factor Model (Jones & Hartley, 2013). Despite its increase in popularity for psychology and leadership research, this model has not been used extensively for educational administration research. Based on several recent studies that have used at least part of the Five-Factor Model in education research, it is likely to become increasingly utilized in the field of education research. For that reason, attention to the framing and use of the model will be vital to limiting the negative implications that come with this research.

This study will explore potential links between a principal's personality and the formation of their behaviors within the school environment. This study sought to identify potential personality profile groups within the principal population that might have different ways of developing behaviors. The study sought to identify situations in which personality may impact

leadership behavior. The results from this study can then be used to develop future studies to test these findings, further study of a principal's personality, determine the potential strength of the potential relationships, and test various ways of improving support for principals using information about their personality. These studies could improve our understanding of principal trait activation, which is the first step to improving practice.

Gaps of Knowledge and the Potential of Personality Research

There are multiple areas of educational administration research that may benefit from using the Five-Factor Model and personality research. It is important to highlight the different ways that personality research and the Five-Factor Model might enrich the field of educational administration research when deciding whether to use this model. These gaps of knowledge will be referenced again in the discussion chapter. The first area of educational administration research that might benefit from personality research is the design of preparation programs. Preparation programs could develop a prospective principal's self-awareness of their personality traits and the school environments that best suit their personality. Due to the responsibilities and demands of the principal position, there may be individuals with certain personality tendencies that are more suited to a certain school. Analyzing principals through the Five-Factor Model could help identify the types of schools a principal might naturally prefer. Preparation programs could individualize the development of these principals. Programs would support them early on to tailor the necessary training best suited to their personality to become effective in these environments. Preparation programs could further improve the development of principals by individualizing curriculum and instruction around personality. Specifically, programs might be able to focus on which actions personality types might use to accomplish the principal tasks. The focus on preferred actions would help principals to more effectively self-reflect on their

behaviors. This development of principals around their personality might improve their preparation for the principal role.

The second area of educational administration research is principal orientation and reaction to performance-related feedback. Michigan and many other states require annual principal evaluations, and many of these evaluation tools involve performance feedback from multiple sources like the VAL-ED model developed at Vanderbilt (Goldring et al., 2015; Goldring, Mavrogordato, & Haynes, 2015). Studying how principals respond to negative feedback could benefit school improvement. One study, which looked at the orientation and reaction to feedback from 14 principals, found that the principals who receive feedback from evaluations below expectations have cognitive dissonance that, either, orient the principal to the neutral and curious feedback, or the negative and defensive feedback (Goldring, Mavrogordato, & Haynes, 2015). Defensive feedback to evaluations is having reservations about the results that led to suspicion around the validity of the feedback. Principals were quick to adopt an orientation toward their feedback that tended to dictate the way they would react to their feedback in the future. The negative and defensive orientation to the feedback leads to the reaction of avoidance/denial, rationalization, superficial interpretations, and unnatural behavior. This paper argues that behaviors initially found after an external stimulus are likely to be heavily influenced by an individual's personality traits. In this case, the Neuroticism and agreeableness traits are likely to have an outsized role in principal reaction to feedback since the Neuroticism trait involves a reaction to negative stimulation, and the Agreeableness trait includes trust in others. By better understanding the relationship between personality traits and behavior reactions, districts can set up evaluation feedback to principals to encourage a more constructive response to evaluations and initiate deeper learning.

Another area of educational administration research that could be improved by the Five-Factor Model is how principals behave within the various tasks of organizational management and administration. Due to the limited time for principal preparation programs and professional development throughout varying school cultures, principals might be underprepared for the principal role. Principals are likely to have developed skills in a lesser administrative role, such as team leader or assistant principal. However, this could vary widely from school to school. What this could mean is that many new principals might not be equipped with enough preparation to become effective school principals. In this event, a principal's personality traits could influence how they behave within the various principal tasks and how they prioritize these tasks. By researching how principals naturally behave to accomplish these tasks, based on their experiences and personality traits, these behaviors could be developed to improve outcomes. Researchers, preparation programs, and schools might be able to find ways to support, train, and mentor principals that align with their personality tendencies. These efforts could develop a more efficient way of individualizing training and support, rather than using a one-size fit all model or a random trial and error of various professional development activities. This research can also be used to develop treatments or improvement plans for principals to increase their professional growth and ensure that motivation and self-efficacy remain high to reduce principal turnover.

Finally, principals can use the Five-Factor Model to better self-reflect and evaluate themselves in the principal role. By using the information about their personality from a preparation program, they might be more aware of their natural tendencies when interacting with other people and performing the various tasks of the principal position. One study showed that using personality assessments for nursing students benefited in those students having a better understanding of how they preferred to relate to others, and how this might affect their work in

groups (Waite & McKinney, 2015). This assessment could be used in educational administration programs to help principals focus on their growth and understand how to improve their effectiveness within the various principal tasks and responsibilities once in the principal role. Having a deeper understanding of their personality and how that could impact them in the principal position, might give principals another tool that contributes to long-term growth, even in the absence of insufficient mentoring. The Five-Factor Model could be used to improve many aspects of educational administration research; however, there are many implications to consider before bringing this type of research into educational administration research.

Negative Implications

Before designing and conducting this dissertation study, which uses the Five-Factor Model in educational administration research, the negative implications of this research must be considered. The worst negative implication would be using personality traits as an initial screening method of principal applicants. A human resource manager might solely use the results to filter out applicants that are too ‘high’ on one trait or applicants that are too ‘low’ on another. To avoid the fallacy and abuse of using an IQ test to predict success in a career position, this research must thoughtfully highlight that personality is only a piece of an individual and does not independently determine their success. The worry about overusing personality tests for human resource decisions is not an unrealistic concern since personality assessments are currently used to screen applicants by many companies and human resource directors looking for ways to filter applications. Currently, school districts do not use personality assessments as a method of filtering applications, but that could quickly change if results from studies are misinterpreted, causing larger charter organizations, districts, or state education policy leaders to use personality assessments as an application filter tool. Individuals that make it through the application and

certification process and become principals based on their experience, knowledge, and values are all likely to be capable of being an effective principal. Instead of focusing on personality research as a method of screening applicants, the focus should instead be on how personality research can be used in preparation programs, schools, and principal self-reflection to train and develop effective principals in all personality orientations. Research on personality and fit with a school's culture should only be part of the self-reflection process for a principal in understanding which schools they might naturally fit in and become effective in any school.

Additionally, because previous research using the Five-Factor Model to look at correlations between the five traits and 'transformational leadership' (Judge & Bono, 2000) people reading these results get the impression that an individual trait can predict someone's outcomes as a school leader. Though a trait may indicate a better alignment with transformational leadership or the desired behavior, other factors might impact an individual's behavior and outcomes. As is explored in the literature review section, at best, these studies that use the Five-Factor Model find an R-Squared of 0.30 or less, for correlations between the traits and leadership types. Research using the Five-Factor Model must include how other factors contribute to behaviors, such as experiences, knowledge, and values. This concern connects to the previously mentioned negative implication that personality assessment results could be skewed and used to screen out individuals based on a false assumption about effectiveness. For these reasons, the focus is on actual behaviors and how individuals with various personality traits become effective. This focus provides productive information that helps all principals become effective instead of just trying to predict if they will be effective based on traits alone. While previous purely quantitative studies using the Five-Factor Model attempt to predict outcomes using personality traits alone, mixed methods might help avoid such misuse. By using qualitative

data to describe behaviors and provide context, conclusions will have more nuance which could help limit results from being turned into merely who will or will not be effective. Overall, this study is focused on how personality might play a role in a principal's general thought process and behavior, and am not seeking to define an 'ideal' personality type for school principals.

The final limitation to address is the age and lack of a theoretical framework for using the Five-Factor Model. Although this model was established since the 1990s, there has been little evolution beyond trying to find connections between personality traits and other variables. Theories have not been developed to explain how, or how much, personality contributes to an individual's behaviors. This is also a result of using the model for purely quantitative studies and looking at outcomes instead of behavioral differences. In early studies that try to connect personality and leadership outcomes, the focus is largely on the correlation between traits and perceptions of effectiveness or transformational leadership. However, there is no reason to assume that individuals across the scale of each trait cannot become effective leaders. What is more important is looking at patterns of behavior that are different across the various combinations of traits and how individuals become effective. The Trait Activation Framework also provides a more comprehensive framework of how personality traits connect to work behavior. However, this framework has yet to use qualitative data and analyses to describe those behaviors. By using qualitative data to focus on actual behaviors and more subtle differences, this model can produce more meaningful results for the development of principals.

Given that there are several significant consequences and implications from this line of research, it is essential to take a step back and determine how to frame and organize research to limit these negative implications. Since there are many ways that this research could improve practice, the use of the Five-Factor Model should be refocused and used in the field of education.

Even without established theories, the model has become more popular in various fields, and it is increasingly likely to be used in the field of education. By entering this area of research now, this paper can shape the use of the Five-Factor Model in the education field to mitigate the potential for the research to be abused and misused in academia and real-world applications. Through this dissertation study, the research and the results are framed in a way that limits these negative implications.

Research Questions

There are three research questions that this dissertation study will answer. The answers to these questions provide preliminary findings that could be used as a foundation for additional studies to better test and apply research on principal personality and the principal role. The focus of these question center around which thoughts, prioritization, and strategies to accomplish tasks might be the result of situational forces of the education environment or the personality traits of the principal. Question one will provide insight into the personality profile of principals to determine if there are potential, multiple personality profiles within the principal population. Also, question one will provide insight into the overall personality of the principal population. Question two will provide information on principal prioritization. Question three will provide information on which personality traits might have the greatest influence on principal behaviors. These answers shape the direction of studying principal personality and behaviors for future research. The research questions are:

- 1) What, if any, are the general personality profiles of principals?
- 2) What role does personality seem to play in the way that principals prioritize the various principal tasks?

- 3) What role does personality seem to play in the way that principals strategize to accomplish the various tasks and grow as leaders?

Chapter 2: Literature Review

Dimensions of the Principal Position

Research into school principals has proliferated over the past few decades. Some of the focus of this research is how much of an effect a school principal has on student outcomes and what behaviors have the greatest impact on student outcomes (Urik & Bowers, 2013; Louis, Dretzke, & Wahlstrom, 2010; Grissom & Loeb, 2011). With principal evaluations annually required for all principals in the State of Michigan, policymakers have already placed principals as vital to school improvement. The basis for this dissertation is to focus on the value of principals as a vital aspect of school improvement. To that end, research on the impact of principals on student outcomes is reviewed first. Then, the literature review looks at the areas of effective leadership behaviors that have shown to have the greatest impact on student outcomes.

Although most people assume that principals impact student outcomes and multiple theoretical models support this assumption, it is important to have empirical evidence to support these beliefs. Hallinger and Heck (1998) conducted a literature review of research on principal effectiveness and educational improvement. They found a general pattern of results that support the belief that principals exercise a measurable, indirect effect on school effectiveness and student achievement. They conclude that, although the indirect effect is relatively small, it is statistically significant and meaningful (Hallinger & Heck, 1998). They add that a possible reason for the variance in results in older research might be from the conceptual and methodological tools used by the researchers. Additional studies continue to demonstrate the importance of principals (Grissom & Bartanen, 2018). Overall, school principals drive student growth indirectly through the natural systems perspective of the school. Scholars who focus on this perspective emphasize that the more informal structure of relations that develop among

participants is more influential in guiding the behavior of participants than the formal structure (Scott, 2007). In the education field, this would refer to things like teacher perception of the principal, teacher motivation, relational trust, and self-efficacy, which then drive educational outcomes. Being the leader of the school, principals are responsible for building organizational trust, motivating teachers, and maintaining self-efficacy.

Relational trust has been demonstrated to impact both teachers and student outcomes. Bryk and Schneider (2002) describe relational trust in schools as necessary to conduct both day-to-day functions, and to allow leaders to implement ambitious school improvement plans. They conclude that schools with strong relational trust have a much larger chance of making improvements than schools that do not. Principals hold a vital role in creating, nourishing, and maintaining relational trust within a school. One study that sampled 2,350 teachers on their principals' leadership behaviors showed that teachers who are older and have more experience desire a relationship with principals that includes trust, shared vision, responsibility, commitment, and perseverance (Munir & Khalil, 2016). The study also showed that, when school leaders are viewed as low on moral conduct, less visionary, non-communicative, having high expectation, inconsiderate of employee needs, not offering incentives, and showing a lack of trust in their abilities from their supervisors, then teacher performance, satisfaction, and motivation decrease over time. The study demonstrates that principals serve an outsized role in the natural system of a school.

Another example of the role principals play with organizational trust is in the decision-making capacity of the organization's leadership. A study that sampled 4,165 teachers in grades K-12 found that high-trust schools exhibit more collective decision making, with a greater likelihood that reform initiatives were widespread and resulted in demonstrated improvements in

student learning (Wahlstrom & Louis, 2008). Principal trust in teachers has been demonstrated to connect to organizational learning. A study of principal and teacher surveys in 116 schools found that trust was directly related to the teacher's perceptions of principal caring and indirectly related to organizational learning. Another study then found that sustained organizational learning demonstrated positive relationships with student achievement (Louis & Murphy, 2017). Since organizational trust links to student outcomes, additional research could examine how personality might influence how trust is initiated, built, and maintained within a school.

Principals also impact teacher self-efficacy, which is the individual's confidence in the ability to execute behaviors necessary to produce performance attainments. The same Wahlstrom and Louis (2008) study found that teacher self-efficacy strongly predicts focused instruction. Another study by Hipp (1996), which used interviews with principals and teachers, found that principals affected efficacy by addressing in-school problems within their control, such as creating and supporting student discipline policies or enacting in-school structures for shared decision-making. These influences from the principal on teachers then lead to impacts on student outcomes. One study by Louis, Dretzke, and Wahlstrom (2010) sampled US teachers to see if the behaviors of school leaders impacted student achievement. One of the findings in the study indicated that student math achievement scores are associated, statistically significant, with focused instruction, professional development, and teachers' trust in the principal. Another study (Goddard, Hoy, & Hoy, 2000), which looked at the impact of teacher efficacy on student outcomes, defined teacher efficacy as the outcome of a cognitive process in which people construct beliefs about their capacity to perform at a given level of competence. This study used survey data from 47 elementary schools and found that not only was teacher efficacy a significant predictor of student achievement in both math and reading, but that teacher efficacy

had a greater magnitude than that of any single demographic control, such as race or socioeconomic status of the student, for both subject areas. Teacher efficacy could explain 53.27% of the between-school variance in math performance and 69.64% of the variance in reading performance (Goddard, Hoy, & Hoy, 2000). These studies indicate that the way that principals impact teacher self-efficacy might directly impact student outcomes. Many studies have demonstrated that principals have an impact on student performance, primarily through teachers' experience in the natural system in the areas of organizational trust and teacher self-efficacy. When applying personality research to educational administration research, it is important to look at the role of a principal's personality traits within their environment and how interactions with teachers impact organizational trust and teacher self-efficacy.

Having looked at the general way in which principals' impact student performance through interactions with teachers, the literature review looks at what leadership behaviors are effective. This process helped to narrow down the number of principal tasks to focus on for this study. Before looking at which leadership behaviors impact school performance, principal activity needed to identify and organize principal tasks into groups. Grissom and Loeb (2011) sought to both organize and identify the principal tasks that most highly correlate to school outcomes and to the performance of students and the school in the state accountability system. The study sampled school principals, assistant principals, teachers, district-provided parent surveys, and administrative data on the Miami-Dade Public Schools in the state of Florida. The survey of principals, assistant principals, and teachers asked participants to rank 42 principal tasks and the effectiveness of the principal on each task. The parent survey was a climate survey provided by the school that asked for the grade their student received as a subjective assessment of overall school performance. The administrative data was the grade of the school (A, B, C, D,

F) that captures the performance of the school based on the achievement and growth of students within that school on the state's comprehensive assessment. The study also included the demographic information of the principals, teachers, and students. The study then conducted many factors and regression analyses to organize the tasks into dimensions and compared the effectiveness of each task to the school's performance. They organized 42 tasks into five dimensions, using factor analysis. The five dimensions include Instructional Management, Internal Relations, Organization Management, Administration, and External Relations. Table 1 includes the outline of the five dimensions, definitions, and tasks within each dimension (also in Appendix B: Table 10).

Table 1: Dimensions of Principal Tasks		
Dimension of Principal Skills	Definition	Tasks
Instructional Management	The set of tasks principals conduct to support and improve the implementation of curricular programs	<ul style="list-style-type: none"> • Using data to inform instruction • Developing a coherent educational program • Using assessment results for program evaluation • Formally evaluating teachers and providing feedback • Classroom observations • Utilizing school meetings to enhance school goals • Planning professional development for teachers* • Implementing professional development* • Evaluating curriculum • Informally coaching teachers* • Directing supplementary, after-school or summer programs • Releasing/counseling out teachers • Planning professional development for prospective teachers.

Table 1 (cont'd)		
Internal Relations	Tasks related to principals' capacities for building interpersonal relationships.	<ul style="list-style-type: none"> • Developing relationships with students • Communicating with parents • Attending school activities • Counseling student or parents* • Counseling staff about conflicts with other staff* • Informally talking to teachers about students • Interacting socially with staff
Organization Management	Tasks principals are expected to conduct throughout the year in pursuit of the school's medium and long-term goals.	<ul style="list-style-type: none"> • Developing a safe school environment * • Dealing with concerns from staff • Managing budgets and resources* • Hiring personnel • Managing personal, school-related schedule • Maintaining campus facilities* • Managing non-instructional staff • Interacting/networking with other principals
Administration	Tasks characterized by more routine administrative duties and tasks executed to comply with state or federal regulations.	<ul style="list-style-type: none"> • Managing school schedules • Managing student discipline • Fulfiling compliance requirements & paperwork • Implementing standardized tests* • Managing student services (records, reporting) * • Supervising students • Managing student attendance-related activities • Fulfilling special education requirements
External Relations	Tasks addressing working with stakeholders outside of the school.	<ul style="list-style-type: none"> • Communicating with the district to obtain resources • Working with local communities • Utilizing district office communications • Fundraising
Note: Tasks had the highest loading onto the dimension.		
Note: Grissom & Loeb, 2011		

The study found that organizational management had the highest positive correlation to school accountability performance, followed by administration and internal relations.

Organizational management was also positively associated with teacher satisfaction and parent climate. Finally, organizational management and administration were positively associated with

the math and reading performance of the schools. This study demonstrates that, although educational administration research focuses on instructional management and organizational learning, the ‘nuts and bolts’ of management and administration tasks still play a major role in school performance and student outcomes. Logically this makes sense; the tasks of organizational management and administration are largely dependent on the principal’s behaviors and decisions. This finding also demonstrates the impact of principals on student outcomes through the rational systems perspective, which is the focus on the formal structures of an organization (Scott, 2007). The results can also be explained by the Hipp (1996) study that utilized interviews with principals and teachers and found that principals affected efficacy by addressing in-school problems within their control. Since the management and administration tasks are largely under the control of the principal as opposed to outside factors, such as the district administration and school community, this provides another explanation of how the effectiveness of accomplishing these tasks affect student outcome through teacher self-efficacy. Teachers, independent of the principal, can use data to inform instruction and other tasks within instructional management; however, managing budgets and schedules is the explicit duty of the school principal, and success within that task is largely dependent on the principal. One way to use the Five-Factor Model with leadership behaviors is to look at how principals attempt to accomplish these the 42 tasks outlined by Grissom and Loeb (2011), and if personality plays a role in preference to accomplishing these tasks. For example, with the task of managing school schedules, the Five-Factor Model helps to explain how a principal goes about accomplishing the tasks within the school, what inputs they seek in that process, and how they present and implement decisions to the teachers, staff, students, and parents. These behaviors could then

impact the school climate either positively or negatively, which loops back around in the form of intrinsic or external rewards to the principal and maintains principal motivation.

Even though the instructional management domain did not demonstrate significant correlations with school performance and outcomes in the Grissom and Loeb study, individual tasks might impact performance and outcomes. In their 2013 study, Grissom, Loeb, and Master (2013) conducted a longitudinal study on instructional functions and student achievement using observations from 100 urban schools. They reaffirm that a principal's time spent broadly on instructional functions does not predict overall student achievement growth; however, some investments did predict gains. Time spent on coaching, evaluation, and developing educational programs predicted positive gains, while time spent on informal classroom walkthroughs predicted negative student growth. This finding demonstrates that simply doing an instructional function task is not enough unless it is part of a broader school improvement strategy. This finding could also indicate that instructional management still has impacts on student outcomes and requires additional study. Louis, Dretzke, and Wahlstrom (2010) demonstrated that instructional management might indirectly impact student achievement through focused instruction by the teacher and the development of professional communities. Although instructional management has shown mixed results on student outcomes, further research could indicate additional ways that leadership behaviors in instructional leadership and management may have direct impacts on education. Some instructional management tasks are included in the survey, even though the domain might not have a strong impact on student outcomes. The Five-Factor Model then helps to explain how principals develop and plan school improvement strategies.

Due to the limited time available to interview principals and produce initial findings for this study, the number of tasks is narrowed down to focus on for the survey and interview. A logical starting point was to look at the tasks that have the largest loading onto the various dimensions, which produced twelve tasks around which to focus the survey, interview, and research questions. This process also helped to ensure that the interview questions covered various dimensions found under both the rational and natural systems perspectives within a one-hour interview. Although more tasks that could be addressed, these twelve tasks provided a good starting point for studying principal personality and behaviors. These results could help to focus future research on a more specific dimension encompassing even more qualitative data points.

Five-Factor Model

The Five-Factor Model would be beneficial to the study of educational administration, and the results could benefit real-world practice. The model has become widely used to study personality and leadership behaviors in other fields and has many benefits over other personality assessment models. In this section, the literature review first provides an overview of the Five-Factor Model and then identifies and describes the assessment tool that is selected for this study.

The Five-Factor Model stems from research seeking to identify personality traits and narrow them down to the fewest types possible. This research began with Sir Francis Galton in 1884, who developed the ‘lexical hypothesis,’ in which he theorized that most individual differences could be encoded into single terms in each of the world’s languages (Goldberg, 1993). Over time, traits were summarized and reduced by Earnest Tupes and Raymond Christel to the five factors and 16 facets used today. Warren Norman brought Tupes and Christel’s findings into the psychology field and is often referred to as the founder of the Five-Factor Model. The late 1980s and 1990s provided more empirical evidence to support the model and

development of formal assessment tools. The research was led by Goldberg in 1992, 1993; Digman in 1981, 1990, Angleitner and Ostendorf in 1988, and McCrae and Costa in 1988, 1989, 1990, and 1992 (Howard & Howard, 1995).

McCrae and Costa (2008) provide the most concise definitions, which is used in this study to define the five personality traits, and are included in Appendix A (Table 9). *Neuroticism* is defined as the number and strength of stimuli required to elicit negative emotion. Someone with a lower scale score would require a high number of stimuli to elicit a negative emotion, while a higher score means that a person only needs a small stimulus to elicit negative emotion. Due to the negative connotation and definition of this trait, many researchers use alternative terminology such as 'negative emotionality' or will flip the scale around and call it 'emotional stability.' *Extraversion* is the number of personal interactions with which someone feels comfortable. Individuals with a higher score require more interactions with many people to feel comfortable, and individuals with a lower score only need a few interactions to feel comfortable. This trait is the most commonly known and referenced because it appears in other personality models. *Openness* is the most difficult trait to define. It is referred to as the number of interests to which one is attracted to and the depth to which those interests are pursued. A higher score indicates that someone has many interests, is creative, or has a high level of intellectual curiosity, while a lower score means someone has fewer interests or has less intellectual curiosity. *Agreeableness* refers to the number of sources that someone uses to form their norms within a group. A major component of this trait is the individual's trust in others. Someone with a high score has many sources and may adapt to many different norms from group to group, while someone with a low score has only a few sources that establish their norms and is more consistent from group to group. A person with a low agreeableness score might be labeled as an

'individualist.' *Conscientiousness* refers to the number of goals (both short and long term) an individual has and their dedication to those goals. Someone with a high score has many goals or is firmly dedicated to goals, while someone with a lower score has fewer goals, or has less dedication to them. Each of these traits has corresponding facets or sub-traits that were primarily used for factor analysis to link the questions to the traits. It is difficult to study the individual facets within each trait independently because they share strong correlations between others within each trait grouping. Therefore, research is done on the five major traits and not the individual facets within each trait. Since the research, at this stage, is focused on identifying connections between the big five traits and behaviors, the first concern is with the five traits. Only after developing solid connections between the big five traits and leadership behaviors have been established, would the individual facets warrant a closer look.

The Five-Factor Model has been tested by many scholars and is supported by convergent and discrimination validation across self, peer, and spouse rating by Costa and McCrae in 1988; temporal stability across the lifetime by Robert and DelVecchie in 2000; across cultural difference by Church (2001), McCrae (2008), Martin (2005), Costa (2008), Judge, and Bono (2000, 2002) ; and has demonstrated relations to outcomes including academic achievement by Poropat in 2009, psychological health by Malouff, Thorsteinsson, and Schutte in 2005, work by Judge, Heller, and Mount in 2000, and leadership by Judge, Bono, Ilies, and Gerhardt in 2002 (Lynam & Miller, 2015). The model also holds many benefits over other personality models. The model is an empirical-based model instead of a theoretical-based model like the Myers-Briggs model, which was developed by theorizing traits first then testing to provide support for the traits. Next, the Five-Factor Model and assessment tools have a high test-retest reliability alpha level range between 0.70-0.91, with an average alpha level of 0.83. (McCrae, et al. 2010).

Current research shows that little change in personality traits occurs in the short term, even when individuals enter new roles. This means that there would be less concern with changes in someone's personality trait in longitudinal studies or when entering a new position, such as the principal role.

Another significant strength of the Five-Factor Model is that it is used across different cultures, languages, and backgrounds. Since the Five-Factor Model was developed to find the 'lowest common denominator among personality words across all languages' (Howard & Howard, 1995), the assessments are easily translatable. That is why the model is used for cross-cultural studies of leadership differences.

The final major strength of the Five-Factor Model is that it is scored on a scale. By having the traits scored on a scale instead of in dichotomous categories (like the Myers-Briggs model), researchers can apply a greater number of statistical analyses on the results. The primary statistical analyses that can be used with the Five-Factor Model are cluster analysis, ANOVA, and regressions. These analyses can be used to configure the mean scores of the traits to create different personality groups. A study by Van Aken, Van Lieshout, & Scholte (1998) performed cluster analysis to categorize personality profiles within a student sample into three groups. This is done by creating high, medium, and low groups within each personality trait and assigning individuals to these groups to allow the study of personality clusters. These groups can then be studied further to find unique characteristics of each cluster, as was done in with the study mentioned above. Having scaled scores can also create interaction variables that can better show how various trait combinations impact an individual's behavior. Finally, a scaled score can incorporate qualitative findings that show shared behavior characteristics that occur at different ranges across the traits. A scale allows groupings to be developed by looking at where behaviors

appear and where they do not across a trait or multiple traits, which is utilized in this study.

Overall the model continues to be validated by additional studies and has provided many results that can be used to understand the psychological underpinnings of an individual. The model can be used alongside other theories to develop new theories and different fields of study, which is why it has become so prolific.

NEO PI-R

There have been multiple assessments developed to measure the Big Five Traits, although there are advantages and disadvantages to each assessment. The most common assessment tool is the NEO PI-R (Neuroticism-Extraversion-Openness Personality Inventory-Revised) assessment, and its variations, which was first developed by Paul Costa and Robert McCrae in the 1980s and further refined in the 1990s through longitudinal testing. This assessment was the first formalized measurement instrument for the Five-Factor Model. It has the highest recorded test-retest reliability (McCrae et al. 2010) that is supported by longitudinal studies (McCrae and Costa 1990) for the Five-Factor Model. Also, the tool has a high intercorrelation, which helps to ensure the accuracy of questions measuring the desired traits. However, the tool is time-consuming (can take up to 45 minutes), costly (\$80 for the manual with \$61 for ten packets), and does not include online versions. Since the school principal surveyed for this study have limited time in which to take a personality assessment, the NEO PI-R or any of its variations were not used. The reason this tool is mentioned is to show that it has high reliability and is used to develop and validate other assessment tools through convergent validity with more recent assessment tools that have not had the time or financial resources to perform the long-term longitudinal studies to provide additional validation.

Big Five Inventory

From the selection of more recently developed tools, the Big Five Inventory is the best tool for use in this study. John and Srivastava in the 1990s (John et al. 1991; John & Srivastava, 1999) developed the tool for this study. The Big Five Inventory (BFI) uses 44 short phrases based on the trait adjectives to create a brief inventory. This process allows for the efficient and flexible assessment of the five dimensions when accurately measuring the individual facets of the traits is not necessary (John & Srivastava, 1999). Experts used factor analytic verification developed 44 items, solely to produce a high alpha level within each trait that allows the dropping of whole facets from the items used. To ensure proper coverage of the five traits, the experts ensured that five of the six facets of each trait in the questions. Additionally, some of the question scales are flipped to help prevent and mitigate acquiescence biases, which is a response bias where a survey respondent agrees with the statement regardless of content (Lavrakas, 2008). The assessment tool is also rapid to grade and without additional statistical training or data tools. In U.S. and Canadian samples from John and Srivastava's original 1999 study (John & Srivastava, 1999), the Cronbach alpha within each trait ranged from 0.75 to 0.90, with an average above 0.80, which demonstrates good internal structure. The test-retest reliability ranged from 0.80 to 0.90 for each trait with a mean of 0.85 (John & Srivastava, 1999). These levels provide enough validation to use the tool to identify potential results and form conclusions, that can then be expanded, supported, modified, or disproven by follow-up studies using different assessment tools. Convergent validity tests between the BFI and NEO PI-R found a mean correlation convergence average of $R=0.73$ (John & Srivastava, 1999). Another study was done in 2004 that sampled individuals from Belgium, America, and Hungary provided further validation of the BFI by showing correlations with the NEO PI-R across different languages and

cultures (Fruyt et al., 2004). A validity study done in Kuwait confirmed similar Cronbach alphas between 0.74 and 0.92 (Alansari, 2016). Also, A study could distinguish trends in trait changes over time between adolescences and through adulthood using the BFI that were like other longitudinal studies (Srivastava et al., 2003). Overall, the BFI has many benefits, including that it is efficient (can be completed in less than five minutes), provides enough coverage of the Big Five traits (John et al., 2008), can be used across culture (Benet-Martinez & John, 1998), has reverse scale responses to limit acquiescence biases (Johnson & Morgan, 2016), and is free, readily available, and easy to grade. It is the perfect assessment tool for doing explanatory/exploratory studies in a new field with different applications. For these reasons, the Big Five Inventory was used in this study.

Personality and Leadership Research

Though there are a few studies on educational leadership using the Five-Factor Model, there have been many longevity and leadership studies that were used to develop a hypothesis for principal personality, as it relates to leadership behavior, and to develop the research questions. Previous studies provide a variety of results for each personality trait, working both independently and with other traits that provide hypotheses for using the Five-Factor Model to analyze principal leadership behavior. This section will review how the Five-Factor Model with leadership research, as well as common results, found and how that connects to a principal's behavior.

Extraversion is positively associated with transformational leadership in general leadership research in the U.S. (Judge & Bono, 2000), which may indicate a natural tendency in the U.S. for more extraverted individuals to become leaders. Researchers have found that Extraversion is suggested to be an essential trait for leaders and effectiveness across the

transformational leadership criteria (Judge & Bono, 2002). Prior research has shown that Extraversion was a valid predictor of success for managers and sales personnel (Francoeur, 2008) as those types of positions work best for individuals that are comfortable with continual interactions involving larger groups of people.

Since the principal position entails a high amount of managerial skills and fostering of many interpersonal relationships, it could be higher extraversion is beneficial to the principal position. One might also assume that the principal hiring process might result in a greater number of extraverted individuals becoming principals. An individual that is more comfortable with larger groups of people might perform better than other applicants, leading to a greater number of principals with high levels of Extraversion. Extraversion has been shown to positively correlate to the employee perception of an effective leader, which is essential for fostering an environment with high employee motivation. Previous studies have demonstrated individuals with higher Extraversion are more frequently linked to transformational leadership and leadership emergence (Cogliser et al., 2012).

The Extraversion trait only indicates how many relationships someone prefers; it does not mean that the individual is not capable of engaging in a large group. A study by Daly et al. (2013), used social network data from district leaders to show exchange and advice network relationships between principals. The study showed the Neuroticism, and Conscientious traits might interact with the Extraversion trait to limit the correlation between the Extraversion trait and transformational leadership. The result could explain why there are a variety of results on the relationship between Extraversion and transformational leadership. One hypothesis is that the principal population might exhibit higher Extraversion overall, especially in those schools with more social networks, such as at the high school level. Another hypothesis is a preference for

principal tasks that have more occurrences of social interactions, and possible modification of tasks to those that involve more social interaction. However, Extraversion is likely not a driving personality trait in principals.

Conscientiousness has also been shown to relate to transformational leaders and team performance. Since Conscientiousness linked to caution, self-discipline, hard work, and a strong sense of direction, it makes sense that Conscientiousness is shown to be positively associated with an overall team and job performance across all job criteria and occupational groups (Tyagi & Bansal, 2010). These results seem to suggest that school leaders in turnaround or high-achieving schools may naturally fall higher on the Conscientiousness trait scale. The trait naturally links to self-efficacy and principal retention, because more conscientious people have a stronger sense of direction and self-determination. These individuals may not require as much support to remain committed in their roles. One hypothesis is that Conscientiousness is positively related to higher control and organization of tasks in organizational management and administration, with more dedication and organization around accomplishing ‘paperwork tasks.’ Due to the number of goals that schools and principals are expected to complete, likely, principals will naturally be higher on the Conscientious trait scale. It is also possible that individuals with high Conscientiousness can better prioritize what they should learn to lead to school success. Finally, principals with higher Conscientiousness may have difficulty in taking risks that deviate from those goals, which could be either beneficial or harmful depending on the school.

Agreeableness is a predictor of success for jobs that involve a high level of interpersonal interaction and is also a predictor of transformational leadership (Judge & Bono, 2000), though those results have not been corroborated. Since the principal position involves a high degree of

interpersonal interaction, individuals higher on the agreeableness trait scale might become effective in the principal position. The trait is built on the trusted facet and on seeking input from others. Since principals must contend with various groups within the school system organization, an individual with higher agreeableness may naturally perform better at conflict resolution by understanding the perspectives of the various parties involved. Agreeableness has also been found to be positively related to career choice decisions. Feldt et al. (2010), suggests this may be due to individuals seeking information and support from others to resolve decision conflicts. This result could mean that principals with high agreeableness might find more success in resolving conflicts in school environments. One hypothesis is that agreeableness is positively related to a principal's trust in teachers and the ability to orient to different social environments.

The *Openness* trait consistently has the weakest independent connection to transformational leadership and organization outcomes (Judge & Bono, 2002). However, the results with other traits included in the regression, the correlation becomes significant. For example, one study found that students with high Conscientiousness and Openness were more likely to become engaged in their studies and exhibit other behaviors that are necessary to ensure their achievement at university (Douglas, Bore, & Munro, 2016). Openness connected with Conscientiousness was also shown to positively relate to career efficacy (Hartman & Betz, 2007). Openness has also been shown in longitudinal studies to decrease from adolescence to adulthood (Howard & Howard, 1995). Overall, the results of previous studies show that Openness alone is unlikely to determine leadership behavior or success, but when linked with other traits may be more predictive. Understanding the entirety of an individual's psychological underpinnings is more likely to be predictive of behaviors than one trait alone. Since Openness measures the degree of intellectual curiosity, creativity, and preference for novelty, it could

impact a principal's strategies for gathering information and making decisions. One hypothesis that Openness is positively related to a principal independently seeking information on professional development and research; however, if combined with lower Conscientiousness could be unfocused or ineffective. It could also produce several interaction variables with other traits.

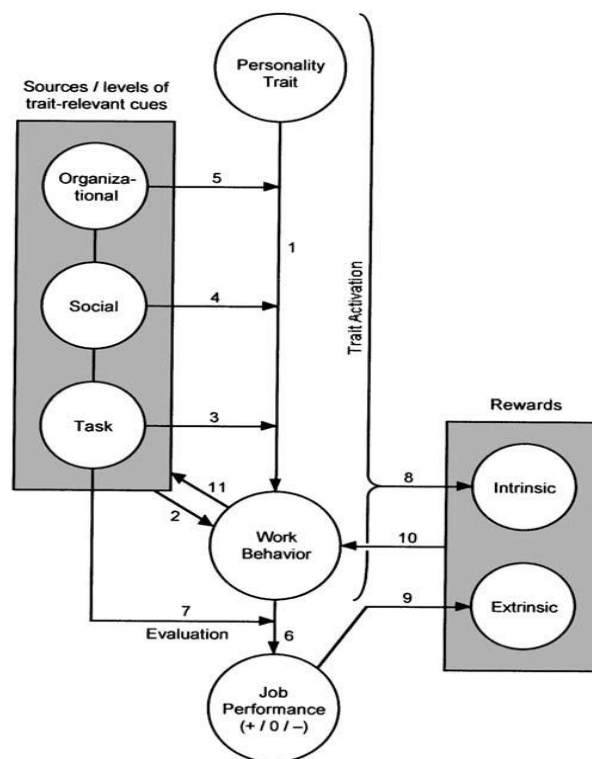
Neuroticism is consistently negatively associated with transformational leadership and success. However, some studies suggest that the negative correlation of the personality trait could be mitigated when combined with other traits and support. The trait is likely to be negatively associated with principal leadership, and principals are likely to have lower Neuroticism overall since it is found to be a negative predictor of success for jobs involving interpersonal interactions (Francoeur, 2008). However, the same study also found that the trait becomes unrelated to transformational leadership once the study controlled for the other four traits. The fallacy of the Neuroticism trait is that the trait is viewed as a negative predictor of leadership and success. A study by Daly et al. (2013) demonstrated how other traits and social network support can mitigate the impact of the Neuroticism trait, and how those individuals are even able to maintain high self-efficacy as leaders. One hypothesis is that, overall, most principals would generally have a low Neuroticism score; however, individuals within the principal group that have a higher Neuroticism score than the group average are likely to seek different strategies to maintain self-efficacy and become effective. Principals with higher Neuroticism might have difficulty processing potentially negative performance reviews of their school or themselves, depending on how they are received, and the trust established with the person doing the review.

The overall results from various studies that looked at personality and leadership are that these traits do not work independently of each other and can be mitigated, or enhanced, dependent on the other traits and context. Therefore, it was important to not look solely at the individual traits in a vacuum, but instead at the various combination of personality traits and how that might impact the behavior of principals.

Conceptual Framework

For this study, the conceptual framework is based on the Trait Activation Framework outlined by Robert Tett and Dawn Burnett. This theory comes from the personality-situation debate in psychology. While the proponents of personality-driven behaviors describe personality as influencing behaviors regardless of the situation, the situationists argue that the external nature of an organization/position has a greater influence on behaviors. The trait activation model combines these as a personality-situation interactionist model that lays the groundwork for

Figure 1: Trait Activation Conceptual Framework (Tett & Burnett, 2003)



specifying the conditions under which personality traits will predict job performance (Tett & Brunnett, 2003).

This model argues that both personality and situational force shape the behavior of individuals. The primary personality-situation debate overall has settled toward a more interactionist perspective overall. Under this model the big five personality traits are defined as “intra-individual consistencies and inter-individual uniquenesses in propensities to behave in identifiable ways in light of situational demands” (Tett & Guterman, 2003). Figure 1 outlines the framework of trait activation to explain how personality traits ‘become activated’ to impact work behavior and how those behaviors impact both the environment and the rewards for the individual.

The framework has 11 paths to explain trait activation. The first path is the primary path by which personality impacts workplace behaviors, and the start represents the dormant personality of principals. The traits pass through three sources of cues (paths 3, 4, and 5), which moderates when and how the traits are expressed in work behavior. Path 2 represents the effects of situations on work behavior, which represent the direct situational influences from organizational, social, and task cues on overall behaviors. Paths 3, 4, and 5 represent three sources (Task, Social, and Organizational) of cues within the work setting that, either, activate trait behaviors or dominate the variation. Path 3 represents the nature of the work itself, which is the traditional tasks represented for the job. Path 3 can be worded as the rational systems perspective. Path 4 represents the social norms expected of the workplace, which can be thought of as those in the natural systems perspective. Path 5 is the culture of the workplace, which is viewed as an extension of Path 4 but includes the social networks and personalities within the organization. Path 5 also falls under the natural systems perspective and is the individual

characteristics of the organization. Paths 1 and 2 contribute to workplace behavior, which is the actual action taken by the individual.

The work behaviors then produce reaction flows into multiple paths. First is Path 6, which is the evaluation of the behaviors through job performance, which includes both formal evaluation (task) and informal evaluations by social and organizational sources. Based on the performance, rewards are triggered. Path 8 represents the intrinsic rewards, which are the satisfaction from accomplishing the task, which leads to pleasure or lack of fulfillment, which leads to displeasure. This framework highlights those accomplishments that allow personality traits to be expressed. This framework proposes that individuals will seek out and be satisfied by tasks, people, and organizational features that allow the expression of personality traits. Path 9 represents extrinsic rewards, which are informal rewards, such as praise and acceptance by other individuals in the organization, or monetary rewards, like pay and promotions. Path 10 then represents those rewards triggered by workplace behavior rather than job performance, which is then either reinforced or discouraged. Finally, Path 11 represents the impact of the work behaviors back on the three sources (task, social, and organizational). This makes the point that the three sources are not unchangeable and instead explains how organizations change over time, from the continual feedback loop.

A study by Timothy Judge and Cindy Zapata (2015) conducted a meta-analysis to test the trait activation framework with the Five-Factor Model. The analysis looked at previous articles that analyzed the relationship between the Five-Factor Model and job performance, and narrowed down the articles to those that used employees as participants, included a measure of job performance, used the Five-Factor Model, and focused on single occupations to allow coding of job descriptions. The study found that the five traits were predictive of job performance in

jobs that allowed employee discretion in the decision-making process. The study also supported the trait activation model in showing that jobs suited to certain personality traits showed those traits as positively correlated to job performance, and the presence of those traits was more predictive of job performance. Conscientiousness, Agreeableness, and Openness were more important in jobs that allowed independence in the completion of work, while Neuroticism, Agreeableness, and Extraversion were predictive of job performance in jobs with strong social skills requirements (Judge & Zapata, 2015). Since working independently to complete tasks and strong social skills are in the principal position, the results from the Judge & Zapata study suggests that the principal positions should allow the activation of personality.

This study will use a conceptual framework based on the Trait Activation Framework with a slight variation. The framework will be used to identify potential behaviors and preferences in the principal position that is a possible link to a principal's personality uniqueness but does not include predicting job performance. This study disagrees with Judge and Zapata (2015) that the results are enough to encourage the use of the Five-Factor Model to make human resource decisions. Results still indicate less than a 0.30 R Squared for models using the big five traits, which means that, while the personality traits might have some influence, it is not determinate of job performance at a level high enough to warrant the sole use of the Five-Factor Model in making human resource decisions. This framework will use qualitative data to display a variety of potential workplace behaviors and strategies that might connect to the big five traits.

Chapter 3: Methods

This study sought to determine if there are potential links between a principal's personality and their potential behaviors in the school environment. The study answers three research questions:

- 1) What, if any, are the general personality profiles of principals?
- 2) What role does personality seem to play in the way that principals prioritize the various principal tasks?
- 3) What role does personality seem to play in the way that principals strategize to accomplish the various tasks and grow?

To accomplish the goals of this dissertation and answer the research questions, this study is a mixed-methods exploratory study of school principals in Michigan. For this dissertation, the data was collected in two phases to collect the quantitative and qualitative data that was used to answer the three research questions. For the first phase, a survey was administered to randomly selected principals across the state. In the second phase, in-person, semi-structured interviews were conducted with 14 principals. Dividing the process into two parts produced a large sample to conduct the various quantitative analyses to seek emerging personality profiles and find relationships with principal tasks, while also providing enriching information on the potential role of a principal's personality when tackling the tasks of the principal position. Also, the quantitative data was used to select the principals to interview to ensure coverage of the Five-Factor Model for the principal sample.

Survey Data

The sample population for this study was school principals in the State of Michigan. According to the Michigan Center for Educational Performance and Information, 3,314 school buildings were operating in the State of Michigan for the 2017-18 school year. This figure includes both public and charter schools. Since there is at most one principal per school building, with many schools either sharing a principal across multiple school buildings or lacking a principal due to vacant positions, at most, there are 3,314 school principals currently working in the State of Michigan. The Michigan Center for Educational Performance and Information does not distinguish school principals from all school administrators, which would include assisting principals and other leadership positions. The total principal population in Michigan is currently unknown.

A randomly selected sample of principals produced enough data to conduct quantitative analyses. To ensure proper coverage, districts were randomly selected from throughout the state. The process ensured that districts that have more school buildings and elementary buildings were not over-sampled. By randomly selecting districts first, the sample included the entire state and all K-12 buildings from various types of schools (large/small, rural/suburban/urban, elementary/middle/high). Superintendents were included in the sample since many superintendents serve a dual role as both superintendent and principal of a school building. After selecting a district, the district and the principal's email address were inputted, which is publicly available from the Center for Educational Performance and Information and the Michigan Department of Education. Districts were randomly sampled until over 250 principals were included, with the ability to quickly select more if needed.

This study needed survey responses from between 64 to 128 principals, although there is no established sample minimum for conducting a cluster analysis. One study (Dolnicar, 2002) that analyzed 243 previous studies that used a cluster analysis showed the sample size for those studies ranged from 10 to 20,000 samples. However, norms do indicate that the sample size should reflect the number of variables that are going to be used in the cluster analysis. One rule for a suggested minimum is to include no less than 2^k cases (where K = the number of variables) (Dolnicar, 2002). Since the cluster analysis in this study would include five variables (the big five traits), that would mean a minimum sample of 64 ($=2^5$) would be needed to conduct a cluster analysis that captures potential personality groupings. A sample of 128 would be preferable to use six variables (either a task or categorical variable) in the cluster analysis. For example, the big five traits and the school building level could be clustered to see, not only if there are personality trait groupings, but if they also cluster within a certain building level type. However, several other analyses were performed to test whether the big five traits might have relationships with other variables. In addition to the random sample, snowball or chain sampling was used with networks from previous MSU classmates and instructional coaches. To get to the desired sample of 64 principals, batches of survey requests to principals were sent periodically. Batches of survey requests were sent until a sufficient sample size was collected. Relying on a mostly randomly selected sample was an efficient way to ensure principals from various school types, but both sampling methods were used to produce the sample size.

Providing respondents with the results of their personality inventory was enough of a reward for the ten-minute survey to meet the minimum response rate. The recruitment email that included the link to the survey and the personality inventory results email is included in Appendix C, and Appendix D. Reminder emails were sent to participants that had not yet

responded to the survey after the first week of sending out the initial email. Under this sampling method, by the end of October 2018, the minimum participant threshold was reached.

The survey was designed in Qualtrics and divided into three sections. The first section was the Big Five Inventory, the second section asked the respondents for their perspective on certain principal tasks, and the third section asked general demographic questions. The principal tasks were those that were identified by Grissom and Loeb (2011), found in Appendix B (Table 10), that had the highest loading value into the domains and included:

- Formally evaluating teachers and providing feedback
- Planning and implementing professional development
- Developing relationships with student
- Communicating with parents
- Counseling staff about inter-staff conflicts
- Developing a safe school environment
- Dealing with concerns from staff
- Managing budgets and resources
- Hiring personnel
- Managing personal and school-related schedules
- Managing student discipline
- Managing student services

The goal of this section of the survey was to determine how principals view the importance of various tasks, their confidence in completing the various tasks, and the tasks that they believe they have most improved since entering the principal role. The responses were used to provide some initial findings and possible links between a principal's personality, and their preferences and behaviors, and to finalize the in-person interview. The demographic section was intended to provide some control variables, such as years of experience, demographics, gender, school district type, and school level.

The survey was first drafted in the fall of 2017 and piloted MSU graduate students to work out any issues, and then modified as needed. The open-ended questions were dropped, and instead, the task selection questions were included, because the responses to the open-ended

questions were generic and did not provide sufficient information to conduct a qualitative analysis. The survey was updated and sent to the same respondents during the summer of 2018 to gather a second round of opinions and finalize the survey. The response was positive, and respondents found the principal task questions more meaningful, and less work, than the open-ended questions. The survey is included in Appendix G. The goal was to send out the first batch of surveys at the beginning of October 2018 to provide enough time to collect responses and to recalibrate the recruitment strategy accordingly, reaching the minimum number of responses necessary after the third batch by the end of October 2018.

Over 750 survey requests were sent out to principals under the sampling method previously outlined, which represents 5% of total school administrators in the State of Michigan. Of that amount, 89 current or recent principals completed the two main parts of the survey (the five-factor inventory and principal task questions), which was a 12% response rate. Of the total responses, 51 respondents were female, 37 respondents were male, and one respondent did not identify a gender. Eighty-three of the respondents indicated being White, one of the respondents indicated Black, two of the respondents indicated Asian, and three of the respondents did not respond to that question. The average respondent had 12.8 years of teaching experience with a median of 10 years, and a standard deviation of 8.2 years, and 11.8 years of administrative experience with a median of 10 years, with a standard deviation of 7.5 years. For the district type, 39 respondents indicated working at a rural school district, 37 respondents indicated working at a suburban school district, 11 respondents indicated working at an urban or large school district, and two respondents did not answer the question. Finally, for the school level, 36 respondents indicated working at an elementary level school, 12 respondents indicated working at a middle school, 23 respondents indicated working at a high school, and 14 respondents

indicated the district level or that they had recently retired from the principal position. Since the email addresses were from the previous spring, some principals had either retired or changed positions over the summer from the previous year. Since the State of Michigan currently does not separate school principals from general school administrators, which would include assistant principals or other school buildings administer positions. That means it is difficult to compare this sample to determine if it is reflective of the principal population in Michigan. However, Table 2 compares the race, gender, and years of administrative experience between school administers in the State of Michigan with the sample collected. The sample collected had a higher proportion of white school principals than is reported from the state. The sample had a statistically similar breakdown for gender when compared to the state. The sample median number of years of administrative experience as similar to the state median. Table 2 shows that the gender breakdown and years of administrative experience are similar between the sample collected for this study and state principal population, while the number of white principals are overrepresented in the sample.

Table 2: Sample Comparison		
	State Count	Sample
Total	12,785	89
White	83.5%	93.3%
Black	14.0%	1.1%
Asian	0.6%	2.2%
Hispanic	1.3%	0.0%
Other	0.5%	0.0%
Female	57.1%	57.3%
Male	42.9%	41.6%
Exp.	6-10 years	10 years
Note: State count from the CEPI for the 2017-18 school year. Exp. means median years of administrative experience		

Interview Data

Ten and fifteen interviews were sought with principals based on the results of the analyses from the survey data. The results of the quantitative analysis identified principals to contact for in-person interviews. For each personality trait, a K-cluster analysis was conducted for three groupings (a high, medium, and low score cluster) for each trait. Respondents from the survey were selected for interviews to ensure that all clusters within each trait were represented. When possible, principals exhibiting different traits clusters from the same district were selected. The sample allowed better determination if opinions and behaviors were more linked to personality groupings or district influences. Principals were selected from different district types and K-12 school building levels to capture any potential district or school building level differences. All variations of personality types, district type, and school level are represented in the interview sample.

The interviews were semi-structured and probed the various research questions. The interview protocol is included in Appendix F. The interview protocol was revised after the survey results to ensure that the greatest breadth of information could be collected from the limited interview time. The interviews took between 45 and 60 minutes. To attract principals to participate in the survey, a \$50 Amazon gift card was given upon completion of the interview to compensate the principals for their time. Funding for the gift cards was supported by a grant that aids in completing dissertations in the College of Education. The recruitment email is attached in Appendix E.

Of the 15 interview requests that were sent out to respondents who had completed the survey and indicated their willingness to be contacted for additional studies, 14 respondents agreed to and made time to be interviewed. Of the 14 interviewees, 13 were current principals,

and one had recently moved to a district-level position. To have more background information before the principal interviews, an informational interview was conducted with a principal mentor.

Of the 14 practitioner interviews, six were female principals, and eight were male principals. The average teaching experience of the interviewees was 12.5 years, while the average administrative experience was 11.6 years, which is nearly identical to the average years of experience of the survey respondents. Seven principals represented a rural school district, four represented a suburban district, and three represented an urban/large school district. Of the interviewees, seven represented an elementary school, four represented a middle school, two represented a high school, and one represented a district-level position (recent principal).

When comparing the five traits of the interviewees selected from the survey respondents using two-sample t-tests, the interview sample was not significantly different from the other survey respondents with an average Neuroticism score of 2.6, Extraversion score of 3.5, Openness score of 3.8, Agreeableness score of 4.3, and Conscientiousness score of 4.26. These details show that the variables and personality of the interviewees were similar to the sample of other survey respondents.

The interviews were completed by mid-January and transcribed using a transcribing service paid for with a grant that aids in completing dissertations in the College of Education. Notes were taken during the interview to develop an initial codebook. The audio files were stored on desktop and secure cloud-based storage to ensure duplicate files. After receiving the transcriptions, the transcriptions were checked for accuracy and then coded the interviews.

Data Analysis

The data analysis section is divided around the three-research questions to focus on how the survey and interview data were used to answer each question. In general, descriptive statistics, K-Cluster analysis, t-test, multiple regression, ANOVA, and Log Regression analysis were used in the quantitative analyses while Thematic-Coding was used for the qualitative analysis. Each will be discussed in-depth for each question.

What, if any, are the general personality profiles of principals?

Before conducting the in-person interviews, various quantitative analyses were conducted to provide initial feedback to address the first research question, finalize the semi-structured interview protocol, and select principals for the interviews. To answer the first question, a preliminary, basic statistical analysis was conducted of each personality trait. The distribution, standard deviation, range, and the potential for possible groupings within each trait were analyzed. Traits that had a larger range and distribution would be more likely to have potential groupings that could be examined. After the preliminary analysis, the first set of cluster analyses was conducted, which was a K-mean cluster analysis (IBM Knowledge Center, 2018; Vojnikova, 2018; Niknam & Amiri, 2009), to identify two groups across all five traits. K-mean cluster analysis is a process by which groupings are assigned randomly within a dataset (that is a scale) and are then analyzed to measure the distance from each data point within a group to the group's mean within each grouping. If individual data points are not closest to the group mean, then the individual data points are reassigned to the group that has the closest mean, which then changes the new group means. The new grouping is again analyzed using the same process to see if each data point within the new group is closest to the group's mean to which they are now assigned. Data sets are then reorganized, if necessary, and the process continues. If there are clusters

within a dataset, this analysis can find them within fewer than ten readjustments. If the analysis requires more than ten readjustments, or groups are never found that have every data point within a group closet to the group mean, then there are not likely to be clusters within the given number of group possibilities. The reason to start with two personality groups is to determine if there are, or are not, at least two possible groupings across all five traits. An example of a potential 'group cluster' could be a group Low in Neuroticism, High in Extraversion, Low in Openness, High in Agreeableness, and Low in Conscientiousness. Based on the result discussed in the next chapter, follow up analyses were conducted. The K-mean cluster analysis for two possible groupings would either result in identifying two groupings that are structurally sound and have group means that are significantly different, or the analysis would be unable to find two groupings across all five traits. Since two potential groupings were not found, there might be three groups that do not split into two groupings, so follow-up analysis was conducted with three grouping possibilities. Both those cluster analyses did not produce stable clusters, which could mean that there are no grouping possibilities across all five traits with the given data. The K-mean cluster analysis was preferable to use with continuous data and was a quick way to conduct a cluster analysis. A positive result of two or more personality groups would have allowed for group comparison between the personality profiles. The Van Aken, Van Lieshout, & Scholte (1998) study divided 3,284 16-year-old students into three personality type groups aligned to the Five-Factor Model and could find group differences in problem behaviors, addictive behaviors, and peer evaluations of acceptance, rejections, and reputation. If this study had found clusters within the principal population, group differences could have emerged when comparing confidence or leadership behaviors. Group differences would provide more evidence of personality correlating to behaviors, particularly if behaviors were only found in one group and not another.

Since the K-mean cluster analysis did not create two or three groupings across all five traits, additional analyses were conducted. Traits were dropped to determine if groupings occurred using fewer than all five traits. There may be only groupings within four out of the big five traits. K-mean cluster analysis using fewer than the five traits occurred until tested all combinations were tested, and no groupings could be found.

The final K-Cluster analysis was to cluster each Big Five Trait into three clusters. This process produced a high, medium, and low cluster within each trait. These clusters were used to select the interview sample and conduct ANOVA (Analysis of Variation) to provide initial results.

To continue to answer research question one, an ANOVA analysis was conducted within the big five traits on some of the categorical data. This analysis would determine if the categorical data resulted in a group mean difference within the Big Five Traits. This analysis is a quick and an initial process to determine potential group differences using both categorical and continuous data. ANOVA analysis was used to determine if personality might statistically relate to any of the categorical variables, such as school type, district type, and gender. For this test, each additional categorical variable was included, along with the Big Five Traits. If these tests produced F-statistics and P-values that indicated significant differences with the Big Five Traits and the categorical variables, then 2-sample T-Tests were conducted with the variables that produce the greatest significance. These tests had the big five trait scores as the independent variable and the categorical data as the dependent variable. These tests helped determine if there are personality clusters around district type, school type, and gender or if personality is independently found through the K-12 system.

The final set of statistical analyses conducted was to test if the personality profile of the principal population might differ from that of the general population. For this test, a study was found that measured a large sample of the American population. A study from 2007 looked at the geographic distribution of the Big Five Traits around the world using the Big Five Inventory, sampling 4,047 undergraduates from the North American region, and published the means for each personality trait with a 95% confidence interval of less than .01 (Schmitt, Allik, McCrae, Benet-Martinez, 2007). Comparing the results from that study with the results of the sample collected in this study could be an indication of differences between the principal population in Michigan and the North American population. The results from the survey responses were then compared to the Schmitt, Allik, McCrae, and Benet-Martinez (2007) study.

In addition to survey data, the first question could be answered using the interview data. The interview responses could indicate certain preferences and thoughts that are found within ranges of a trait that are unrelated to experience, education, and district influences. The interview responses where an individual does not state the rationale for a task preference or strategy to accomplish a task were first analyzed. An example would be how someone prefers to make decisions for the school. A few people may prefer a large collaboration with multiple stakeholders, and those people might rank higher on the Extraversion and Agreeableness traits and lower on Neuroticism, Openness, and Conscientiousness traits. Interview responses were analyzed to see if similar patterns emerged for other behaviors. This process could establish thematic grouping across ranges of the Five-Factor Model and help to determine if there are personality groupings around behaviors that might not cluster neatly around a quantitative grouping that is measuring how close everyone is to the group mean. There may be thematic groups of preferences, behaviors, and attitudes that do not emerge from a K-Cluster analysis. By

focusing on strategies and behaviors that vary through a range of a trait, the study would produce less well-defined groups but produce more practical insights into how principals develop their behaviors.

What role does personality seem to play in the way that principals prioritize the various principal tasks?

To answer the second question, both the survey and interview data were used. The second and third questions follow an exploration and verification process that incorporates the various data. The survey asked the individuals to rate the importance of the tasks previously mentioned on a scale of 1 (least important) to 10 (most important). First, an ANOVA was conducted using the three clusters within each trait used to select the interview sample to test the responses to task importance. These initial tests see which tasks might have statistical differences since the ANOVA would merely show if the grouping means are or are not similar. Under this analysis, the task importance response is the independent variable, and the Big Five Traits are the dependent variables. Multiple regression analyses were conducted to determine if, and how much, someone's task preference score might be dependent on their personality trait or the control variables. Since running multiple statistical analyses over so many variables are likely to produce some findings no matter what data was used, the results of the statistical analyses are used to gather initial findings. The qualitative analysis is used to support further or disprove the quantitative findings. No conclusions are made using only the quantitative analyses.

The results from the statistical analyses were used to develop the final interview protocol. The qualitative data was then used to confirm, or disprove, those initial findings. The qualitative analysis is addressed when answering the next research question. The interview protocol was modified to ask questions regarding task importance and how principals prioritize their various

tasks. The initial responses were followed up to try to determine what influences have the greatest impact on task prioritization.

What role does personality seem to play in the way that principals strategize to accomplish the various tasks?

To answer the third question, both quantitative and qualitative analyses were conducted with the survey and interview data. The same quantitative analyses used to answer the previous question was utilized by conducting ANOVA and multiple regression analyses. This analysis was used for each task and the average task confidence because interviewees were asked how confident they were on a 1 to 10 scale. The model for each analysis included task confidence as the independent variable, the Big Five Traits as the dependent variables, with gender and years of administrative experience as the control variables. After the initial multiple regression analysis for each task and task average, additional analyses were conducted depending on the P-value of the variables. The variables with the highest P-value in each model were dropped, and another multiple regression analysis was conducted. If this resulted in a higher adjusted R Squared, then the new model was used; if not, then the first model was kept. The process continued until the adjusted R squared no longer increased because of dropping variables. In the results, Table 6A displays the results of the first original multiple regression analyses, while Table 6B displays the results of the multiple regression analyses with the model that produced the highest adjusted R squared. This process was done to produce models that explained the greatest amount of variation in the data. Since the Trait Activation Framework explains that only some traits might be 'activated' to accomplish tasks, the best-fit model for confidence in each trait might include less than all five traits.

In the survey, the interviewees were asked which three tasks they felt had improved with the most since becoming a principal. The question helps to indicate if the principal perception of task improvement might correlate to personality or not. The analysis used for the task improvement responses was log regression analysis to determine if personality might correlate to the probability that a respondent selects a task as most improved. This analysis again used the Big Five Traits as the dependent variables with gender and years of administrative experience as the control variables. Since the response is either 0 or 1, the log regression analysis is most applicable and would show if the variables are predictive of the response.

After conducting the quantitative analysis, qualitative analysis was done to determine how the principal's personality might relate to how they prepare and strategize to accomplish various tasks. For the qualitative analysis, a 'Thematic Coding' process was used that begins with open coding and interpretation methods (Merriam & Tisdell, 2016). During the interviews, notes of responses were taken that stood out, and later in the interview would be followed up to elicit additional clarification. These notes also provided initial codes. Those in-interview codes development initial codes and generate new codes when responses seemed to be significant to the principal. The codes were compared with the other interviews to find similarities and differences that emerge around various aspects of the principal position. Examples include assigning various codes around how principals gather information, how they made decisions for the school, how they implemented changes, how they felt confident, and what helped them as a new principal. The similarities and differences in strategies within these categories compared across the interviews. Notes of similar codes that occurred within all interviews were taken and those that occurred within only some interviews. This information determined if any codes were more prevalent across personality traits when strategizing to accomplish the various tasks. This

established potential patterns of response that could connect to personality. These patterns appear from multiple responses to many related situations and questions (Mashhadi, 1996). This provided validation to the patterns found that might link personality to behavior. The results of these various analyses indicated if the differences might link to personality. By comparing both the survey and interview data, possible tasks and strategies might correlate with the personality of the principal.

Considerations

Before beginning this study, the limitations of the study needed to be addressed. The first limitation was that the study was designed around self-reporting for both the survey and interview portions. Meaning the conclusions rely on the opinions and thoughts of the principals. Conclusions could not be made on how principals actually behave or perform in the leadership role. That is also why the study focused on the principals' thought processes, preferences, and intended behaviors. This focus on the formation of behaviors, as opposed to predicting what the principal would or would not do, limits the negative potential of these results, as mentioned in Chapter 1. An example of this was asking which tasks principals think they have improved on the most. The question was not to form a conclusion on which tasks they had actually *improved* on the most, but merely which tasks they *thought* they had improved on the most. Since principals are asked how they perceive their personality and the impacts on their thought process, the best way to answer those questions was by directly asking.

Another limitation and issue with the validity of this study is the potential for response biases. Principals might respond to the task questions with the tasks that they hear are the most important, or what they think others might feel is the most important. Instead of measuring relationships between personality and their actions, instead, this study would be measuring the

link between their education and their actions. Having qualitative data helped to confirm or disprove how much personality impacts the principal's thought process on the various tasks. Principals might also respond to the Big Five Inventory with responses that they think are more positive. To limit potential response biases, the confidentiality of the responses was ensured, and the questions framed in a way to ensure that the interviewees did not perceive the study as trying to judge if a principal was 'effective' or not. The study and only conclude with sample findings and not that the findings reflect the entire principal population. This limitation is due to the 12% response rate to the survey, and only 14 principals were interviewed. However, this study hopes to try and answer the research questions as well as establish a framework for using the Five-Factor Model to study leadership behavior in the future.

Additional measures were taken with both the quantitative and qualitative analyses to ensure the validity of the conclusions. With the quantitative analysis, the Cronbach alpha level within each of the traits and underlying questions was found to determine if the alpha level was similar to those results from previous findings. For the qualitative analysis, patterns across the responses were found to determine if the response was universal, or in a range within a personality trait. It also meant finding codes across multiple questions, for example, looking to see if the response to how principals strategize to gather information is like the responses to how they prioritize the various tasks or make decisions. These responses were compared with other principals within a similar personality range. The process looked to see if the responses related to findings found in previous studies using the Five-Factor Model and if the behaviors fit with the general understanding of the spectrum of a trait. By taking these measures, the conclusions have more validity.

Finally, I considered my positionality when conducting this study. Since I did not come from an education background and worked in the policy process, I needed to ensure that my interview questions were not viewed as judgmental and or unaware of the principal role. I made sure that I did not have preconceived opinions about the principal role. Throughout this study, I checked my positionality, both when conducting the interviews with principals and when analyzing and interpreting the data. Addressing all these considerations before the beginning of the study helped limit potential biases in the data.

Chapter 4: Results

This chapter will cover the results of the study. The chapter is divided into two parts, the results from the survey data and the results from the interviews. Within these two parts, the results organize around the three research questions.

Survey Data

What, if any, are the general personality profiles of principals?

Table 3: Descriptive Statistics						
Trait	N	Minimum	Maximum	Mean	Std. Dev.	Skewness
Neuroticism	89	1.000	3.875	2.37	0.564	.096
Extraversion	89	1.750	5.000	3.56	0.601	-.183
Openness	89	2.100	4.700	3.62	0.492	-.595
Agreeableness	89	3.000	5.000	4.20	0.416	-.452
Conscientiousness	89	3.000	5.000	4.21	0.389	-.355

Table 4: Scale Reliabilities and Intercorrelation					
	N	E	O	A	C
N	(0.77)				
E	-0.15	(0.82)			
O	-0.20	0.08	(0.73)		
A	-0.34	0.13	-0.04	(0.77)	
C	-0.24	-0.10	0.13	0.11	(0.72)
Note: Reliabilities (Cronbach Alpha) are displayed in parentheses					

Table 3 shows the descriptive statistics of the Big Five Traits across the 89 respondents, and Table 4 displays the intercorrelation between the five traits and the results of the reliability analysis that was conducted for the questions that correspond to each trait to calculate the

Cronbach's Alpha for each set of questions. The Cronbach's Alpha for Neuroticism was .772, Extraversion was .818, Openness was .731, Agreeableness was .773, and Conscientiousness was .721, with the average Cronbach's Alpha across the five traits at .763. These Alpha levels meet acceptable reliability levels (George & Mallery, 2003) found in previous studies using the Big Five Inventory, but around .05 lower than the Alpha levels found in John and Srivastava's original validity study (John and Srivastava, 1999). The difference could be due to a sample size difference of 462 respondents in John and Srivastava's 1999 study compared to 89 respondents in this study. These Alpha levels support the reliability of this personality inventory in real-world applications and the use of the results for this study.

As Table 3 shows, the Neuroticism trait had the lowest mean of the Big Five Traits for the principal sample, and is significantly less than the Schmitt, Allik, McCrae, Benet-Martinez study from 2007 (Table 5), which published a mean score of 2.92. The Neuroticism trait measures the number and strength of stimuli required to elicit negative emotions. With the nature of the principal position being high-stress, it is not surprising that this trait had the lowest mean of the five traits, and that the trait was less than the sample of the mean North American. However, it is important to note the range of the trait goes from 1.0 to 3.875, with a standard deviation of 0.565, which is higher than most of the other five traits. When a multiple regression was conducted on the Neuroticism trait with gender, years of teaching experience, and years of administrative experience as the dependent variables, the regression showed that none of the variables had a statistical significance, which means that none of the variables demonstrated a statistical relationship with the trait.

The Extraversion trait had the largest range of any trait in the principal sample (3.25) and the highest standard deviation (0.601) with a mean of 3.56. The mean was slightly above the

findings of the 2007 study (Table 5), however, not statistically significant. Extraversion measures the number of personal relationships with which a person is most comfortable. Since the nature of the principal position involves many interpersonal interactions, it might be assumed that the sample mean in this study would be significantly higher than the mean population. Another assumption could be that the range would be narrower since individuals with a lower Extraversion trait might not enter the principal role. However, the results from the survey contradict this assumption with the Extraversion trait of the principal sample being like the North American mean.

The Openness trait was slightly greater than the Extraversion trait, with a mean score of 3.62, but slightly less than the mean found in the 2007 study (Table 5), the difference was not statistically significant. The Openness trait measures the number of interests one is attracted to, and the extent to which those interests are pursued. The results indicate that the Openness trait of the principal sample is like the North American mean.

The Agreeableness trait had the second-highest sample mean of the five traits, with a mean of 4.2, which was statistically significantly above the mean from the 2007 study (Table 5), which published a mean score of 3.79. The range of the trait within the sample was also low, with a range of 2.0 and a standard deviation of 0.416. The Agreeableness trait measures the number of sources from which one draws to establish one's norms for correct behavior. The trait includes the facets of trust and values. Conducting a multiple regression on the Agreeableness trait with gender, years of teaching experience, and years of administrative experience resulted in no statistical significance with any of the dependent variables.

Finally, the Conscientiousness trait had the highest mean of the sample, with a mean of 4.22 and was statistically significantly above the mean from the 2007 study (Table 5), which

found a mean score of 3.60. The Conscientiousness trait measures the number and level of commitment to goals on which one is focused. Conducting a multiple regression on the Conscientiousness trait with gender, years of teaching experience, and years of administrative experience had no statistical significance with any of the dependent variables. By looking at the overall survey sample of principals compared with the sample from the 2007 study (Schmitt, Allik, McCrae, Benet-Martinez, 2007), a general impression of the personality profile of the principal sample and insight into what individuals might choose to enter the principal position was developed.

Table 5: Comparison with 2007 North American Mean BFI				
Trait	North America		Survey Sample	
	Mean	CI	Mean	Std. Dev.
Neuroticism	2.92	0.01	2.37	0.56
Extraversion	3.41	0.01	3.56	0.60
Openness	3.71	0.01	3.62	0.49
Agreeableness	3.79	0.01	4.20	0.42
Conscientiousness	3.60	0.01	4.21	0.39
Note: North American Sample from Schmitt, Allik, McCrae, Benet-Martinez, 2007				
Note: CI means 95% Confidence Interval Level.				

After looking at the overall personality traits of the principal sample, the analysis moved to look at potential differences within the sample. A T-Test was conducted on the Big Five mean differences for gender and showed no statistical difference between the means of each trait. The results indicate that the sample of the principal population does not show significant gender differences.

A one-way ANOVA was conducted for the mean traits of rural, suburban, and urban school districts and showed no statistical significance between groups. The results indicate that

the personality of the principal population is more consistent across district type. A final one-way ANOVA was conducted for the mean traits with the school level and showed no statistical difference between the groupings. These results also demonstrate that the personality of the principal population might be consistent regardless of school level, even with those respondents that move to the district level. These results show that the personality of the principal sample is consistent across the demographic and control variables. Having looked at the overall principal position, the analysis then looked within the personality traits to see if there may be potential clusters of personality groupings within the principal population.

To explore potential personality clusters within the principal population, a K-mean Cluster analysis was conducted to seek if any cluster groups might emerge across all five traits. K-mean cluster analyses seek to cluster the data points around the nearest mean to find potential personality prototype groups. An example of a potential personality prototype group would be a cluster of principals with high Extraversion also ranking in the middle on the Neuroticism trait, low on the Openness trait, low on the Conscientious trait, and high on the Agreeableness trait. A cluster analysis was performed for 2, 3, 4, and 5 grouping possibilities. None of these possibilities produced stable groups across all five traits. This result indicates that there are no personality groupings across all five traits. K-mean cluster analyses were then conducted using four out of the five traits for the five combinations with 2, 3, 4, and 5 grouping possibilities and, again, resulted in no stable groups among any four-trait combinations. The results indicate that there are no general personality profile groups within the principal population across all five, or even four out of five, traits in the Five-Factor Model.

The analysis of the survey did not produce any results where all five traits had a relationship with the task response questions. Instead, for the results that did show a connection

to personality traits, at most only three personality traits or less are potentially influencing principal opinions about tasks and strategies.

The results of gender, years of experience, district type, and school level showing no relationships with personality traits from the ANOVA demonstrated a generally homogenous sample with no obvious clusters of personality differences within the sample. It also shows no relationship between personality and the choice of a district or school type within the principal sample. The results of the Multiple Regression Analysis with gender and years of experience on the personality traits also demonstrates a generally homogenous group. No statistical relationship was shown with the Big Five Traits as the independent variable with gender and years of administrative experience as the dependent variable or with years of administrative experience as the independent variable and the Big Five Traits and gender as the dependent variables. These results show, statistically, that the Big Five Traits does not change over years of experience or gender and that the Big Five Traits do not relate to the number of years as a principal.

What role does personality seem to play in the way that principals prioritize the various principal tasks?

When conducting the ANOVA for the three personality groupings within each trait and task importance, there were no statistically significant relationships found. To ensure that there were no relationships, a multiple regression analysis was conducted for each task using the five personality traits, gender, years of administrative experience, and years of teaching experience variables. These results also showed no variables that had a statistically significant relationship to task importance. Looking at the means and standard deviation for each task, the results might indicate a hierarchy of task importance that could be further explained by the

interview results. Table 6, below, is the mean response and Standard Deviation for each task importance.

Table 6:		
Task Importance Average		
Task	Survey Response	
	M*	SD
6: Developing a safe school environment	9.87	0.42
3: Developing relationships with students	9.38	0.97
4: Communicating with parents	9.02	1.07
1: Formally evaluating teachers and providing feedback	8.85	1.47
9: Hiring personnel	8.84	1.48
7: Dealing with concerns from staff	8.81	1.12
2: Planning and implementing professional development	8.64	1.19
11: Managing student discipline	8.29	1.65
10: Managing personnel, school-related schedules	8.10	1.51
8: Managing budgets and resources	7.91	1.48
5: Counseling staff about conflicts with other staff	7.21	1.64
12: Managing student services (records, reporting)	6.49	2.28
Note: Items were measured on a 1-10 Likert Scale, with a 1 representing “not important at all” and a 10 representing “most important.”		

The results show the potential for three tiers of importance in the principal position that occur regardless of other individual variables, such as personality, gender, and years of administrative and teaching experience. The first tier of task importance are those tasks focused almost immediately on students and their families and have a mean above 9.0 with the smallest Standard Deviation. These tasks include developing a safe school environment (task 6), developing relationships with students (task 3), and communicating with parents (task 4). This would indicate that these tasks take more immediate priority over the other tasks in the principal position.

The next tier of tasks is those tasks that are more focused on teachers and their development, and that have an average between 8.5 and 9.0. These tasks include formally

evaluating teachers (task 1), hiring personnel (task 9), dealing with concerns from staff (task 7), and planning and implementing professional development (task 2). These tasks involve building trust with the school staff and accomplishing the goals mandated by the State of Michigan, such as teacher evaluations.

Finally, the tasks that are considered more 'managerial' in nature make up the final tier, with the lowest means and higher Standard Deviation. These tasks include managing student discipline (task 11), managing personnel schedules (task 10), managing budgets and recourses (task 8), counseling staff about conflict with other staff (task 5), and managing student services (task 12). These tasks are likely to be scheduled, but take lower priority when situations arise from either of the other two tiers and are the tasks that are most likely to be completed outside of school hours when the demands of the other tasks are no longer taking precedence. Overall, even though the results of task importance showed no impact from the other variables, it does indicate that the priority of tasks in the principal position is universal to the principal position.

What role does personality seem to play in the way that principals strategize to accomplish the various tasks?

The three groupings within each personality trait were utilized to measure group differences for task confidence using ANOVA. The ANOVA for the personality groupings and task confidence showed significant group differences, which were then followed up with multiple regressions analysis and included gender and years of experience. After the first multiple regression analysis for each task, another regression analysis was conducted where the variable that showed the highest P-values was dropped. This process continued until the model's adjusted R Squared no longer increased. The results are used to address the potential of trait activation within task confidence. Table 7A displays the results of the first multiple regression

analysis for each task, and Table 7B displays the results for the multiple regression, best-fit model with the highest adjusted R squared.

Table 7A:									
Primary Multiple Regression Analysis Results									
Task	Mean	R ²	Big Five Traits					Control Variables	
			N	E	O	A	C	Gender	Exp.
1: Formally evaluating teachers	8.78	0.204	-0.14	0.43	0.53*	-0.08	0.69*	0.18	0.05*
2: Professional development	8.56	0.233	0.29	0.52*	1.10*	0.16	0.26	0.45	0.02
3: Developing relationships with students	9.42	0.160	0.19	0.01	0	1.05**	-0.27	0.29	0
4: Communicating with parents	9.02	0.019	-0.12	0.03	0.22	0.5	0.01	0.49	0.02
5: Counseling staff about conflicts	7.79	0.060	-0.67	0.31	0.68	-0.26	0.07	0.53	0.02
6: Developing a safe school environment	9.10	0.083	-0.32	0.05	0.19	0.17	-0.15	0.15	0.03*
7: Dealing with staff concerns	8.58	0.058	0.11	0.27	0.28	0.23	0.49	0.08	0.03
8: Managing budgets	8.09	0.125	-0.63	-0.23	0.58	-0.53	0.54	0.47	0.08*
9: Hiring personnel	8.99	0.201	-0.15	0.30	0.49*	0.13	-0.75*	0.12	0.04**
10: Managing schedules	8.38	-0.020	0.16	-0.25	0.18	0.14	0.23	0.68	0.02
11: Managing student discipline	8.79	0.218	-0.81*	0.39	0.21	0.12	-0.29	0.77**	0.04*
12: Managing student services	7.49	0.095	-0.99*	0.14	0.12	-0.09	1.02	0.67	0.03
Average task confidence ^a	8.58	0.259	-0.26	0.16	0.38**	0.13	0.15	0.41**	0.03**
*p < 0.05, **p < 0.01. ^a Task Average is the mean response of all twelve task confidence questions.									
Note: Exp., mean years of administrative experience. Items were measured on a 1-10 Likert Scale, with a 1 representing “not confident at all” and a 10 representing “most Confident.” R ² is adjusted R Squared. N = 89.									

The first task, formally evaluating teachers and providing feedback, had a mean confidence response of 8.78. The mean indicates that the average principal has a high level of confidence in this task. When conducting the multiple regression, the best-fit model showed years of administration experience with Extraversion, Openness, and Conscientiousness showed statistical significance to the response with an adjust R Squared of 0.227, shown below in Table 7B. The Conscientiousness trait had the highest coefficient in this model, which suggests principals that exhibit a higher average goal orientation and organization might feel more confident in accomplishing this task, which includes significant organization and planning to accomplish.

Table 7B:

Best-Fit Multiple Regression Analysis Results

Task	Mean	R ²	Big Five Traits					Control Variables	
			N	E	O	A	C	Gender	Exp.
1: Formally evaluating teachers	8.78	0.227	-	0.47*	0.54*	-	0.76*	-	0.05*
2: Professional development	8.56	0.233	0.29	0.52*	1.10*	0.16	0.26	0.45	0.02
3: Developing relationships with students	9.42	0.194	0.18	-	-	1.06**	-0.26	0.29	-
4: Communicating with parents	9.02	0.019	-0.12	0.03	0.22	0.5	0.01	0.49	0.02
5: Counseling staff about conflicts	7.79	0.060	-0.67	0.31	0.68	-0.26	0.07	0.53	0.02
6: Developing a safe school environment	9.10	0.108	-0.35*	-	-	-	-	-	0.03*
7: Dealing with staff concerns	8.58	0.079	-	-	-	-	0.53*	-	0.03*
8: Managing budgets	8.09	0.125	-0.63	-0.23	0.58	-0.53	0.54	0.47	0.08*
9: Hiring personnel	8.99	0.219	-	0.35*	0.48*	-	-0.67*	-	0.04**
10: Managing schedules	8.38	-0.020	0.16	-0.25	0.18	0.14	0.23	0.68	0.02

Table 7B (cont'd)									
11: Managing student discipline	8.79	0.234	-0.81*	0.44*	-	-	-	0.71**	0.04*
12: Managing student services	7.49	0.126	-0.98*	-	-	-	1.10*	-	-
Average task confidence ^a	8.58	0.260	-0.34*	-	0.39**	-	-	0.48**	0.03**
<p>*p < 0.05, **p < 0.01. ^a Average task confidence is the mean response of all twelve task confidence questions.</p> <p>Note: Models were simplified to the highest adjusted R Squared. Exp., mean years of administrative experience. Items were measured on a 1-10 Likert Scale, with a 1 representing “not confident at all” and a 10 representing “most Confident.” R² is adjusted R Squared. N = 89.</p>									

Task 2, planning and implementing professional development, had a mean confidence response of 8.56. The mean indicates that most principals are confident in this task. When conducting the multiple regressions analysis, the original regression analysis was the best-fit model, and only Openness and Extraversion showed a statistical significance to the response with an adjusted R Squared of 0.233, which is shown in Table 7A and 7B. The coefficient for Openness is the highest coefficient for the Openness trait for any of the task confidence models. Openness trait facets include being inventive and thinking. The results also show the highest coefficient for the Extraversion trait of any of the task confidence models. The results indicate a strong potential relationship between planning and implementing professional development and the Extraversion and Openness traits.

Task 3, developing relationships with students, had a mean confidence response of 9.42. When conducting the multiple regressions analysis, only Agreeableness had a statistical relationship with an adjusted R Squared of 0.194 for the best-fit model. Table 7B shows the highest coefficient for the Agreeableness trait among the task confidence models and the only task that demonstrates a statistically significant relationship with Agreeableness. The

Agreeableness trait includes the facets of trust and altruism, which may activate when developing relationships with students.

Task 4, communicating with parents, had a mean confidence response of 9.02 with no variables having a statistical significance, which suggests that the variables included in the survey do not have a relationship with developing confidence in this task.

Task 5, counseling staff about conflicts with other staff, had a mean confidence response of 7.79 with no variables having a statistical significance. This task also had the second-lowest confidence response among the twelve tasks.

Task 6, developing a safe school environment, had a mean confidence response of 9.10. The multiple regression best-fit model resulted in Neuroticism and years of administrative having a statistical significance and a low adjusted R Squared of 0.108. The results mean that ten years of experience would cancel the negative relationship of a Neuroticism trait 1.0 above the sample mean. Neuroticism includes the facets of worry and vulnerability, which could be activated when developing a safe school environment.

Task 7, dealing with concerns from staff, had a mean confidence response of 8.58 with only Conscientiousness and years of administrative experience having a statistical relationship in the best-fit model, with a low adjusted R Squared of 0.079. The results show a generally weak relationship between the variables and confidence with this task. The Extraversion trait has the facets of warmth and positive emotions, which may activate when dealing with concerns from staff and years of experience.

Task 8, managing budgets and resources, had a mean confidence response of 8.09 with years of administrative experience having statistical significance and an adjusted R Squared of

0.125. The coefficient for years of experience is the highest among the task confidence models, indicating that years of experience greatly improves the confidence with this task.

Task 9, hiring personnel, had a mean confidence response of 8.99. Many variables were statistically significant with this response, including years of administrative experience, Extraversion, Openness, and Conscientiousness in the best-fit model, with an adjusted R squared of 0.219, which is shown in Table 7B. The most surprising result is the coefficient for the Conscientiousness trait as the trait is negatively associated with the confidence of this task and is the only task confidence model that has a statistically negative relationship with Conscientiousness.

Task 10, Managing personnel and school-related schedules, had a mean confidence response of 8.38 with no variables showing a statistical significance in any multiple regression model.

Task 11, managing student discipline, had a mean confidence response of 8.79 with Neuroticism, Extraversion, gender, and years of administrative experience, all showing a statistical significance in the best-fit model with an adjusted R squared of 0.234, shown in Table 7B. This task shows gender having the highest statistical relationship to the confidence of the twelve tasks. Gender shows a similar magnitude to Neuroticism, indicating the potential that female principals with higher Neuroticism would have an offsetting effect in the confidence of managing student discipline.

Task 12, managing student services (i.e. records, reporting), had a mean response of 7.49 with Neuroticism and Conscientiousness having a statistical relationship, and an adjusted R Squared of 0.126 for the best-fit model. This task had the lowest average confidence of the twelve tasks. This task also shows the highest relationship between Neuroticism and any of the

task confidence models. Conscientiousness had the highest relationship to the confidence level of this task among the twelve tasks and showed a potential offsetting effect between positive Conscientiousness and negative Neuroticism. Conscientiousness has the facets of order and dutifulness, which would be activated to accomplish this task.

Looking at the average confidence for all twelve tasks, the sample average was a mean of 8.58 with Neuroticism, Openness, gender, and years of administrative experience having a statistical significance with an R squared of 0.26 for the best-fit model, shown in Table 7B. The results demonstrate a general consistency of years of administrative experience having a positive relationship with the average confidence in tasks, that Neuroticism generally has a negative relationship with task confidence, and surprisingly the Openness trait being the only Big Five Trait to have an overall positive relationship with average confidence and having an offsetting relationship with Neuroticism. Agreeableness and Conscientiousness do not have an overall statistical relationship with task confidence, which is surprising since the traits are, on average, higher for the principal population.

The final analysis performed with the survey data was the bivariate logistic regression analysis with task improvement responses. For this analysis, a bivariate logistic regression was performed for each task with years of administrative experience, years of teaching experience, gender, and the big five traits to determine if any variable influenced predicting if a principal would indicate that they had improved in that task. Below are the only two tasks that had positive, statistically significant, and meaningful results.

Task 11, managing student discipline, had the highest R squared of the log regression tests with an R squared of 0.314 and the personality traits of Neuroticism, Openness, and

Agreeableness having a statistical significance. The Agreeableness trait had the highest positive relationship with predicting that a principal would indicate this task as most improved.

Task 12, managing student services (i.e., records, reporting), showed only Neuroticism had a statistical significance in predicting if a respondent would not select the task as improved, with an R Squared of 0.220.

The results from the survey show a generally positive influence of years of administrative experience on the confidence in the twelve principal tasks, as demonstrated in Tables 7A and 7B. The results demonstrate the assumption of an overall negative influence of Neuroticism on task confidence and the surprising result that Openness had an overall positive relationship with task confidence.

The results indicate that personality showed a little overall relationship in predicting how principals believe they have improved in the various tasks. Likely, giving the respondents three tasks to choose from for most improvement might have made too much overlap. Principals may have been more likely to select similar tasks regardless of personality than if the respondents choose only one task.

Overall, the survey data shows that personality showed some relationship with how principals feel about their role in the principal position, which is one way of showing how personality might play a role in how principals think, strategize, and behave in the principal position.

Interview Data

Table 8 describes the 14 practitioners who were interviewed during this study. The figure includes gender, years of administrative experience, district type, school level, and their survey scores for each trait from the Big Five Inventory. As previously mentioned, the sample means for these principals are statistically equal to the rest of the survey respondents.

Table 8: Interview Participants									
Name	Gender	Admin. Years	District Type	School Level	N	E	O	A	C
Ellyn	Female	34	Suburban	Elementary	2.75	2.88	3.80	3.78	4.00
Liz	Female	7	Rural	Elementary	2.63	3.75	3.90	5.00	4.44
Kristin	Female	15	Suburban	Middle School	2.50	4.38	3.60	4.44	4.44
Travis	Male	17	Suburban	Central Office	3.75	3.13	3.40	4.44	4.78
Joe	Male	18	Rural	Middle School	2.63	4.00	3.30	4.56	3.78
Bruce	Male	8	Rural	High School	2.75	3.13	4.70	4.11	4.78
Justin	Male	2	Rural	Elementary	1.88	2.88	3.80	4.89	4.33
Stephen	Male	1	Rural	Elementary	2.25	2.75	3.90	4.56	4.00
Kelsea	Female	4	Rural	Elementary	2.88	5.00	3.60	4.11	3.89
Laurie	Female	19	Urban	Elementary	2.25	3.00	4.00	4.44	4.67
Tyler	Male	18	Urban	Middle School	2.25	3.50	3.30	3.78	4.44
Jeff	Male	3	Rural	Middle School	3.88	2.50	3.70	3.67	4.11
Drew	Male	10	Urban	High School	1.75	4.38	4.30	4.67	4.22
Kathy	Female	7	Suburban	Elementary	2.50	4.25	3.90	4.22	3.78
Notes. Names have been altered to protect the confidentiality of the interviewees.									

What, if any, are the general personality profiles of principals?

After transcribing and coding the interviews, thematic codes were analyzed across the interviews and within the ranges of the personality traits across all five or four out of the five personality traits. No codes resulted in clusters across all the five personality traits. The results show that there were no personality profiles within the principal population from the interview data. Even though there were no general personality profiles of the principal population from the

interviews, there were some relationships between codes and individual behaviors that clustered within a couple of personality traits.

What role does personality seem to play in the way that principals prioritize the various principal tasks?

The interviews showed that personality had very little relationship with prioritizing the tasks for principals. The results from this section will demonstrate the universal prioritization of tasks, with students and parents as the top priority, followed by building trust with the teachers and planning long-term goals for the school. In general, there are planned tasks by the principal, which are mostly lead by district priority; however, when a crisis occurs involving students or other adults, that will take priority over the planned tasks.

Students and Families

When asked how principals prioritize and plan to tackle the various challenges, principals mention prioritizing the needs of students within the school as a top priority. At the elementary level, trauma was one of the top concerns and priorities of principals. Additionally, principals mention not having much control over the tasks they must accomplish throughout the day and the year. The day-to-day tasks are dependent on the events of the day, with the needs of the students taking priority over any other planned tasks. Kristin responded to the prioritization question with:

I think that, obviously kids in crisis come first regardless of whatever. Even if I'm out of the building, I'm at a meeting, and so and so is having a crisis, there's staff here to deal with it, but sometimes I need to be there to support the staff.

And later in the interview, she says,

I am definitely a planner. I make lists, I check things off. I still do that, but I have to recognize that things aren't going to be done always when I want them, how I want them. I just have to say, "Okay, well that's not gonna happen, today. I'll try for that one, tomorrow." And, I think that's how kids work. You think that they're one way, and then as you get to know them, you're like, "Nope, actually you're gonna need this, instead."

both quotes mention the principal needing to reorganize her schedule around the top priority of students. There are plans for the day, but often events occur that change those plans. These quotes also highlight the continual amount of organizing and reorganizing that occurs in the principal position. Students were consistently the top priority of school principals.

When asked how Stephen makes decisions for the school when he is given flexibility, in this case, with budgeting, he responded with, "It goes through my filter of, 'Is this what's best for the kids?'" If it addresses a need for a population of our students that we need to address, then we go ahead with it." This quote demonstrates the focus that student takes priority both when doing individual research and when focusing on day-to-day tasks. Some form of focus on 'what is best for the kids' was mentioned during all of the interviews.

Adult issues also took priority over other more managerial tasks or plans of the principal; however, students still take the higher priority. Ellyn explained the challenges that occur with the principal position and how she has learned from the role and said,

You deal with people all the time who are confrontational. You deal with parents, right before you walked in there was a mom that was all up. And that's when I really try to be a good listener and I always, like in this situation I said, "I'll investigate the situation and next week we can sit down and talk about it once I can gather more information." And I don't know that she was really happy with that because I think she just wanted me to pounce at it, and I'm not going to do that. These are kids that are involved, and kids will be kids.

This statement shows layers of prioritization occurring in a single event of the day. The principal must reorganize her planned daily tasks to be available to another adult, in this case, a parent. She also still maintains the top priority of students, in this case, protecting them before

making an investigation. The behavior relates to that tier of tasks and prioritization that occurs in the principal role, with students taking the top priority, then adults, both presenting new tasks that the principal must address. This demonstrates that the priorities of the principal might, sometimes, be out of their control.

Even for principals that have assistant principals working with them, immediate student issues do come up. Bruce described how he generally breaks down responsibilities between himself and his assistant principal:

The way that we operate is most of the kid issues are hers, and all the adult issues are mine. That's how we divvy it up. That's not to say that I won't do a discipline referral or especially if we have some big incident with multiple kids and it's all hands on deck. In terms of plans with kids and all those kind of things, that's her strength, and so then I deal with the curriculum instruction and adult kind of stuff.

This statement shows his willingness to tackle student issues that occur throughout his day, even if it is not in his designated area between himself and his assistant principal. These statements from Kristin, Stephen, Ellyn, and Bruce show that students taking the top priority are consistent despite the years of administrative experience, going from one full year to 34 years of experience and across school level. The focus on students as the top priority is also consistent across the ranges of the personality traits.

Building Trust

When discussing those weekly and yearly goals of the principal, after students, the top tasks are those involved with building relationships and trust with the school staff and implementing the goals of the district. Building these relationships takes priority over the personal goals of the principal. Stephen mention his focus for the first year being,

My first year, I really focused on building relationships. That's really the key in that first year, is that you start to know who all the players are. When I say "players," among your staff, among the families, among the children. Even

knowing, within the kids, who are the ones that are going to need what? Starting to address that, and then helping them understand that I'm here to remove any barriers from learning, period. If there's something that's keeping you from being the best that you can be, then tell me what that is. Let's see if we can get it out of your way. Building those relationships was year one.

This quote demonstrates that even first-year principals have their initial priority going into a new school as relationship building and understanding the culture of the school, both with the teachers and students and families.

Kathy mentioned her top priority by saying, "I need teachers to feel supported. If they feel supported, they are going to do what's best for kids. I don't want them walking on eggshells." This quote demonstrates a rationale for why building trust and support is so important: that it is vital to helping students.

Building trust is the necessary step before more significant changes can occur within the school. Another more recent principal, Jeff, discusses his priority and reasons for that focus,

The first priority there was to build trust among the staff. You'd think it would be with the administration, but I thought it was better to build trust among the staff, and then, as I'm doing that, I'm kind of ultimately building trust with them (the administration) as well. We do monthly team-building exercises where the staff has to overcome some obstacle together. That has worked out very well. It's really allowed some people to be voices.

This quote further demonstrates both that focus on building trust and the rationale that it is necessary to make other changes happen. The last principle that will be mentioned is Justin, who highlights both multilevel prioritization and a rationale for why:

I talked a lot about the relationship aspect of it. I think it's a huge plus in this role. I think it's something that needs to be invested in. I've seen others not invest in it and I think it can really hurt them down the line because that trust isn't built. On the other hand, I think it's something that makes it very difficult at times with the job, because like I said where you get in those situations when something happens and you have to discipline someone, makes uncomfortable situation, especially for me. The relationships with the kids too I think is crucial. I talked a lot about staff and talking about that, but I truly do feel and I try to show it that it's those relationships with the kids that are key.

Justin demonstrates that focus on both students and teachers and mentioned one reason for this opinion being his experience from seeing other principals not invest in building trust within a school. These quotes demonstrate that principals have a focus on building relationships throughout the school, from the time they enter the principal role and going forward. Most of the principals mentioned this priority as necessary to make other changes happen. The quote from Justin suggests that the high focus on building relationships is learned from experiences and values rather than personality traits.

District and State Policy

The final area of prioritization was the influence of the district on the principals' long-term goals, with many principals mentioning a frustration with the education world continually trying to implement new policies. Travis, from the district office, gives an analogy for this:

So, I give the example of my iPhone. I can update all apps or update one at time. In education, we hit update all the time, and then the little pie chart comes when it's loading your app and it goes really slow if you hit update all. It'll say like updating 120, it takes forever for your phone to actually update the app. Where if you hit one or two, it's like quickly done, done, done. We hit update all in education all the time... And I would say, a lot of them are just ineffective 'cause this concept of false-starts. Like, you start but you never get back to it, and that's where I see we build cynics in teachers and don't really help them find success because we don't see anything through the end or give them the support they need to become good at what we're trying to teach them.

This quote highlights that many policies get selected to be implemented and that many of the individual goals and tasks get chosen from outside of the principal's control. The principal is, instead, charged with strategizing and developing the school system to allow for implementation. Tyler highlighted his frustration with this system by saying:

What's difficult is when an initiative was thrust upon you that you do not seek out. And that seems to be a pretty common thing that occurs in this profession. Everybody has a boss, and I don't know who's just come into this profession, but there are peaks and valleys and there are things that are popular

that, oh, well I reckon they're doing it so we have to do it, whether it's appropriate or not. And when things are out of my control, and I'm told to do something, and I have to get in the front of it and I have to make it work as best as possible, again I do what I can to keep as much things away from the staff that stops them from working.

He mentioned both his frustration with the continual churn of new education programs to implement and his attempt to try and shield teachers from these new initiatives. Later in the interview, he directly mentions the influence of the district on his tasks with,

We have a weekly checklist of items that have to be done that are sent from the central office. And they range from make sure this information gets out to your newsletter, to this event is coming up, please make sure the students are aware and that they attend, to directions for printing report cards, it's a very busy, task-oriented communication.

Both Justin and Tyler demonstrate that they have less control over the tasks and policies to accomplish, which are instead dictated from the district or state policy level instead of allowing a principal to prioritize policy at the school level.

Bruce mentioned having to filter out incoming initiatives from other education groups, which distracts from education goals. He provides this example:

The overall overarching focus of everybody is what's best for our students, and what's best for our students is often defined as getting them ready for post-secondary, whatever that is, whether it's a job or college or whatever it is ... Then stuff comes in all the time, all the time that has nothing to do with any of that, all the time. Having to have that filter and say, "Is this something that ..." I mean, you'd be amazed at how many people want to send drunk driving simulators to schools. It's incredible. I mean, I get three calls a year about that. Well, that's all fine and good, and we do it every so often, but I use that as an example not because drunk driving isn't important but because there are lots of things that can distract from the work that you're supposed to be doing. Everybody's got an assembly. Everybody's got a motivational speaker. Everybody's got this and that, and being able to stay focused on the work that's important is key.

This statement highlights that, not only are principals maintaining the high importance of the students within the school, but they also must filter initiatives from education groups, in addition to the priorities from the district, and State policy. The quotes from Justin, Tyler, and

Bruce demonstrate that the district and state policy largely dictate the long-term goals of the principal. After those goals, day-to-day events alter the planned schedules of the principal, leaving little room for principals to set their priorities for the school. It appears that experience, the nature of the position, and outside forces have more of an influence on prioritizing principal tasks and goals than personality. This final quote from Stephen brings this research question altogether by highlighting the priorities for the day are ultimately determined by others, and that the lower-tiered tasks of the day or week are completed outside of school days and hours:

I do a lot of my work at home. Like I said, when I have a vision for my day, and everybody else has a different vision, they usually win. Then I take the rest of the stuff home with me... The good news is, I actually took the snow day and went through it, and filed, and organized, and did all that stuff ... Ultimately, with this job, yes. I would say that it's easier for me to sit at home and do it when I have control over what's going on with my time. Whereas at school, I have to be available, so I don't necessarily always have that time to do that.

What role does personality seem to play in the way that principals strategize to accomplish the various tasks?

The next research question to address is how personality might play a role in how a principal goes about accomplishing tasks. The interview allowed for more variation in response and had the potential to show how personality might be playing a role in those strategies. The areas of strategizing that had variation, and that could potentially link to the personality traits, center around how principals gather information to make decisions and understand the school's culture, implement decisions being made, and how principals learn in the position. Combinations of some personality traits showed a relationship between how principals think and strategize for the role. Though the behaviors do not cluster around all five or four traits, some behaviors do appear at various high, medium, and low combinations of some traits.

Researching

The first strategy that seems to relate to the personality traits of the principal is related to gathering information, both to find options for addressing problems in the school and understanding the culture of the school.

Conducting researching outside of school hours is explained in the prioritization research question, where, due to the demands of the school in controlling the tasks of the principal during the day, there is little time to conduct independent research while school is in session. Stephen described researching playground equipment in response to additional incoming students and noted that he conducted that research outside of the school day, as previously highlighted:

Me: Do you find yourself doing a lot of research on things of what to spend? Do you delegate that to others?

Stephen: Depends. When it came to the playground, I knew the staff felt there was a need. I certainly felt there was a need, because if we're going to have an additional 25 kids in each grade level out there at recess, then we need space for those 25 kids. Adding a climber that had a capacity of 24 got us to that point where we felt like we had increased the capacity to do that. When it came to the research and figuring out how to go forward with that, I did all of that research, and then put it out in an email to staff saying, "I have a printout of what I'm looking at. If you have any input, please stop in the office, take a look at the specs, and let me know what you think." I got just really positive feedback from it. I don't think that we necessarily always have to convene a committee to look at all those things, because sometimes that just slows you down to the point where ... People have a lot of other things on their plate. Am I really using their time well? I can sit home on the internet and find the right structure. Most of the time, I would say, if they come to me with a need, they've already done a little bit of research on whatever it is they want. Then I just have to make sure it fits the kids, and then we go forward with it.

This quote demonstrated a general attitude towards conducting independent research for more minor scenarios, then presenting those options to the teachers for final approval. He also mentioned being open to the independent research conducted by teachers in the school, demonstrating a higher value when independent research is conducted and brought to his attention.

Kelsea also mentioned conducting independent research outside of school due to the higher priority tasks that had to be completed during the day,

I would say it's in bits and starts, and it's not always the best. I mean our jobs are so all consuming just with, and then that's not even talking about, I mean I have two young children that are extremely busy and active and I have a family life as well so kind of balancing all of that doesn't leave a lot of time for continual education. I try to do a good job of journal articles. So when I lay down or whatever at night to go to bed there's certain things that I'm interested in and like nationwide policy or state stuff that I kind of catch up on at that point.

The quote demonstrates that even with the demands that come with the principal position, many principals still make time to conduct independent research outside of the school. This type of behavior was mentioned across the entire range of the personality traits throughout the interviews.

There was a subgroup of interviewees who not only used independent research to research options for the school but used the time to evaluate what decisions to make for the school and focused on implementing those decisions. This was a higher-level activity than just conducting independent research to bring to the school for discussion or keep up with current events. This type of behavior was found clustered at the Openness trait at or above 3.90 and Conscientiousness trait at or above 4.0, meaning high on both Openness and Conscientiousness traits. The Openness trait related to thinking and objectivity with the goal orientation of the Conscientiousness trait. Bruce describes a failure that had occurred early on in his career at his high school:

Me: Going to the negative side, so have you had any instances where either from your gut reaction or just your gut instinct where you just attempted something, and you tried it, and it just didn't work, or something just fell apart? How did you process that? How did you learn from that? How did that inform you going forward?

Bruce: I think it was my second year. I'm fresh out of Michigan State's master's program. We had read Data Wise out of Harvard. I was like, "Oh, this is great. My staff will get this." We scrapped what we had done for a couple of years

in terms of professional development staff meetings, and we did this whole Data Wise process. I built in, and I forget who the author is, but the book's called Root Cause Analysis, and it's all about five why's and digging down to the root cause of problems. I built this whole yearlong professional development thing around that, the Data Wise process and the Root Cause Analysis piece, and I did not in any way, shape or form prepare the staff well enough to effectively manage that.... Finally, I don't know it was probably February or March, and I had one of my department chairs, good guy, good staff leader, came up to me after a staff meeting and said, "Bill, this isn't working. We need time within our departments. We're not spending enough time building relationships and talking through things. This isn't working." What we were doing was really by the book. I mean, it was like PLC 101. That conversation, in particular, was important to me because it did cause me to step back and reflect, say, yeah, you know what? This probably isn't working. We scrapped it. We have a great PLC process now. It's data-rich, and actually, a lot of what we do in the work that we do for data analysis is pretty heavily rooted in Data Wise and the Root Cause stuff, but six years later we're a lot farther along in our journey of data analysis. We made it into something that was useful to us. It wasn't just, "Here's this book out of Harvard. We're going to follow it." That was a good lesson for me.

The quote demonstrates the initial impulse of someone high in Openness and high in Conscientiousness wanting to implement something they had researched, and then, when implementation failed, reflecting on how to better implement things by matching the approach to school culture. Reflection is another facet of Openness, which may be activated when a failure occurs. Bruce later mentioned his work with Marzano Laboratories by saying:

One of the things I learned through my doctoral work at Michigan State, there was a heavy component in our program around schools being the center of a community and understanding that. That's a big push. We have a lot of community engagement on the part of our kids... that High Reliability School certification level one is a safe and collaborative school environment... This year we're working on level two, which is effective instruction in every classroom... A lot of our professional development is centered around that, and it has been for a long time, not just because we're doing the certification process this year. I think that's a part of our culture as well.

This quote demonstrates that Bruce has an interest in implementing things learned from academia, but has learned instead to adjust how he implements these strategies by slowing down the implementation of new policies while building up the capacity of the school. This preference

towards conducting individual research and seeking academic research to inform a principal's decision making and trying to implement that knowledge was mentioned during interviews with Liz, Bruce Laurie, and Drew. Liz had mentioned the push to implement the knowledge learned from trauma research and the Adverse Childhood Experiences Study, and the difficulty of getting all the teachers on board,

I only have two or three people out of my staff of 80 that need to retire, that think that trauma and form care is B.S. And that if these parents would just spank these kids they'd be fine. But they're going to retire. And if they don't retire this year, they'll definitely be retiring next year, because their evaluations aren't looking very good this year.

This demonstrates the struggle of getting all the teachers aligned with academic research, appreciating those teachers that are aligned, and pushing those teachers who are not onboard out. The quote also demonstrates a focus on accomplishing goals that have been focused on by the principal, which is another aspect of Conscientiousness. This focus on how to implement academic research, even when faced with opposition, was mentioned from these four principals as well. None of the four mentioned reconsidering the decision made. This reaction makes this behavior type potentially meaningful, as it not only links to decision-making strategies but also implementation strategies. The behavior was mentioned from principals across district type, school level, and gender.

Another type of information gathering strategy, which also links to implementation strategy, is comfortable with and uses data to inform decisions. With the focus on using data to demonstrate school improvement and evaluate principals, those principals that might naturally have confidence in using data might have an advantage. Those principals that had a lower Extraversion trait (at 3.125 and below) and higher Conscientiousness trait (at 4.0 and above) demonstrated having a deep understanding of, and initial comfort with, how to use data to inform

decisions. Four principals mentioned initial comfort with data and how they utilize it in their role. This includes Stephen, Laurie, Jeff, and Bruce. Stephen discusses using data to figure out what the school should focus on:

I think, in a lot of cases, it's showing them the numbers and just saying, "Look. Here's what our data is showing. It's showing that we have these five or six students who have regular difficulties with behavior." When we look at these five or six students, most of them already or are in the process of getting an individualized behavior plan. When we think about it, out of 19 classrooms, and we have five or six kids, we can't sit here and generalize that we have this big behavior problem. I will say, quite frankly, having had experiences in other districts, I see a lot less behavior issues in my current school than what I would see in other districts that I've worked in. I think it's perspective. I think when you're in the middle of it, you feel like it's everything, when, really, it's a very minor thing when you think about less than 1% of our kids. I guess it's less than 2%, but not less than 1%, now that I think about it.

Stephen demonstrates how to use data to focus the school, instead of solely relying on his past anecdotal experience. The quote might also display the order and dutifulness in pursuing data, which is facets of the Conscientiousness trait. Data also appears to be a way for some principals to try and limit the number of initiatives undertaken by the school by identifying those initiatives that are not as vital to the overall school performance. Jeff also describes discussing data with teachers to build acceptance of using tests and get buy-in:

A lot of times, I'll often beat around the bush at getting to the idea that none of us are trained in actual test creation, and so it's very hard for us to make those calls. Just because one kid didn't do well doesn't mean it's an invalid test. When you look at the information that we got from the test, you've got a standard deviation that's under 5, and you tested 550 kids, it's not an invalid test. That's a very reliable and very valid test. It means that you are going to get pretty much the same results 100 times if you made them take it 100 times. Getting everyone to understand those nuances, though, is brand new, because now, instead of just throwing around the words reliability and validity, trying to make sure that you're making them back their work with their own data. Everything needs to be backed up. Everything needs to be solution-based. Using that strategy, we've been able to overcome a lot more problems, just emphasizing data.

Jeff highlights the struggle of convincing teachers to use the information that comes from data, and that he has comfort with, and understanding of, the reliability and validity of data. Finally, principals used data to build confidence in themselves and defend their decision to detractors. Bruce mentioned the role of data in building his confidence as a principal:

One other thing that gives me confidence is I have a pile of data that shows what we're doing is working. It changes the conversation when you're in a room, and you can say, "Look, we're doing the right thing. I know we are because of this." You know this going through your work, data can say lots of different things.

This demonstrates the final way that data used by principals as another implementation strategy. By understanding how to use data, Bruce used the results from decisions to get further buy-in from the teachers and maintain their commitment to those decisions. Achievement striving is another facet of Conscientiousness, and a principal higher on the trait might seek more way of demonstrating achievement. Comfort and understanding of data have many implications in both how principals gather information to make decisions, and how they implement those decisions. It is important to mention that, although these principals appeared to have a natural preference and understanding of how to use data, principals outside this group mentioned learning how to use data once in the position. It is not that case the principals outside of this group were unable to understand how to use data.

Another strategy for gathering information to inform decisions is to use the experience and knowledge of teachers within the school and other principals within the district to supplement the knowledge of the principal. Ellyn mentions using the knowledge of the various departments within her school to inform decisions on how to spend appropriations:

I give it to my grade levels or to my departments, and I'm like, "Okay, you have \$500. Before you buy something you have to put in a request so obviously it makes sense." But they know what they need, I don't know what they need. I don't know that they need new scales for science.

Instead of doing independent research or using test scores, Ellyn allows the internal knowledge and experience of the Science department to make the final decision on how to use appropriations. Another elementary principal, Justin, whose content knowledge was Math, explains how he gathers knowledge on how to make curriculum decisions involving English:

That's where I really like our (district) team. We've got another principal in the district who that's what his degree is in, his Master's is in English, along with our curriculum director, so I rely on them. I'm not going to make any changes in this building without talking to them.

The quote demonstrates that the first instinct of Justin is to utilize the internal knowledge of the district to make decisions, as opposed to conducting individual research or some other strategy. The preference of using the internal knowledge within the school or district to gather information for decision making was mentioned by Laurie, Ellyn, and Justin. These three principals varied across ranges of the personality traits except for Extraversion, where they were all between 2.875 and 3.0. This could represent a moderate level of assertiveness and activity from the Extraversion trait. The scores are in the middle of the distribution of the Extraversion trait for the principal sample.

Many principals mentioned enjoying going to conferences or in-person professional development as a strategy to gather information to inform decisions. Due to financial constraints, many principals also mentioned an inability to go to conferences that they would have liked to attend. However, three principals mentioned not only enjoying conferences but actively pushing to attend, even without support from their district. Kathy mentioned fighting to get herself and another principal to a conference on trauma,

I'll go to PD, and afterwards, he'll be like, "You didn't ask about that. Why'd you go?" It's always questioning. But I know if I ask beforehand it'd be an absolute no. I think that's part of the frustration too, is I feel like I'm limited in what I'm allowed to do and learn. Myself and another principal went to Kansas for

professional development on trauma informed practices, because we found our student population really needs it. We have a lot of students that come from trauma backgrounds. We have a huge foundation of understanding. We've been to Kansas twice. We went in the summer. We went back over our fall break. It's all on our own time, so this is not even school time we're doing this. We are going and talking at other schools and districts and conferences, but the curriculum director still has not even heard us say anything about it. He won't talk about it. He does not want to address this. He's going to pretend we never went, and we don't have the learning. It's frustrating that we can't even talk about different ideas as a group and learn from each other, when we have this knowledge, but we have to not talk about it.

Instead of conducting independent or internal to address the issue of trauma in her school, Kathy not only mentions a preference for utilizing in-person professional development, but a willingness to circumvent the district to get to those events. These three principals were clustered around the middle of the Neuroticism trait (2.50 to 2.63) and exhibited higher than average Extraversion (3.75 to 4.25). The higher level of Extraversion would be an excitement-seeking and positive emotion, and moderate Neuroticism could be impulsiveness and worry, which could be activated during a conference and motivate principals to seek conferences.

The final research method mentioned in the interviews involved tiered research, which is like internal research, but with the addition of assigning a research objective to a group of teachers to tackle a problem. The groups then present several options or consider one option to implement as a solution for the school. Justin describes this process:

A lot of what we did last year, and I'm going to keep going back to the math side of it because that was where a lot of the changes that I made last year and are still going on this year, we would start off and we would have conversations around research articles. I would bring in an article, we would read it, we'd start to have a conversation about it, we'd talk about the pros, the cons in it. We'd talk about what does it look like with our current teaching practices, what are some things that we would need to change, what are some things that are going on well. I think getting people to see the research, reflect on their own practices, and then look and start talking about what changes we can make according to that.

This strategy combines some individual research with the experience of the teachers in the school. It is also important to note that Justin utilized both individual and tiered research methods with this process. However, while academic research was used to inform the principal's decision-making process, the initial individual research strategy is used to narrow the focus of the teacher group to digest the material. This strategy links to implementation as it helps to first get teacher buy-in on a new proposal, as well as shape the knowledge to implement the proposal to fit the operations and culture of the school. Stephen mentions how he forms these teacher groups:

I also try to find the leaders in my staff and ask them to lead. For example, we have different groups that are studying different topics in our professional development, so they have a teacher leader who's leading that who is our resident expert, or someone who's passionate about that topic.

The preference and utilization of this research strategy was mentioned in interviews with Laurie, Kristin, Stephen, Joe, Justin, Kathy, and Drew. All seven of these principals were at, or above, 4.22 on the Agreeableness trait and at or below 2.63 on the Neuroticism trait. High Agreeableness relating to trust, straightforwardness, and modesty, while lower neuroticism relates to calm and encouragement, which are represented in these quotes. When conducting research, the findings from the interviews indicate that all five traits could be influencing the preference of which strategy to use when researching school improvement options. Some of these strategies also extend to other areas of the principal role, such as decision-making and implementation. It is important to note that none of the principals demonstrated a preference to use only one strategy and, instead, utilized several strategies to gather information to inform decision-making. These clusters of personality traits that might influence decision-making may change from strategy to strategy.

Understanding School Culture

The prioritization of tasks demonstrated the importance of building relationships and trust within the school. The first step to accomplishing this goal also involves information gathering, in this case, gathering knowledge about the school culture. The school's culture is the organizational source in the Trait Activation Framework. This is then used to make additional decisions, build trust, and implement change. This type of research deserved its section within strategies for gathering information because the information gained from these strategies is vital to the success of implementing any of the changes resulting from the other research strategies.

The first strategy for gathering simple information about the school culture is to walk the halls of the school. The strategy was utilized across school level, district type, and personality traits as a way of gathering information about the school and building trust in the principal's relationship with teachers. Jeff, the least Extroverted principal interviewed, mentioned how he goes directly to teachers to gather information,

I have a ton of informal meetings, too, because I know everyone's prep. I typically, if I get an idea that's mulling around in my head, that I think somebody in the building can particularly be helpful with, I'll walk in during the prep and usually open with, "Hey, I was thinking ..."

The behavior demonstrates the impulse to go directly to teachers to ask questions instead of waiting for a formal meeting or calling the teacher down to them. The lower Extraverted principal may feel most comfortable gathering information from a few individuals at a time. Going down to a teacher's classroom also demonstrates a level of respect for the teacher. Rather than using the knowledge of a teacher's prep time to call that teacher down, he instead goes directly to the teacher to seek their knowledge. This impulse to go out of the office and directly with the school was mentioned by Kristin, who was the most Extroverted principal interviewed.

During her interview, she mentioned how she gathered information about a new school she was temporarily assigned to mid-year:

Researcher: How did you start to learn the culture? Did you just try meeting with people one-on-one or something else?

Kristin: Yeah. Some of that. Some of it was really just walking around and observing. Looking at how people interacted, looking at how they had things set up, like, "Hm. Okay. How do they run their bus duty?" Their bus duty was totally different than how we run our bus duty. Some of it was watching, and then it was asking a lot of questions and just say, "Oh, I notice you have somebody out in this area. What does that person do? How come you decide to have the kids come down this way?" It was an understanding of how; this is how they like to organize their environment. This is the value they put in. They have people out at the bus loop, which means they're concerned with safety. They have people at the parent pick-up, which means they're also concerned with also connecting with those parents. When they came in, in the morning, a lot of teachers were outside of their classrooms, and the specials teachers were at the front entry. If the kids walked in, they were there, "Good morning, good morning, good morning." And it was every day. No one asked them to do that. But, to me, that was, okay, they really wanna make these kids feel welcomed, first thing. They wanna be visible; they see the importance of greeting them, first thing in the morning, and starting their day off, right. Some of it was just, somebody could've written a list for me, but that wouldn't make sense. I really had to see it and feel it, in order to really, truly understand it.

The quote displays not only that she enjoys being in the most active areas of the school, but also interacts with the environment to gather school culture information. Excitement-seeking, warmth, and positive emotion is represented in this quote and are also facets of the Extraversion trait. One hypothesis was that principals higher on the Extraversion trait scale might prefer being outside of the office, while principals lower on the trait might prefer to stay in their office. However, informally walking around the school and asking questions was found across all the ranges of the personality traits. Within this behavior I did observe more subtle differences. The less Extroverted principals walked directly to individual teachers' rooms to ask planned questions, while the more Extroverted principals walked around more freely and asked questions without a planned conversation in mind. These differences show how even this simple strategy

of walking around the school to gather information may take different shapes when executed by persons with different personality traits.

Another simple strategy utilized by many principals is the establishment of an open-door policy, where other people in the school were free to enter their office. This strategy was highlighted in interviews with principals who had a higher Agreeableness trait (at or above 4.22), and a lower Neuroticism trait (at 2.50 and below), and was mentioned in interviews with Stephen, Kathy, Kristin, and Drew. The strategy includes elements of trust and straightforwardness with less worry and encouragement, which is represented in high Agreeableness and lower Neuroticism. This strategy was in evidence during the interview with Kristin, who kept the door open during our interview. The interview was even interrupted by a school staff member, and she mentioned, “I’m very, I feel like, approachable. This door is always open, so I try to connect with staff on lots of levels, whether it’s inside of school, outside of school.” She was the only principal who kept the door open during our interview. Kristin scored as the most Extroverted, which further showed that, even within this strategy, some principals carry them out in different ways, possibly based on their personality.

Another more direct way principals gathered information and opinions about the school was with scheduled, direct one-on-one meetings with school staff. Jeff explained that he scheduled weekly 45-minute meetings with all staff members. He did this to align the focus of, collect input from, and build relationships with the staff. This principal demonstrated the most significant use of one-on-one meetings with staff. He also had the lowest Extraversion score, and highest Conscientiousness score of the principals interviewed that mentioned this strategy. The strategy combines focus on one individual in a very orderly process, which represents lower Extraversion and high Conscientiousness. Other principals described this strategy when entering

the principal position at a new school. Tyler mentioned sending out an email to all school staff when entering the principal role,

I was appointed in June, and so, when the other principal transitioned out of here, I contacted the staff, sent them a welcome email, and said, "I'm gonna be here, at school, beginning of August 'cause we start early. And I would like to set up a, just a half-hour meeting with you so that we can just sit down and get to know each other." I had three questions that I asked everybody, because the first staff meeting, I wanted to go in and not be a total stranger and vice versa. And I've made that recommendation to people who have moved into this position, and similar, to do that because it really paid off really well. Getting to know them and getting to know ... I asked them what's the best thing about the school, what's the most challenging thing about the school, and what do you want to see happen here at the school? And just, that's extremely beneficial.

Tyler highlighted his preference to use this strategy before school even started. Stephen also shared the preference for more one-on-one meetings. The meetings were used to get an initial impression of the school before the start of the school year. Tyler also mentioned advising other principals to use this strategy when starting at a new school. This strategy was mentioned by the three principals with an Agreeableness trait at 3.78 and below, Openness at 3.70 and below, and Extraversion at 3.50 and below.

Principals utilized several strategies to gather information to make decisions, which combined understanding the school culture and building trust. These variations in strategies related to where principals fell along with the ranges of the personality traits. The strategies utilized in information gathering also seem to play a role in how principals make decisions and implement those decisions.

Decision Making

After gathering education, knowledge, and information about the school, principals then had to set up a process to make decisions for the school. Throughout the interviews, all principals described instances of making individual decisions for the school, whether directly or indirectly.

Decision-making was done using a variety of strategies from individual decisions, group led decisions, councils formed with representatives from administration and teachers, and committees formed from the various teacher groups in the school focused on tasks. Laurie described creating an open steering committee that narrowed down the choices to address a problem in the school, after which she had the entire school staff make the final decision. All principals also utilized multiple decision-making strategies that did not appear linked to a principal personality.

The strategies used to gather information about a topic do appear to relate to how often some principals make a final decision. As an example, Justin used internal knowledge to gather information, and then used the same strategy to arrive at a consensus with staff,

We made a lot of changes in math and the way we were teaching, so then the next year when a teacher, I guess I did tell someone no, the next year when a teacher approached me about it (a math computer game) and asked me, this year, asked me about it to start the year, I said well does it really align with where we're going in math, does it align with what we're doing. They're like no, it doesn't, so we started to have that conversation, and we decided probably not the best thing to move forward with since it doesn't really align with where we're going.

So even in the scenarios where Justin made the final decision, he utilized the internal knowledge of the teachers in the school to arrive at a consensus with staff members. Another example was Bruce, who conducted individual academic research to inform his decision on overarching policies to enact within the school. This demonstrates that, although many decision-making strategies were more common to the principal population, preference for some strategies did link to how a principal gathered information. Both decision making and information gathering strategies could then have a relationship with personality.

Implementation

During the interviews, the principals described using a variety of strategies to implement decisions. One thing that was consistent throughout the interviews was that principals find the 'line in the sand' where they make a stand and remain committed to that decision. This attitude seemed to be a key part of a principal maintaining fidelity and confidence in their position. Drew summarizes this as,

One of the things you learn right away which might speak to one of your other questions is you have to very quickly as a building principal have a ... I guess a moral or a policy, whichever way you look at it, sometimes it's both, sometimes it's either one, backbone at which point you're like this is where I'm comfortable going, and I don't care what Flak hell I'm going to get pushed on, I can defend this, and I'm comfortable defending this at whatever cost.

The opinion highlights that principals make core decisions for themselves before major decisions are made for the school. This attitude was found across all personality traits and experience levels. Even Liz, who had the highest score on Agreeableness, a trait that might be perceived as being the most open to other thoughts and opinions, mentioned this conviction. It could also be assumed that this behavior would be more present in the principals that scored lower on the Neuroticism trait, but Jeff, who had the highest Neuroticism score in the interview sample mentioned,

I have to be very, very stubborn in the sense that there's going to be times where we're going is going to run directly up against maybe the entire staff's way of viewing education. If that's what research is saying, if that's what data is saying, that's the direction we got to go.

This quote highlights both his commitment to his decisions and the use of his preference for data to defend those positions. This high level of commitment to core beliefs leads to the various implementation strategies of principals. As previously demonstrated, there were a variety of strategies mentioned throughout the interviews.

One method was to change the opinions of dissenters and get buy-in was related to the code, 'taking a strong position,' which was a universal code. When using this method, a principal utilized direct confrontation with the staff who were resistant to the decisions to try to change the minds of the dissenters and to carry out the implementation of the decision. This strategy was mentioned during the interviews with both Jeff and Drew, each of whom was at the extremes on either the Neuroticism or Extraversion traits for the principal sample, but higher on the Conscientiousness trait (between 4.11 and 4.22). Drew described this strategy,

Me: So when you have those sort of (a handful of people that are going to be upset)... you have an idea of which ones are gonna support this, which ones aren't. Do you try to focus more on the people that don't or that might not be on board, or do you try to...?

Drew: So in that case, in that particular case, it was both and. You've gotta talk to the people that are going to be upset because they're gonna be upset and they're gonna ... there's gonna be chatter, and there's gonna be that conversation... Sometimes it's really just me, and it's me being able to say, "Listen, you're looking at it from your classroom perspective; I've gotta look at it from a whole building." And then sometimes that level of aggregation radically changes the way that your perception of reality is. And it's not negating yours, it's just mine's different, and the buck inevitably has to stop here. So I'm telling you this is the way it has to be. Okay, thanks. But there's that explanation as to why right? It's not just do it for the sake of doing it.

This quote describes his willingness to immediately get in front of dissenters to curb that negative chatter and directly explaining his decision process to those staff members. Many other principals mentioned leveraging supporters and utilizing supportive coalitions, to change the minds of dissenters, but only Jeff and Drew mentioned this direct one-on-one action with dissenters as a strategy to change opinions.

A more common strategy to change the minds of teachers that disagree with decisions was to utilize, and lean on, the various coalitions to get the 'maybe' and 'no' teachers onboard. This strategy was also found at the ends of the Extraversion and Neuroticism traits in interviews with Laurie, Travis, Jeff, and Drew. The strategy could represent a combination of high worry

and vulnerability with excitement seeking and assertiveness or encouragement and confident with negative emotions. Jeff describes using this strategy to change the opinion of the 'maybe' teachers first before worrying about the 'no' teachers,

You got to make sure that the way I'm trying to develop the school is that you got to make sure that your early adopters, the ones that are going to jump on board, that their voice is more powerful than the never adopters. If your never adopters' voice is more powerful, then your fence-sitters are always going to go towards them, because they're people that are going to go towards wherever they think the power lies. If it's going away from you, then you know, as principal, you don't have the respect or position that you need. You got to change.

The quote illustrates Jeff's worry and vulnerability to dissenters (facets of the Neuroticism trait) and a deep understanding of the natural systems perspective in understanding the power dynamics of a school and how to implement change. Jeff was also the other principal that used direct confrontation as a strategy to change the mind of the 'no' teachers. He used both the strategy of making the 'early adopters' voice louder, while directly confronting the dissenters to increase the buy-in for decisions.

Another implementation strategy was using those same tiered structures that were used to research and then to make decisions, either by subject or grade level or issue area, to implement decisions like those related to curriculum. This group also overlapped with the group that used tiered and internal research strategies previously mentioned in interviews with Justin, Kristin, and Drew. These principals are clusters around the lower half of the Neuroticism trait scale (at 2.50 and below), the higher half of the Conscientiousness trait scale (at 4.22 and above), and the higher end of the Agreeableness trait scale (at 4.44 and above). The traits represent less worry, more organization, and high amounts of trust. Justin describes the importance of building pockets of trust to form tiers that allow conversations to occur and implement change, "I think working in smaller pockets and building that trust by grade level first, and then going out from

there and opening those conversations in the smaller groups." This focus on trust represents a facet of higher Agreeableness. After these groups are formed and running, Justin utilizes them to assist in implementing a new curriculum and then gathering information on experience with the new curriculum to form a feedback loop.

Liz mentioned creating issue committees to allow for a focus on key areas and to distribute the gathering of information, decision making, and implementation of decisions,

We've got the building management team committee, we've got the student support team committee, we've got the school improvement team committee that meets monthly, and so each one of them is really specifically defining and prioritizing the stuff in their realm. So if it's around our school improvement goals, or are we implementing our curriculum with fidelity or whatever, that's the school improvement team. And if we're talking about our kids' behavior and how that's impacting things, that's our responsive classroom team. Or if we're looking at new curriculum, the science ... and that team are really involved this year, because they're the ones doing that. And so really, it seems like a really good distribution of responsibilities and power. I'm the figurehead, and I'm the one that pulls it all together into one big building plan, but it's really divided up really nicely.

Liz describes using these groups for the entire process of researching problems, making decisions, and implementing decisions. Though most principals mention using teacher groups to solve problems, these three principals described using this system and being an active, constant participant in the process to tackle all stages of addressing the various issues of the school (research, decision-making, and implementation).

The final type of implementation strategy mentioned during the interviews was principals actively demonstrating that they follow their own decisions, and can 'walk-the-walk' to help bring teachers on board with a new strategy. Justin provided an example of this approach when describing implementing the new math program,

I would go into the classrooms, and I would do the Number Talks. I volunteered for teachers. I said whenever you want me to do. I still do that. If you want me to come in and do a Number Talk, I'll do it. If there's someone who has

to go home sick partway through the day and we don't have a sub, or something happens where we don't have a sub, I will step in, and I'll teach.

The quote demonstrates an attitude of being open to put himself out there to demonstrate using a new curriculum. This behavior builds trust among teachers by showing that he would not ask teachers to do something that he was unable, or unwilling, to do.

Drew described a new lunch policy and the expectation he set for his administrative team to be an active part of that policy,

I expect we're all gonna be in the lunches. And we will be in there, each of us will be in there two or three lunch hours ... If we're gonna expect change to happen, we need to be a part of that, right? It's a fair volley at us, so let's do it.

This quote demonstrates that, even at a high school in a large school district, this attitude of 'walking-the-walk' can still be sought by principals that prefer this strategy for building trust and implementing policy. This strategy was mentioned during interviews with Liz, Travis, Kristin, Joe, Justin, Kathy, and Drew. They all had an Agreeableness trait at 4.22 and above, which is associated with a focus on trust, developing relationships, and establishing norms for behavior from many sources.

Confidence/Growth

Beyond the information gathering, decision-making, and implementation, other patterns came out of the interviews, some of which potentially related to personality-driven preferences.

In carrying out the various tasks of the principal position, one thing that was obvious in all the interviews was that principals mentioned having a high level of confidence in their current position, specifically around the area of the relationships and trust they have established. Travis describes his confidence in this area,

So I'm very confident in my relationships, and the trust I've developed over 24 years now in the district allows me latitude in my leadership as a principal to make hard decisions and have people swallow it and move on.

This opinion describes the cyclical nature of the focus on building relationships and trust. Initially, principals have a high commitment and focus on establishing trust and relationships within the school; then, several strategies are then undertaken to accomplish this task, which in turn allows the principals to make more changes in their school. This confidence was demonstrated in all the interviews, beyond just responding to the question, asking, 'what makes you confident.' The opinion demonstrates that across the variations in personality traits and circumstances of the position, principals from the interviews feel confident in accomplishing the various tasks required of them.

What makes a principal feel supported in the position, and how a principal grows in the position is another important factor that contributes to a principal's confidence in their role. Looking at what principals felt was beneficial for growth. All principals that had a designated mentor found it to be valuable to their early development and growth as a principal. Those who did not have a designated mentor mentioned that it would have greatly benefited them. Liz described her first three years as a new principal, and the benefit of having a mentor,

I wouldn't trade having had her for a mentor for three years for anything. She's the consummate how do you principal in the world. And she was my personal mentor, so no matter what was hard about the district, having her paid off a hundredfold.

Having that mentor allowed Liz to have a constant and reliable person to help tackle all the various issues in the principal position. Liz highlights the value and importance of mentors in the early development of new principals.

Along with having a mentor, being supported by the district was also very beneficial and a necessary part of principal growth. Often, however, many of the principals mentioned not feeling enough support from their district upon first entering the role. Throughout the interviews,

principals mentioned finding other principal support groups to turn to for advice. This was particularly apparent among those principals that lacked a designated mentor or lacked support from their district. Even with a mentor, Liz found a huge benefit from her network of principal support when it lacked from the district level,

My fellow principals, because they also didn't get any support from the superintendent. So we made our own little elementary principals support group. And every payday we just, the four of us went out to breakfast together and talked about our babies, and the things I'm really struggling with, "what do you guys think?" Because we didn't get any of that from him. Their new hire onboarding was shitty. You met with HR for a half an hour to sign paperwork and stuff, but there wasn't, "Here, have a staff handbook. Here's our philosophies and beliefs." You were just like, "Here you go. Here's your building, call me if you need anything." And so it was bad. It wasn't good.

The quote describes how principals throughout a district formed networks of support when a district or superintendent was not providing sufficient support. These support groups are another place where principals can gather information and advice on how to tackle problems within their school. At the high school level, Drew described forming a network with other principals in the district that lacked support from the district level,

There was another principal who was here at the time, who has since retired, and she said if it wasn't for you becoming a principal, we never talked to each other as principals, and now we do because I'm not shy about asking questions. I'd rather ask the question and be told it's a dumb question than not ask the question and step in something that will not only cause me problems but potentially somebody else. So we've all started communicating.

Drew describes this in the context of a larger district having to reduce the level of support it can provide to principals from the district level due to reductions in the student population and revenue. The behavior also shows that when this occurs, principals will begin to form more informal networks within the district. Some principals mentioned finding support at the middle and high school levels in smaller districts that only had a single middle and high school building within the district. The feeling of needing support, especially for new principals, and principals

independently seeking support groups within the principal population was demonstrated across all ranges of the personality trait, school level, and district type.

There were some items principals found beneficial that could be related to the personality of the principal. For example, some of the principals mentioned benefiting greatly from moving up to the principal position from within the same district, as opposed to preferring going into an entirely new district where there would not be any previous relationships that might negatively interfere with their new role. Tyler mentioned not being able to imagine going into a principal position in an entirely new district because he felt an understanding of the dynamics of the district was vital when entering the principal role. This preference was found at the extremes of Openness and Conscientiousness traits.

Other principals found preparation programs to be beneficial when becoming a principal. The opinion was mentioned during the interviews with Liz, Travis, Joe, Bruce, and Kelsea the benefit included the content knowledge gained, or networks established. These principals had a Neuroticism trait at 2.63 and above. They could be new principals with higher worry or vulnerability, may benefit from preparation programs, and feel more confident when entering the position.

Finally, some principals mentioned that having an induction program was helpful, or would have been beneficial, in more quickly understanding the dynamics and procedures of the district/school. The opinion was mentioned during interviews with Liz, Kristin, Travis, Bruce, and Drew, who clustered around having an Agreeableness trait at 4.44 and above and Conscientiousness trait at 4.22 and above. Drew discusses the preference for having an induction program designed around principals,

I think having an induction or an administrative supports, mentor induction program would make a lot of sense. I think it does make a lot of sense.

You know, and it's tough because you're asking people who are already overstretched largely to do more. But I think all of us are willing to do that for the people we work with, and that's why we've developed those on our own. You know. Like here at the district we have a great program, a teacher induction program. Where new teachers go to it, there are experienced teachers that help, talk about how to get through some of the challenges, it's great. We don't do that for administrators, and I don't know why.

This quote describes how many districts currently have induction programs for teachers, but not for principals. That it seems odd that there is a district priority that teachers need induction programs when entering a new school or district, but that same commitment is not carried over to new principals. The facets of straightforwardness, order, dutifulness, and achievement striving in high Agreeableness and Conscientiousness might, in the opinion of wanting an induction program. More principals could share this opinion; however, only these principals specifically mentioned this as something that would have been beneficial to their early development.

Throughout the interviews, principals described many strategies they use and their opinions about the principal role. Some of these strategies were mentioned during interviews with most principals, such as the need for support as a new principal or establishing teacher groups to tackle decision-making. It was obvious that principals used a variety of strategies within the principal role. However, some strategies did appear to be preferred by some principals over others and related to the principal's personality.

Self-Described Personality

Throughout the interview, principals self-described their personality and how they think it helps or hurts them in the role. One personality type that was mentioned were principals who described themselves as calm, even during high conflict. Tyler was one principal who described herself as calm saying,

As far as personality goes, I think I'm pretty laid back. I try never to be the person who's going to escalate the mood in the room. If there's a major situation that's a point of frustration for a lot of people, I try to be the calming voice in that.

Tyler mentions the two characteristics/descriptions of this trait, which includes being more laid back and deescalating conflicts. This personality type was mentioned during half of the interviews with Stephen, Kristin, Joe, Laurie, Tyler, Ellyn, and Bruce, and they all scored in the middle of the Neuroticism trait between 2.25 to 2.75. Another way to think about this is that individuals scoring between 2.25 and 2.75 might call themselves 'calm.' This calm personality was described, generally, as a benefit to the principal role due to the number of issues that suddenly emerge during the day and the need to not have a negative reaction. Ellyn associated this personality type to never having a grievance filed against her during her administrative career. However, the downside to this is that it might frustrate some employees who may perceive that the principal is not 'passionate' in the role, which Stephen described. The principals that mentioned this potential downside thought it was still more beneficial to not respond quickly (and possibly incorrectly) to sudden events, and to appear as the 'neutral' person during conflicts. It could be due to the worry of making an incorrect decision or 'knee jerk reaction' that these principals are prepared to take time to think even if this results in a minor annoyance from those that want an immediate decision.

Within the group of principals who described themselves as 'calm' were principals who also described themselves as organized. This group included Joe, Kristin, Laurie, and Stephen, all who were in the middle of the Neuroticism trait (2.25 to 2.63). Laurie described herself by saying, "I was always the organized one." The relationship between these attitudes could go in both directions; perhaps the principals that describe themselves as more organized are so because they are calm, or vice versa.

The one Big Five Trait mentioned during the self-description portion of the interview was the Extraversion trait. The principals that explicitly described themselves as extroverted were the principals with an Extraversion trait at 4.25 and above, which included Kelsea, Kathy, Kristin, and Drew. At 4.00 and below, some principals mentioned being more introverted, such as Tyler and Bruce. However, it does appear that, due to the positive connotation of being more Extroverted in the principal role, many principals mentioned having to learn to be comfortable within large groups or being present throughout the school. This feeling of being 'pushed' to appear or become more comfortable with large groups was a focus of some principals. Bruce describes this focus,

One of the things I've struggled with because of my personality, I'm not a person who naturally walks into a room full of people and is comfortable in that small talk moving around the room. I especially wasn't early on, so that's something I had to learn. I'm pretty good at it now. I can manage pretty well. So walk into a crowded room, I can move around the room pretty easily now, but that's not something that comes naturally to me.

The quote demonstrates that even if naturally talking with many groups of people might not be a principal's first preference, they can focus on and mimic this behavior. It could be that the high school level position might require that principals to at least demonstrate more extroverted behaviors, even if they might prefer fewer personal connections.

Another self-described personality type were those principals who described themselves as 'outgoing,' which was mentioned during interviews with principals who had an Extraversion trait of 4.0 and above, and Conscientiousness of 3.89 and below, which might represent being more excitement seeking and less orderly. This description was mentioned during interviews with Kelsea, Kathy, and Joe, who viewed this behavior as beneficial to the position and development of a healthy climate within the school.

Many principals mentioned that they like to be challenged or like change. Both preferences were found with principals having a Conscientiousness trait of 4.00 and above, which included Liz, Laurie, Travis, Ellyn, Bruce, Drew, and Laurie. This would represent individuals who are achievement driving, discipline, and deliberate. However, the preference for challenge or change was not mentioned during the interviews with all the principals with a Conscientiousness trait of 4.00 and above.

There was an indicator if a principal would mention that they liked change or liked challenges. Principals that mentioned liking changes were in the middle of Agreeableness trait (between 3.80 to 4.44) and the middle of the Extraversion trait (between 2.88 to 3.13) of the principal sample. These principals included Laurie, Travis, and Ellyn. However, Laurie described her preference for both seeking change and challenges in her career choice,

I was really looking for what's next. Like, what else? Because I really hadn't done anything longer than eight years. I was in a middle school for eight years but I taught second grade, third grade, and fourth grade. It was before curriculum so, moving grades wasn't like it is now. Then, it just really felt like I needed the next challenge, like; what's the next thing I can do in my career?

Laurie first mentions liking to change things up and going with those changes but then clarifies that she is seeking more challenges instead of just change for the sake of change. Laurie also had the highest Openness score of the principals who mentioned liking change.

The other principals that enjoyed a challenge liked to seek out something new that was not only different but would challenge them and help them to grow. Those who mentioned that they liked a challenge had an Openness trait of 3.90 and above and Neuroticism trait of 2.75 and below, which included Liz, Laurie, Bruce, and Drew. Liz mentioned feeling rewarded by a challenging new position, "It's obviously much more challenging to really truly get to lead like that, but it also a ton more fulfilling." This quote describes those who seek challenge as finding it

rewarding for them personally. This difference could indicate where principals plan to go within their career once in the principal position. Those principals that enjoy ‘change’ might move position to seek something new, such as a different school or a new role in the district at the district level, while principals that enjoy ‘challenges’ might seek new positions that challenge them and their personal growth.

Another difference with the principals that mentioned liking a challenge was that they were also the only principals to provide multiple examples where they had experienced a failure in the principal role, and how they learned from that mistake. An example of this is Bruce, who mentioned his initial failure as a new principal trying to implement the Data Wise framework to solve a problem in his school. This might influence how principals learn and grow. Those principals that enjoy challenges might be more receptive to self-analysis and identifying key weaknesses to improve. The opinion could represent lower Neuroticism, and the principal might feel less vulnerable in the principal position.

The interviews show that principals have some understanding of their general personality and preferences, with the view of how this is beneficial or an obstacle for them as a principal. Throughout the interviews, there were many preferences for information gathering, decision making, implementation of decisions, and growth. These preferences varied throughout the interviews and had some relationship with the personality of the interviewees.

Chapter 5: Discussion

This chapter will first discuss the results from the survey and interviews and provide answers to the three research questions for this study with the Trait Activation Framework. Then, the chapter discusses how the results contribute to the Five-Factor Model and educational leadership research. Finally, the chapter discusses the limitations of this study and propose a framework for future research using the Five-Factor Model in educational administration research.

Research Questions

This exploratory study collected both survey and interview data from principals in Michigan to answer three research questions. This section will go through each research question and use the results from both the quantitative and qualitative analyses to answer each question and discuss ways this study could have provided additional answers to the research questions.

What, if any, are the general personality profiles of principals?

The survey and interview results provided a solid answer to the first research question. The results showed that there were no general personality profiles across all five personality traits within the principal sample. The survey results did not produce general clusters of principals on the scales of the personality trait across all five personality traits, or even four out of the five personality traits. The interview data further confirm this answer since none of the codes aligned to clusters on the scales for all five traits. Also, where principals did cluster around a strategy, behavior, or thought, the groups were not consistent across the codes. Instead, groups of principals realigned and changed between the various strategies, behaviors, or attitudes.

The results do not align with the study by Van Aken, Van Lieshout, & Scholte (1998), which found three personality profiles from a student sample across all five traits. One reason for this could be that Van Aken, Van Lieshout, & Scholte (1998) used a general student population, whereas this study focused on education leaders. This rationale could mean that the principal population is different from the general population. Indeed, when comparing the principal survey sample with the general sample of undergraduate students in North America (Schmitt, Allik, McCrae, Benet-Martinez, 2007), two traits were significantly different. Agreeableness and Conscientiousness traits were statistically different between the principal population and the general population samples. None of the surveyed principals had an Agreeableness or Conscientiousness trait below 3.0. One explanation for this can be found using the Trait Activation Framework, which states that individuals will seek out professions and organizations that allow the expression of their personality. In the principal position, it could be that individuals higher in Agreeableness and Conscientiousness feel more satisfied with the position because the position involves a high amount of consensus building, trust, and focus on accomplishing goals. The Trait Activation Framework further explains that when individuals can express their personalities in a position they receive intrinsic rewards that motivate them to continue in the position. Since the principal position includes building trust, building consensus, and accomplishing goals, individuals who align higher on these traits receive more intrinsic rewards.

The explanation means that the difference between the North American and principal sample might more likely be due to career choice, rather than changing personality traits overtime or a higher attrition rate for principals lower on those two traits. The results showed that the higher Agreeableness and Conscientiousness traits were not found to link to the number

of years of experience in administrative positions. If personality traits changed because of being in the principal position or principals lower on the traits had a higher attrition rate, the results would show that principals higher in Agreeableness and Conscientiousness would be more likely to be older principals. Instead, the results showed no relationship between the Agreeableness and Conscientiousness traits and years of administrative experience. The result suggests the difference between the North American and principal sample is more likely due to career choice.

Leader emergence theories might also support this rationale. A study by Coglisier et al. (2012) studied 243 undergraduate business students in virtual teams using the Five-Factor Model to evaluate leader emergence, team trustworthiness, and peer-rated member performance. The study found that the Agreeableness and Conscientiousness traits were positively related to the task and social-oriented dimensions of leader emergence, while Neuroticism was not related to either dimension of leader emergence. The interviews also showed that most principals described their preference for 'change' or 'challenges' and were all high on the Conscientiousness trait scale. If most principals enjoy change or challenge, it could explain the desire for entering the principal role and why the Conscientiousness trait has such a high average in the principal sample. The principal position has many changes and challenges, requires a high focus on accomplishing educational goals, and building trust within a school, so, logically, these leaders would have an Agreeableness and Conscientiousness trait higher than the general population sample.

The most surprising result was that the Extraversion trait of the principal sample was similar to the general population sample. The result does not align with other research on personality and general leadership. A major focus of principals from the interview showed that they considered accomplishing goals and building trust a high priority, which does not align with the characteristics of the Extraversion trait. Multiple regression on the Extraversion trait with

gender, years of teaching experience, and years of administrative experience, also resulted in no statistical significance. The results also suggest that the trait does not change over years of experience and that there is not a higher turnover rate for principals low on the Extraversion trait. The interviews show that principals can learn to become comfortable with large groups and 'mimic' Extraverted behaviors when it is necessary. That would suggest that traits other than Extraversion might be more activated in the position and cause principals to be 'satisfied' in the position.

Neuroticism and Openness traits were also shown to be similar to the general population sample, which could mean that these traits are less important in terms of career choice or changes in personality traits over time. These results are in line with studies showing a weak relationship between Neuroticism and Openness traits and leadership. The Coglisier et al. (2012) study also showed that Neuroticism did not relate the leader emergent, which would indicate that the trait is not correlated to career choice.

The control variables (gender, years of teaching and administrative experience, district type, and school level) showed no personality differences, which indicates a homogenous group of individuals within the principal sample. These results all support that Agreeableness and Conscientiousness drive individuals into the principal position, but not within the principal sample.

What role does personality seem to play in the way that principals prioritize the various principal tasks?

The results from the survey and interviews conclude that personality plays little to no role in how principals prioritize the various tasks and goals of the principal position. Instead, it is more likely that the balance of day-to-day events and external demands on the agenda leaves

little room for personality to have a relationship with the prioritization of principal tasks. The results can be explained with the Trait Activation Framework, where the sources of cues from the organization do not allow the expression of the personality in work behavior. Prioritization of tasks might not allow enough room for personality to drive decisions. The results from the survey data showed no statistical relationship between task importance and personality.

However, the results did show that some tasks clustered together as more important than other tasks. It appears that there are three tiers of task importance. The first tier is those tasks most immediate to students and their families, such as developing a safe school environment, developing relationships with students, and communicating with parents. The interviews also indicate that these tasks take priority over other planned tasks that the principal may have for the day. Tasks and events involving the safety of students taking top priority over everything else, which is expected in a student-focused field.

After the first tier of tasks are those tasks more focused on teachers and their development, such as formally evaluating teachers, hiring personnel, dealing with concerns from staff, and planning and implementing professional development. An explanation for this extends from the answer to the first research question. The general personality profile of principals showed higher Agreeableness and Conscientiousness traits, which manifest in activities like building trust, and more goal-oriented tasks such as teacher evaluations. The interviews show building trust with the staff as a primary objective to accomplish before anything else. The Trait Activation Framework would contribute to the results by explaining that, since the environment is so focused on building trust as one of the primary goals, the traits relating to that are activated. When trust begins to build, principals receive intrinsic rewards, satisfaction, and confidence. This feedback loop maintains principal satisfaction in the principal role.

The last tier of tasks is the managerial tasks and the goals to implement, resulting from district or state policy. Many of the third-tier tasks are the first to be reassigned, or done entirely outside of school hours when the priorities from the other two tiers are no longer as pressing. The nature of the principal position is that there are tiers of priorities and tasks to accomplish, both in the short term and long term, that take precedence over the principals' more personality driven personal goals. One piece of information missed during the interviews, which might have provided more information, was to ask what tasks were accomplished first outside of school hours. More specifically, this question would look at if a principal first conducts research for decision making or accomplishes the more managerial tasks or some other task. That result might have been one area where personality-driven variation may have occurred. Overall, the answer to research question two is that the principal role itself determines the priority of principals, which may be a reason for higher Agreeableness and Conscientiousness overall. The results suggest a more situational influence on behaviors from Path 2 of the Trait Activation Framework.

What role does personality seem to play in the way that principals strategize to accomplish the various tasks?

Up until now, the general personality of the principal sample appears to be more similar than different. However, it does appear that personality traits relate to some of the variations when it comes to how principals strategize to accomplish tasks, their confidence, and growth. The Agreeableness and Conscientiousness traits play the most significant role in principal strategies, confidence, and growth and, when aligned with Neuroticism, Extraversion, and Openness, could result in differences in preferences for strategies, execution of behavior, and attitudes.

The way that principals collect information was related to how they make and implement decisions and appear to relate to personality differences within the principal sample.

Agreeableness and Conscientiousness traits seemed to have the most relationship with decision-making activities. Conscientiousness appeared in the research activities, and Agreeableness appeared in understanding school culture activities. The Openness trait seems to have importance with activities involving research, possibly due to the traits associated with creativity and thinking. The Openness trait combinations with Agreeableness and Conscientiousness related to various research preferences, such as individual academic research, comfort with using data, and conducting one-on-one meetings. One surprising result from the survey was how often the Openness trait linked to confidence in performing tasks and, in many cases, had the highest coefficient of the five traits. Openness positively linked with average task confidence, confidence in hiring, planning and implementing professional development, and formally evaluating teachers. In previous leadership research using the Five-Factor Model, the Openness trait has typically had the weakest connection to transformational leadership. However, in the principal sample, it could be more important to include the Openness trait if it can be shown to have a relationship with various information-seeking strategies. These information-seeking strategies may link to higher confidence in the principal tasks. It is important to note that many principals mentioned having to conduct individual research outside of school hours. One explanation for this could be that the nature of the principal position requires principals to be focused on the higher tier tasks.

The Extraversion trait also seems to relate to strategies preferences, when connected to Agreeableness and Conscientiousness, for tasks that can be accomplished through varying levels of personal connections. These trait combinations were related to the strategies of using data to

make decisions and make arguments, seeking information for decision making from individuals within the school and district, the preference for and seeking out of in-person professional development, and conducting one-on-one meetings. Extraversion was related to how principals execute their information-gathering strategies, indicating that these strategies might link to where the principal falls on the trait scale. For example, many principals mentioned walking around the school to gather information on culture. The most Extroverted principal preferred being in high social areas and asking questions, while others just wanted to see how the school builds trust, and the principals with the lowest Extraversion preferred walking directly to teachers to ask questions about the school. Extraversion could explain slight variations in the execution of tasks.

When combined with Agreeableness and Conscientiousness; Neuroticism also related to some behaviors. For example, utilizing tiered research to gather information. These principals generally used the same system to make decisions and implement those decisions to increase teacher buy-in and maintain fidelity. This group also linked to those who explicitly mentioned having an open-door policy to indicate availability to gather concerns from the school.

One important note is that the top three confident tasks were also the top three important tasks of the principal position. The results could indicate a bias in task confidence that aligns with what the principal thinks is most important instead of how confident they feel in each task. However, it could also be explained with the Trait Activation Framework, that these three tasks are the most important in the principal role, and when leaders high in Agreeableness and Conscientiousness within the school feel confident in these tasks and receive that intrinsic rewards, they are then driven to enter the principal role. The explanation would connect both the higher Agreeableness and Conscientiousness trait and the higher importance and confidence in these three tasks.

It is important to highlight that principals utilized several strategies to gather information and make decisions. It is more likely that personality plays a role in the initial preference of principals; however, personality does not limit principals from utilizing any of these options. Another finding is that there were no behavior variations associated with principals' low in both the Agreeableness trait and Conscientiousness trait for the principal population. Being higher, on average, in either trait in combination with the other three traits is where strategy differences or preferences occurred. The results could explain why individuals appear in different code groups. For example, Bruce having high Conscientiousness when linked with his higher Openness showed a preference for using academic research to make decisions. However, when his high Conscientiousness trait combined with his lower Extraversion, he linked to the group that preferred using data. Since there are differences in the grouping of principals depending on various strategies, it also explains further why there are no clusters of principal personalities across all five traits.

After decisions were made, either individually, grouped, or tiered, the principal then must work to implement these decisions in a way that increases buy-in from all teachers and maintains the fidelity of the decisions. For implementation, Neuroticism and Extraversion linked with Agreeableness and Conscientiousness and related to various strategies. First, with the extremes of both the Neuroticism and Extraversion traits combined with high Conscientiousness, principals preferred choosing direct confrontation. The result illustrates how there can be a larger range in Neuroticism and Extraversion traits within the principal sample, that when combined with higher Conscientiousness produce various behaviors or strategies. When looking at just the extreme of Neuroticism and Extraversion traits, principal mentioned utilizing coalitions of support to push other teachers to get on board. Lower Neuroticism and high Agreeableness and

Conscientiousness linked to tiered implementation strategies. Finally, the higher Agreeableness trait was associated with the attitude of ‘walking-the-walk’ and can demonstrate understanding and personally commitment to a new curriculum, policies, or processes.

The survey and interviews suggest some behaviors might relate to personality. This link is found most strongly in those tasks associated with that personality trait, such as Openness with information-gathering strategies. The Trait Activation Framework suggests that, when a task has options open to individual choice, personality is more likely to have a relationship to the behavior. Since the principal position is isolated and independent, many aspects of the position might be open to relationships with personality. Despite this, Principals were overall confident in their role and took strong positions they viewed as being core to their educational philosophy. Future research must determine if this is the result of the three sources, or the result of principals having higher Agreeableness and Conscientiousness, or both.

By understanding how personality might drive initial behaviors in the principal position, principals could self-reflect on these strategies to ensure they are correctly executive and assigning the correct strategy to address the given problem. In the same way that principals could 'mimic' Extraverted trait behaviors even if it did not initially align with their personality, with practice, principals could 'mimic' other behaviors they would like to exemplify even if it does not initially align with their personality.

Principals mentioned seeking and craving systems of support in their positions, both from mentors and other principals. Formal and informal mentors valued and benefitted their early development, and they often maintained relationships with those who motivated them into entering the principal field. Principals also developed networks of support with other principals or district leaders within and outside their district. These findings link to those from the study by

Daly et al. (2013) on social networks, which showed that leaders with more incoming advice-giving relationships were associated with attaining more years of experience and higher self-efficacy. The networks developed by the principal to seek information then develop to those same principals being sought-out for information. In the interviews, more experienced principals mentioned feeling that they are often sought out for and provide advice to the newer principals in the district. The result can explain how principals can maintain self-efficacy and retention even when the other, more formal systems of support are removed.

Additionally, the nature of seeking advice and input from other principals and mentors likely maintains strategies and systems across the principal position. The rationale could explain why there is so much overlap in strategies across the principal sample. Experience from mentors and other leaders might shape the strategies of principals as much as personality initial behaviors and attitudes in the position. This gap of knowledge is an important area to explore in future research.

In the survey, there were likely allowed too many options for task improvement, which resulted in too much overlap. Allowing fewer options for most improved tasks could have produced more variation with possible links to personality. Also, to contribute to the understanding of strategy preference, the survey could have asked a few dichotomous questions to determine strategy preference. The result could have helped to confirm, or disprove, the other findings. More time in the interview could have better determined the origins of opinions for making decisions, which would have helped to determine the potential importance of personality in those decisions.

Five-Factor Model

This study provides a fresh perspective on how to use the Five-Factor Model with qualitative research. For example, if a survey asked if principals walked around the school to gather information, there would be no relationship to personality as most principals mentioned this behavior. However, during the interview, this similar action took different forms, which seemed to relate to the principal's Extroversion trait. The result of the different forms of this behavior could have different results on a school and would not be identifiable using just quantitative data. Qualitative data provided a more enriching context of how personality might influence behavior and describe how different personalities appear in the real world.

The Neuroticism trait appears different than what was hypothesized. One group of principals described themselves as 'calm,' which was in the middle of the Neuroticism trait, unlike the expected lower end of the overall trait. The result could be the result of variation in the facets of the Neuroticism trait. Perhaps the question of 'remains calm' slightly diverges from 'worries a lot,' which results in an average that is more in the middle of the trait.

Within this group were those principals who described themselves as 'organized.' It could be that the answers are given by principals that view themselves as 'remains calm' relate to the answers given about being organized. Since the principal population already has a higher Conscientiousness trait, when combined with being 'calm' could produce someone who feels more task-oriented and organized, rather than more generally goal-oriented. Judge and Zapata (2015) showed that Conscientiousness did not determine alignment to 'task management' but, instead, the attention given to achieving goals. The results show how qualitative data allows for a more nuanced description of the Big Five Traits.

The interviews also produced some descriptions for the Extraversion trait. All the principals at the very top of the scale labeled themselves as Extroverted, which shows that the common impression of being “extroverted” appears at the high end of the Extraversion trait in the Five-Factor Model. Going down the scale, principals viewed themselves as less extroverted (or forced extrovert), and then introverted. The discussion around Extroversion was the area that best shows the importance of principals understanding their personality orientation. Bruce mentioned having to work on social interactions since he knew, going into the position, that he would have to appear to be comfortable interacting with large groups. It also shows that personality traits are not determinate of behaviors and that when a principal is aware of their natural tendencies, they can accomplish tasks and gain confidence even if they do not naturally align with that task. This study provides an example of how to use the Five-Factor Model in a mixed-methods study to gain more enriching findings on the relationship between personality and leadership behavior.

Educational Leadership

The Five-Factor Model can provide an additional understanding of principal behavior and the sources that might influence decisions. The results from this study show that the principal sample had a naturally higher Agreeableness and Conscientiousness trait than a sample of the general population. It also showed potential variations in behaviors that may be related to principal personality. The results provide some insight into leader emergence and the individuals that choose to enter the principal role using the Trait Activation Framework.

Finally, the results demonstrate the potential value for principals in understanding their personality and how it might shape their natural tendencies. As mentioned with the Extraversion trait, principals could learn the natural behavior tendencies of various personality traits. This

knowledge would provide insight into what to focus on to gain confidence in behaviors with which the principal is not initially comfortable. The results could further erase the difference in behavior strategies between the natural tendencies of personality and the strategies and behaviors that best meet the needs of various schools.

Trait Activation Framework

The Trait Activation Framework benefited the analysis and understanding of the results. The framework provides both organizational and intrapersonal characteristics of the individual that influence their behaviors. It also provides a framework for understanding how the reaction to behaviors in the form of positive rewards, encourages an individual to stay in positions that allow for the expression of individual personality traits. It can be applied to educational leadership research, and the results of this study provide support for the framework. Specifically, the potential that the personality traits for Agreeableness and Conscientiousness drive individuals to enter and stay in the principal position. The result is likely due to the nature of the principal, which includes responsibilities like consensus building, building trust, and accomplishing goals, which is represented in the social cues from organizational influences. The results also show that the task and social cues from organizational influences dictate much of the actions of the principals like prioritization and task importance.

The framework could be utilized more within educational leadership research to combine the organizational influence of the general position and the individual, organization cues of an individual school such as the social networks in the school and school culture. It could allow more nuance grouping of school beyond general characteristics like school level, district type, and demographics. The framework could benefit from allowing additional intrapersonal characteristics like principal values, knowledge, and experiences, which could provide even

variables that contribute to work behavior. The inclusion of these variables could contribute to future studies on educational leadership.

Limitations

There are many limitations in this study that affect the conclusions that can be reached using the results. First, this study used volunteer and self-responses to gather information on principal opinions and potential behaviors. It is possible that since the survey was volunteer-based, the applicants that chose to respond to the survey might have a different personality make-up than the general principal population. The principals represented in the sample could be those who are more on task, resulting in a higher Conscientiousness trait sample average. The self-response also has the potential of biases in the response, without any corresponding observations to ensure the accuracy of intentions with actual behavior. The limitation means the conclusions can only be made on the principal sample collected, and can only cite the interview as indicating the intentions of the principal, and not their true behavior. As previously mentioned, response bias could result in responses different than actual, though, such as the top three most important tasks also being the top three most confident tasks. The limitation is that it is unknown if this is due to a response bias or the fact that individuals confident in these tasks become principals (career choice).

Despite these limitations, there are still findings that warrant future research using the Five-Factor Model and educational administration research. Since this study was the first to use the Five-Factor Model with mixed methods on education leadership, the scope of this study was exploratory. There were no significant assumptions on the result, with the potential of showing no sign of relationship to personality. The results are framed to only refer to the principal sample collected in this study, and the conclusion cannot be generalized to all principals.

This study does not attempt to nor make any conclusion on predicting principal work behavior or success. The relationships found in the interview data only provide potential relationships and does not intend to mean that principal scores on the traits will or will not result behaviors. At best, the result provides initial connections on preferred strategies driven by personality types. The intention is that if preferences based on personality traits are verified, the results are to provide beneficial information to principals about their strategy preferences to be used in growth and self-reflection and not for human resource decision-making.

The final limitation is that there are only limited control variables in this study (school type, district type, gender, and years of experience). Other variables might contribute to work behavior that could be more significant and overlooked in this study, such as race, background, values, knowledge, experiences, and social networks. Indeed, in the interviews, many principals mentioned observing the success and failures of other leaders or knowledge from mentors in shaping their philosophies to the position. One disappointment of the principal sample was the lack of diversity in the sample collected since the other variables were close to the general education administrator population. This lack of diversity further limits the result of the study to a sample overly sampling white education leaders.

Future Research and Implications

This study shapes potential future research and implications in educational administration using the Five-Factor Model. There are many ways this type of research could be used to understand further the role of personality in shaping principal behaviors.

The first type of study would be to explore leader emergence within the teacher population. The goal would be to see the potential impact of personality in driving leader emergence, and prospective principals that choose to enter the principal role. The results could

use mixed methods to provide more generalizability with nuance in exploring how personality shapes behavior.

The next type of study could be to explore how personality shapes actual behaviors in the position, beyond just what the principals say they try to do and their thought process. Mixed methods using long term observations and interviews with school survey data would help to describe potential personality influences on behaviors and how those behaviors impact various school climates. This type of study is vital in determining the extent and depth of personality in shaping behaviors. This type of study could also use the Trait Activation Framework to understand the relationship between the various social cues on personality and work behaviors. This type of research could also provide more nuances with other variables, such as experiences and values. Particularly in values where some values (building consensus) could be representations of personality traits, which could link to previous research.

The final type of study could be experimental studies that use the knowledge gained from other research to provide new principals with knowledge and understanding of their personality, potential tendencies, and self-reflection to test potential benefits. Studies like this could provide practical benefits to educational leadership research using the Five-Factor Model. These studies could help to confirm or disprove the result of this study and provide a better understanding of the potential role of personality in shaping principal behavior.

In all these potential studies, it is hopeful that samples collected have a higher response rate that is more representative of the principal population to provide a more generalizable conclusion to be useful for practitioners.

The beneficial implications of future research could provide additional support to principals and guide them through their positions. The information could provide insight that

aligns principals to school buildings that will allow the expression of their personality traits. The information could help principal growth by understanding the potential initial impulses and preferences of the principals to ensure their behaviors reflect their intentions in benefiting the school. All these implications could improve the retention of principals and education outcomes.

The negative implications of this research are that the results are used to make human resource decisions, such as hiring. Even if strategy preferences do conclusively link to personality, it does not mean that other principals are incapable of using those strategies and becoming effective in a task. As this study and future studies will likely show, principals can learn behaviors and strategies (interacting with large groups or using data) even if it does not align with their personality-driven preferences. Also, since there are no general personality groups within the principal sample, it would be impossible to focus hiring based on one behavior without losing out on other beneficial behaviors that are preferred by the other principals. It is the hope that any future research into educational leadership using the Five-Factor Model does so in a way that highlights the potential benefits, provides nuance, and mitigates negative implications.

Conclusion

This study provides initial findings and potentials for utilizing the Five-Factor Model within educational administration research. Using the Trait Activation Framework, this study identified possible ways the position shapes principal behavior and where personality might play a greater role. The study found the principal sample homogenous within the scope of personality variation and exhibited no clusters of personality types. The sample of principals also exhibited Agreeableness and Conscientiousness trait averages that were higher than the sample of North Americans. Under the Trait Activation Framework, this suggests a potential that these traits

might be ‘activated’ in the principal position, while the other three traits are less active. Next, the principal role seemed to exert the most influence on prioritization of tasks, with student and family focus as the highest priority, followed by developing trust and experience of teachers, and, finally, completing the more managerial tasks determined by the district and state policy. In strategizing to accomplish these tasks, there were many universal opinions, such as using teacher groups and the need for support, which could be driven more by the source of influence in the principal position. However, some variations related to personality, such as gathering information and implementing decisions, which related to personality orientations. These results provide initial findings that could be used to further utilize the Five-Factor Model with mixed methods on the principal position. These further studies could explore the link between personality and leader emergence, actual principal behaviors, and practical benefits to principals in the field. This study helps to shape the use of personality research to benefit educational administration research.

APPENDICES

Appendix A: The Big Five Traits

Table 9 The Big Five Traits				
	Definition	Facets	Tendencies of low scale	Tendencies of high scale
Neuroticism	The number and strength of stimuli required to elicit a negative emotion	worry, anger, discouragement, self-consciousness, impulsiveness, and vulnerability	Require a high degree of stimuli to elicit a negative emotion	Minimal stimuli elicit a negative emotion
Extraversion	The number of personal relationships in which a person is most comfortable	Warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive	Require minimal or no other individuals in order to be comfortable	Require many individuals in order to be comfortable
Openness	The number of interests one is attracted to and the depth to which those interests are pursued	Originality, wisdom, objectivity, knowledge, reflection, and art	Low curiosity and only a few interests	High curiosity and many strong interests
Agreeableness	The number of sources from, which one takes to establish one's norms for right behavior	Trust, straightforwardness, altruism, compliance, modesty, and values	Only develop norms for 'right behavior' from self or a few sources	Develop norms for 'right behavior' from many sources
Conscientiousness	The number and level of commitment of goals one is focused on	Competence, order, dutifulness, achievement striving, self-discipline, and deliberation	Few goals or very little commitment to those goals	Many goals and/or very high commitment to those goals
Note: Howard & Howard, 1995				

Appendix B: Dimensions of Principal Tasks

Table 10:

Dimensions of Principal Tasks

<u>Dimension of Principal Skills</u>	<u>Definition</u>	<u>Tasks</u>
Instructional Management	The set of tasks principals conduct to support and improve the implementation of curricular programs	<ul style="list-style-type: none"> • Using data to inform instruction • Developing a coherent educational program • Using assessment results for program evaluation • Formally evaluating teachers and providing feedback • Classroom observations • Utilizing school meetings to enhance school goals • Planning professional development for teachers* • Implementing professional development* • Evaluating curriculum • Informally coaching teachers* • Directing supplementary, after-school or summer programs • Releasing/counseling out teachers • Planning professional development for prospective teachers.
Internal Relations	Tasks related to principals' capacities for building interpersonal relationships.	<ul style="list-style-type: none"> • Developing relationships with students • Communicating with parents • Attending school activities • Counseling student or parents* • Counseling staff about conflicts with other staff* • Informally talking to teachers about students • Interacting socially with staff
Organization Management	Tasks principals are expected to conduct throughout the year in pursuit of the school's medium and long-term goals.	<ul style="list-style-type: none"> • Developing a safe school environment * • Dealing with concerns from staff • Managing budgets and resources* • Hiring personnel • Managing personal, school-related schedule • Maintaining campus facilities* • Managing non-instructional staff • Interacting/networking with other principals

Table 10 (cont'd)		
Administration	Tasks characterized by more routine administrative duties and tasks executed to comply with state or federal regulations.	<ul style="list-style-type: none"> • Managing school schedules • Managing student discipline • Fulling compliance requirements & paperwork • Implementing standardized tests* • Managing student services (records, reporting) * • Supervising students • Managing student attendance-related activities • Fulfilling special education requirements
External Relations	Tasks addressing working with stakeholders outside of the school.	<ul style="list-style-type: none"> • Communicating with the district to obtain resources • Working with local communities • Utilizing district office communications • Fundraising
Note: Tasks had the highest loading onto the dimension. Note: Grissom & Loeb, 2011		

Appendix C: Survey Recruitment Email

Hello,

My name is Cory Savino, and I am a graduate student at Michigan State University, College of Education. I am working on my dissertation on the intersection between personality and leadership behaviors of school leaders and am seeking participants for a brief survey.

You are being asked to participate in a survey that will contribute to the study of principal personality and leadership behavior. The only activity you are being asked to do at this time is to respond to the survey. Participation in this survey will provide you with feedback from the personality inventory!

Survey:

This survey is divided into three parts. The first part is a short personality inventory that will provide information on your Big Five personality traits. The second part asks you for your thoughts on certain principal tasks. The final part asks you about yourself and your background. The survey can be completed in 5-10 minutes. Clicking on the link below will take you to the survey.

Research Goals:

The results of this study will be presented to and written for graduate research and publications. This research will provide information on the personality make-up of the principal population and identify possible links to principal tasks, strategies, and behaviors. The goal of this research is to determine the intersection of personality and leadership behaviors that could provide principals with better professional development, training, and support. Sharing your school leadership experiences will help to change the profession!

Privacy:

The data from this survey will only be used to conduct quantitative analyses to identify potential personality groupings within the principal population. All responses will remain confidential, and any publications from result will not include any individual responses or information that identifiable to you or your school. Your response will solely remain with me.

I appreciate your time and assistance with this research. Please let me know if you have any additional questions.

Thank you,

Cory Savino
Doctoral Student
Michigan State University
savinoco@msu.edu

Appendix D: Survey Response

Hello,

Thank you for completing the survey for this study!

The results of your personality inventory are included. First, I wanted to introduce the personality inventory that you took. The personality inventory you took is called the five-factor model or "the Big Five Personality Type" inventory. For this model, there are five personality traits, and everyone falls on a 1-5 scale for each of the five traits. The five traits are Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. Neuroticism is the measure of the number and strength of stimuli required to elicit a negative reaction. Extraversion is the measure of the number of personal relations in which a person is most comfortable. Openness is the measure of the number of interests one is attracted to and the depth to which those interests are pursued. Agreeableness is the measure of the number of sources from which one takes to establish one's behavioral norms. Finally, Conscientiousness is the measure of the number and level of commitment to goals that someone is focused on.

Now to your results. First Neuroticism, you scored a __ on the 1-5 scale, which indicates that you require a (high, moderate, or low) level of negative stimuli to elicit a negative reaction. Next Extraversion, you scored a __ on the scale, which indicates that you prefer a (large, moderate, or low) number of personal relationships. For Openness, you scored a __ on the scale, which indicates that you have (Many, some, or a few) interests that you pursue in life. Next is Agreeableness, you scored a __ on the scale, which indicates that you establish your behavioral norms from (many, some, or a few) sources. Finally, Conscientiousness, you scored a __ on the scale, which indicates that you have a (high, moderate, or low) level of commitment to goals.

Those are your results from the personality assessment that you took. Let me know if you have any additional comments or questions from your results or this study.

I wanted to again thank you for taking the time to complete the survey and for your interest.

Sincerely,

Cory Savino
Doctoral Student
Michigan State University
savinoco@msu.edu

Appendix E: Interview Recruitment Email

Dear __,

Thank you for participation in the personality survey and your willingness to be contacted for future studies. I am seeking participants for an in-person interview for my research on the personality and leadership behaviors of school leaders.

I am hoping you'd be interested in an in-person interview based on the results of the survey you recently completed. The interview involves various questions on your personality make-up and how that might impact the strategies and behaviors you pursue to tackle the various principal tasks. The interview will take around one hour at any location you prefer. Upon completing the interview, you will receive a \$50 Amazon gift card for your time. You are under no obligation to conduct this interview.

If you would like to be interviewed, please respond to this email or call me with days and times that you will be available in October and November. I can interview you at any day, time, or location that works for you. Your responses to the interview will be kept strictly confidential and any quotes or information that is published would include pseudonyms and remove any individually identifiable information

Please let me know if you have any additional questions regarding this interview or study.

Thank you for your time,

Cory Savino
Doctoral Student
Michigan State University
savinoco@msu.edu

Appendix F: Interview Protocol

Before we begin, I would like to thank you for your time and ask if I may record this interview so that I can ensure the accuracy of your responses and focus on your responses. During the interview, you can choose to skip any questions you do not wish to answer. If you have any additional questions afterward, feel free to contact me.

- 1) To begin, could you provide me a little more background about yourself, what motivated you to go into teaching, and then to become a principal?
- 2) How would you describe your personality, and do you think it plays a role in how you tackle the various tasks as a principal? How does it help you in this role? How does it challenge you?
- 3) How has this position changed your personality, or how have you had to modify yourself to become successful in this position?
- 4) What makes you most confident in this position?
- 5) Describe a time you had to change your approach to a challenge?
- 6) How would you describe this school's environment? What makes it a good place to work, and what are the major challenges? How do you prioritize and plan to tackle these challenges?
- 7) Describe the role the district administration plays in prioritizing your tasks? How much input do you have in the district decision-making process?
- 8) How were you supported when you were a new principal? Is there anything that you would change to improve that process? How have you improved yourself as a leader?
- 9) Is there anything about the topic of personality and leadership behaviors that you think is important for me to know that I didn't ask?
- 10) Do you have any questions for me?

That concludes the interview, thank you again for taking the time to answer these questions. Make sure to give a gift card.

Appendix G: Survey

Thank you for taking the time to complete this survey!

Your participation in this survey is completely voluntary. If you decide to participate, you are free to choose not to answer any questions or to withdraw from the survey at any time. Whether you choose to participate or not will have no effect on your current positions in any way.

If you have questions or concerns about this study, you may contact the primary researcher at Michigan State University, Cory Savino (517-290-0012 or savinoco@msu.edu) or Dr. Kristy Cooper Stein (kcooper@msu.edu). Phone: 517-353-5461 Mail: 620 Farm Lane, 403 Erickson Hall, Michigan State University, East Lansing, MI 48824.

If you have questions on concerns about your role and rights as a research participant, you may contact, anonymously if you wish, the Michigan State University's Human Research Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail 4000 Collins Rd., Suite 136, Lansing, MI 48910

By completing this survey, you indicate your voluntary agreement to participate in this study. If you agree to be in this study, please click the NEXT button.

This is the first set of questions. Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others?
Please indicate the extent to which you agree or disagree with that statement

I see Myself as Someone Who...

	Disagree Strongly	Disagree	Neither Agree nor Disagree	Agree	Agree Strongly
1. Is Talkative:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Tends to find fault with others:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Does a thorough job:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Is depressed, blue:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Is original, comes up with new ideas:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Is reserved:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Is helpful and unselfish with others:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Can be somewhat careless:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Is relaxed, handles stress well:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Is curious about many different things:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Is full of energy:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Starts quarrels with others:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Is a reliable worker:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Can be tense:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Is a deep thinker:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Generates a lot of enthusiasm:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Has a forgiving nature:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Tends to be disorganized:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Worries a lot:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Has an active imagination:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Tends to be quiet:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Is generally trusting:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Tends to be lazy:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. Is emotionally stable, not easily upset:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Is inventive:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Has an assertive personality:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Can be cold and aloof:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Perseveres until the task is finished:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Can be moody:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Values artistic, aesthetic experiences:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Is sometimes shy, inhibited:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Is considerate and kind to almost everyone:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Does things efficiently:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Remains calm in tense situations:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Prefers work that is routine:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Is outgoing, sociable:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Is sometimes rude to others:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Makes plans and follows through with them:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Gets nervous:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Likes to reflect, play with ideas:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Has a few artistic interests:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Likes to cooperate with others:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Is easily distracted:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. Is sophisticated in art, music, or literature:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The next set of questions include your thoughts on various principal tasks.

Here are a number of tasks that may or may not be important to the principal position. Please indicate the importance of each task from 1 (not important at all) to 10 (most important).

	1	2	3	4	5	6	7	8	9	10
Formally evaluating teachers and providing feedback:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planning and implementing professional development:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing relationships with students:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating with parents:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling staff about conflicts with other staff:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing a safe school environment:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dealing with concerns from staff:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing budgets and resources:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hiring personnel:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing personal, school-related schedules:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing student discipline:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing student services (records, reporting):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Here is the same list of tasks. Please indicate the confidence you have in completing each task from 1 (not confident at all) to 10 (very confident).

	1	2	3	4	5	6	7	8	9	10
Formally evaluating teachers and providing feedback:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planning and implementing professional development:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing relationships with students:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating with parents:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling staff about conflicts with other staff:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing a safe school environment:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dealing with concerns from staff:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing budgets and resources:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hiring personnel:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing personal, school-related schedules:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing student discipline:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing student services (records, reporting):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Select the three tasks that you have improved with the most:

- ☐ Formally evaluating teachers and providing feedback
- ☐ Planning and implementing professional development for teachers
- ☐ Developing relationships with students

- ☐ Communicating with parents
- ☐ Counseling staff about conflicts with other staff
- ☐ Developing a safe school environment
- ☐ Dealing with concerns from staff
- ☐ Managing budgets and resources
- ☐ Hiring personnel
- ☐ Managing personal, school-related schedules
- ☐ Managing student discipline
- ☐ Managing student services (records, reporting)

The final set of questions include your background. Feel free to skip any questions that do not apply to you or you do not wish to answer.

Please check the following statements as applicable:

- ☐ I would like to receive the results of my personality inventory (2)
- ☐ I grant permission to be contacted in the future to provide additional information for this dissertation, which may be declined at any time. (3)

To give you your results or to be contacted in the future please include your full name.

1. Gender

- ☐ Male (1)
- ☐ Female (2)

2. Race

3. Years of teaching experience

4. Years in an administrative role

5. Years in your current position

6. Years working at your school district

7. What type of school district do you work for?

Rural

Suburban

Urban

8. What type of school do you work for?

End of Block: Default Question Block

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