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Staying informed: superintendents and their experience with evidence-based research in the West Virginia public school system

Gabriel Dwayne King
gabrielking513@gmail.com

STAYING INFORMED: SUPERINTENDENTS AND THEIR EXPERIENCE WITH EVIDENCE-BASED RESEARCH IN THE WEST VIRGINIA PUBLIC SCHOOL SYSTEM

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Gabriel Dwayne King
Approved by
Dr. Barbara Nicholson, Chair
Dr. Ronald Childress
Dr. Thomas Hisiro
Dr. Thomas Williams
Dr. Lisa Beck

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APPROVAL OF DISSERTATION

We, the faculty supervising the work of **Gabriel D. King**, affirm that the dissertation, *Staying Informed: Superintendents and their Experience with Evidence-Based Research in the West Virginia Public School System*, meets the high academic standards for original scholarship and creative work established by the EdD Program in **Leadership Studies** and the College of Education and Professional Development. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.

Dr. Bobbi Nicholsen Leadership Studies	Committee Chairperson Major	4.18.19 Date
Dr. Ronald Childress Leadership Studies	Committee Member Major	4/10/19 Date
Dr. Tom Hisito Leadership Studies	Committee Member Major	4/10/19 Date
Dr. Thomas Williams	Committee Member	4-10-19 Date
Dr. Lisa Beck	Committee Member	4/10/19 Date

ii

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The purpose of this study was to explore the sources used by West Virginia public school superintendents to stay informed; how useful they find evidence-based research; the perceptions they have regarding the overall usefulness/credibility of evidence-based research; the barriers that exist to the use of evidence-based research; and whether there are relationships between selected demographic variables and superintendents' consumption of evidence-based research. Data were collected using a 10-question researcher adapted survey administered to 59 superintendents in West Virginia. This study continues the work of Treadway (2015) and Hoylman (2017) in the local public education arena. The most relied upon source of information by superintendents was their own professional experience. Evidence-based research was identified as useful, to a degree, in executing professional duties, but was not identified as a frequently relied upon source of information by superintendents; paradoxically, superintendents reported using evidence-based research to inform board of education members, policymakers, members of the general public, and in public relations. For superintendents to effectively inform policymaking, they must be efficient consumers of evidence-based research, fellowship with members of professional organizations, and develop methods of succinctly communicating evidence-based research to policymakers.

CHAPTER ONE

Since the early 1980s, there have been substantial increases of political oversight in the American education system. President Ronald Reagan warned of an impending tide of mediocrity that our failing education system was destined to produce. A *Nation at Risk* (1983) was pushed by the Reagan administration to address concerns in our nation's school system by using evidence-based data to monitor student performance via standardized testing to gather these diagnostic data (U.S. Department of Education, 1983). A *Nation at Risk* was highly publicized, which helped to sow a consciousness of trepidation regarding the condition of posterity and our education system's ability to prepare our youth to be functionally and globally competitive in the workforce (Moody, 2007).

The swells of educational reform were revitalized in 2001 by President George W. Bush's signing of the No Child Left Behind (NCLB) act. The goal was to ensure students were not shuffled through our education system only to fall through the cracks. Evidence-based accountability systems would be installed and schools would be held accountable based on students standardized assessment data, which would determine schools' adequate yearly progress (AYP) (NCLB, 2001). No Child Left Behind was another measure to assuage a perception of trepidation instilled in our society in the 1980s that our education system was failing our youth.

The 2015 Every Student Succeeds Act – which was the reauthorization of the Elementary and Secondary Education Act (ESSA, 1965) – was signed into law by President Barack Obama to replace NCLB (Every Student Succeeds Act, 2015). Under the act, states are held accountable for developing a system to hold schools accountable; in West Virginia, student performance data on the West Virginia General Summative Assessment (WVGSA -- grades 3-8) and the Scholastic Achievement Test (SAT – grade 11) are just two of the essential evidence-based data

sets that are used by the West Virginia Department of Education (WVDE) for school accountability. Based on these data, intermediate and long-term student performance goals are calculated for each school using a formula (Every Student Succeeds Act, 2015).

West Virginia has experienced severe economic turmoil as the effects of a declining coal industry – West Virginia's main economic engine for decades – become more palpable among the state's population (Harder, 2012). West Virginia's budget revenue has declined, forcing state policymakers to make difficult choices. Raising corporate taxes and severance taxes on extraction industries has rarely been a popular method of increasing budget revenue, particularly for politicians who have historically depended on campaign contributions from those industries, and allocations to public services such as public education and publicly funded healthcare for educators have consistently declined (O'Leary, 2018).

The public education work stoppage in West Virginia in early 2018 was a grassroots movement of political action initiated by West Virginia's educational professionals. To protest rising public employees' insurance premiums, stagnant teacher salaries, and lack of funding allocated to public education, teachers descended on the state capital for multiple days, facing both political and social resistance. After policymakers agreed to a five percent salary increase for public employees and the establishment of an ad hoc task force to examine the problematic public employees' insurance system (PEIA), the stoppage dissipated and teachers returned to work in West Virginia classrooms.[1]

In addition to budget cuts to public education and disgruntled educational professionals, the 21st century has ushered in a new type of learner. The transition from an industrial economy

[1] The Blue Ribbon Task Force appointed by Governor Jim Justice to develop strategies for adequately funding PEIA by December 2018 failed to submit any recommendations by that deadline, suggesting another work stoppage may occur in 2019.

to a knowledge economy geared toward technical and scientific advancement has created a workforce that demands a more diversified educational system that adapts to the needs of the individual 21st century learner (Powell and Snellman, 2014). The rate of technological change and the demands of the modern workforce have caused individuals and companies to question the usefulness of public education and whether it offers a practical process for educating our nation's youth. Many people have chosen to bypass public education in favor of private education and online education; companies are beginning to develop their own education programs to train employees outside of the higher education arena.

The education policy trend over the past few decades has been to use evidence-based data to hold schools accountable for student performance, and political oversight is more stringent today than it has been in history (U.S. Department of Education, 1983). The process of streamlining the incorporation of evidence-based research into public education policymaking has perhaps never been more imperative than now. Board of Education members must be well-read or well-informed with evidence-based research to better understand the direction in which 21st century learners are taking education. As the greatest institution in America, the public education system is essential for maintaining the American dream of leveling the playing field and facilitating opportunities for people to achieve mobility through stratified socio-economics. This opportunity should not be exclusive to students from families who can afford their choice of private or online education, but for all children.

Statement of the Problem

One of the keys to our public-education system's ability to adapt to our 21st century education needs is for policymakers to become better informed via the consumption of evidence-based research. Cooper, Levin, and Campbell (2009) assert that despite efforts in improving

research communication and use, we know very little about the results; to compound this issue, little is known about how practice organizations, such as schools and school systems, find, share, and use evidence-based research. "Using research evidence should lead to more informed policy, higher-quality decisions, more effective practices, and, in turn, improved outcomes" (Cooper et al., 2009, p. 160).

According to Hoylman (2017) West Virginia county school boards consulted their respective county superintendents[2] five times more frequently than any other source of evidence-based research when making school board-related decisions. Evidence-based research was consulted neither frequently nor with any depth by members of West Virginia's county school boards; only 2% of county school board members heavily used professional academic journals and 60% did not use professional journals at all in decision-making (Hoylman, 2017). They relied almost exclusively on their respective superintendents' perceived knowledge, leading Hoylman (2017) to recommend that a future study explore superintendents' experience with the production and consumption of evidence-based research. We know their board members believe superintendents are well-informed. We do not know whether that perception is accurate, and what sources are used to stay informed.

Research Questions

1. How often do superintendents consume evidence-based research to stay informed?
2. To what extent, if any, do superintendents find evidence-based research useful to executing their professional responsibilities?

[2] West Virginia's public school districts are organized by counties; i.e., one school district per county with one superintendent employed by each county board of education to operate as the chief administrative officer. Based on student enrollment, some county school boards may also employ deputy, associate, and/or assistant superintendents to assist the chief administrative officer in operating, managing, and leading the school district. To avoid confusion terms such as "county school boards" and "county superintendents" will be used.

3. What perceptions do superintendents have related to the overall credibility/trustworthiness of evidence-based research?
4. What barriers exist to the use of evidence-based research?
5. Are there relationships between selected demographic variables and superintendents' consumption of evidence-based research?

Summary of Methods

This non-experimental descriptive study focused on superintendents of West Virginia's 55 county school systems. A survey instrument was designed to collect data through the use of multiple choice, Likert-type responses from all of West Virginia's 55 county superintendents and deputy, assistant, and associate superintendents ($N = 106$). The Qualtrics program was used to operationalize the research instrument, and the Statistical Package for the Social Sciences (SPSS) program version 25 was used to analyze the data collected by the research instrument.

The survey was designed to explore the sources used by West Virginia public school superintendents to stay informed; how useful they find evidence-based research; the perceptions they have to the overall usefulness/credibility of evidence-based research; the barriers that exist to the use of evidence-based research; and if there are relationships between selected demographic variables and superintendents' consumption of evidence-based research.

Limitations and Assumptions of the Study

Limitations to this study began with the relatively small population size ($N = 106$), which could have influenced the statistical outcomes of the research data. The findings were limited to the perceptions of a relatively small population of superintendents from one state. This limitation makes is difficult to generalize the findings to a larger population of superintendents. Limitations related to the method include the fact that superintendents who responded may have

done so out of a particular bias, either positive or negative, about the role of the superintendent, and that the potential for socially desirable responses to the survey items was present.

Significance of the Study

With increasing demands to use evidence-based research in decision-making, the process of utilizing evidence in school district central offices is sophisticated, spans multiple sub-activities, and requires administrators to make sense of evidence and its implications (Honig & Coburn, 2008). Hoylman (2017) found that members of West Virginia local school boards relied on evidence-based research the least of all sources to stay informed and relied on local superintendents over 60% of the time to keep them informed. Considering these findings, it may be beneficial to determine local superintendents' experience with the production, consumption, and use of evidence-based research.

Peterson (2010) examined past trends in education and predicted that the future of education institutionally and politically could include a shift in control of education policy away from local boards to more distant governmental locales, and that bureaucratic regulations will become more sophisticated as external agencies seek to extend authority over school operations. Politically speaking, Peterson (2010) speculates that power over educational policymaking will oscillate between the two major political parties, and that organizations of public-sector employees will exercise increased control over school board, state legislature, and state department of education decisions. Given these potentialities and a documented lack of relevant training (Hoylman, 2017; Treadway, 2015) in the production and consumption of evidence-based education research of individuals with policymaking authority for public education, more research should be conducted to understand how to implement evidence-based research to more efficiently and appropriately influence policymaking.

Cooper, Levin, and Campbell (2009) assert that the use of knowledge in the decision-making process is not just an intellectual task of moving information from the educated to the ignorant, but is a social process that includes iterative phases of generating new research, communicating and applying established evidence-based knowledge, and contextualizing research to suit particular environments (pp. 166-167). Given this sophisticated and continual process of utilizing evidence-based research in policymaking, superintendents who wish to effectively guide and reinforce the policymaking process must be competent in the production, consumption, and use of evidence-based research.

CHAPTER TWO

REVIEW OF LITERATURE

The use of evidence-based research emerged in the field of medicine over 50 years ago when objective evidence became essential for medical researchers to appropriately diagnose and treat complications related to patients' health (Southwest Educational Development Lab, 2003). The emphasis on evidence-based decision-making in education has been pushed for decades and the modern trend was initiated by *A Nation at Risk*, which placed emphasis on examining indicators of student performance. Just as medical professionals would gather objective evidence from diagnostic assessments of patients' health conditions to make healthcare decisions, in the public education arena, data on student performance for decision-making were emphasized to make educational decisions and hold educators and schools accountable (U.S. Department of Education, 1983). The interpretation of those data by experts was a key element in addressing the problem of declining student achievement (U.S. Department of Education, 1983).

Nelson, Leffler, and Hansen (2009) sought to examine how policymakers and practitioners acquire, interpret, and use evidence-based research in their decision-making and the role of evidence-based research in decision-making. Their seminal study found that K-12 policymakers tend to have an underlying belief that much research is not to be trusted or is very limited in its practical application. Treadway (2015) carried out additional research to understand the role that evidence-based research plays in policy-related decision-making in West Virginia's higher education systems, the perceptions on the reliability and usefulness of the data, as well as insights that impede or facilitate the use of research evidence. He found that policymakers want information that is accurate, concise, easy to acquire, and bias free.

Acknowledging that Treadway's (2015) study was limited to the higher education arena in a single state, he suggested that future studies should extend his research and that of Nelson et al., (2009) by examining perceptions of evidence-based research in the decision-making process of other education policymakers. Hoylman (2017) undertook such an examination, analyzing the perceptions West Virginia PK-12 board of education members had toward evidence-based research, whether they considered evidence-based research credible and useful, and what barriers, facilitators, and demographic data may play into their decision-making processes. After surveying over 200 board of education members in all 55 of West Virginia's counties, Hoylman found that while board members said they value evidence-based research, they consult it the least, favoring instead input from intermediaries and trusting them to provide briefs of evidence-based research when advising the board. As superintendents were the most frequently cited intermediaries for West Virginia school boards in the decision-making process, Hoylman recommended future studies examining West Virginia superintendents' levels of training in the production and consumption of evidence-based research.

There has been relatively little research done on the use of evidence-based research in educational policymaking, as this review of the literature will demonstrate. Kay and Carruthers (2017) pointed out that while interest is growing in the utilization of evidence to inform decisions, only limited research has been conducted on the use of online research by school board leaders. This study sought to build on the findings of Treadway (2015) and Hoylman (2017) by examining West Virginia superintendents' levels of training with evidence-based research as they advise their local school board policymakers. This is a review of the existing and relevant literature.

Evidence-Based Decision-Making

Just as a *Nation at Risk* embedded paranoia into the psyche of Americans concerned with the appropriate educating of our posterity, Ronald Reagan reinforced the trepidation regarding the potentially inferior educating of our youth by warning of an impending "tide of mediocrity" (U.S. Department of Education, 1983, para. 1). The idea of administering standardized tests to gather data on student performance for decision-making was emphasized, as these data would be used to make educational decisions and hold educators and schools accountable (U.S. Department of Education, 1983). *A Nation at Risk* was highly publicized and opened up a floodgate of education reform and initiatives, the likes of which had never been seen before (Moody, 2007). These reforms were followed by tides of public and political oversight, the swells of which are still being and will be felt into the future. Educators are forced to operate in an environment where their professional expertise has little influence in strategic educational decision-making, and they are forced to follow policies created by non-education professionals which govern their professional practice.

The No Child Left Behind Act (NCLB) of 2001 perpetuated the swells of educational reform, continuing to maintain that our nation's schools were failing and requiring them to use data from examinations to track and meet adequate yearly progress (AYP) (NCLB Act, 2001). "The first step to making sure that a child is not shuffled through is to test the child as to whether or not he or she can read and write, or add and subtract; I understand taking tests aren't fun – too bad" (Bush, 2002). President G.W. Bush wanted to perpetuate the education initiatives pushed by Reagan, who felt that our schools were developing students of mediocre ability and that some students were succeeding while others were not. The idea was that in order for our students to be

prepared to compete for current jobs in the workforce, someone or something had to be held accountable for the functional[3] preparation of our students.

The current federal statute governing American education is the Every Student Succeeds Act (ESSA) of 2015, which is a bipartisan measure reauthorizing the 1965 Elementary and Secondary Education Act (ESEA) (Every Student Succeeds Act, 2015). The law requires states to develop systems of accountability for public schools, and a large portion of how the West Virginia Department of Education holds schools accountable is student performance and growth on the West Virginia General Summative Assessment (WVGSA) and the Scholastic Assessment Test (SAT). To prepare students for the WVGSA, educators must carefully teach skills and content detailed in the Common Core Standards Initiative, which is designed to functionally prepare students for college and career readiness. Student performance data on these assessments are part of the metrics for West Virginia school accountability.

The days of trusting educators on their professional competence and expertise to educate our youth have passed. Trust among professionals in general has decreased in recent years and evidence and data are the name of the modern game of accountability. Patients, parents, students, clients, and customers are less likely today to take professional advice on trust; informed consent is needed prior to intervention, requiring professionals to be ready to explain and provide appropriate evidence suggesting the efficacy of their actions and methods (Solesbury, 2002). Public policy has caught up with these recent trends, as people are suspicious of established influences on policy, leading policy thinking to be opened up to outsiders (Solesbury, 2002).

[3] Functionalism: Functionalists generally see schools as serving to socialize students to adapt to the economic, political, and social institutions of a particular society (Feinberg & Soltis, 2009). Students become self-sufficient by learning skills which will make them employable (i.e., students are prepared to become workers, consumers, taxpayers, and citizens).

While policymakers continue to focus on older and narrower measures of accountability (i.e., summative test scores), educators have moved on to more recent research findings. According to Dweck (2006, p. 5), in an effort to understand how educational programs can evolve to bring about fundamental changes in intelligence, Binet designed the now notorious IQ test to identify students who were not benefiting from Parisian public schools. His intent was that the test provides educators with appropriate data to help design more effective educational programs. According to Binet, "With practice, training, and above all, method, we manage to increase our attention, our memory, our judgement and literally to become more intelligent than we were before" (as cited in Dweck, 2006, p. 5).

Duckworth (2016), however, hypothesizes that the greatest predictor of success in an endeavor has less to do with talent and more to do with how much grit a person has, or how much passion and perseverance a person has when working toward long-term goals. Based on her research, Duckworth (2016) posits that grit is more common in successful individuals than talent. Similarly, Dweck (2006) asserts that a "growth mindset" is essential for individuals to reach their full intellectual potential and that scientists are learning that people have more capacity for lifelong learning and intellectual development than ever before (p. 5).

Considering these recent hypotheses suggesting that humans have tremendous capacities for neuroplasticity rather than a fixed mental capacity, progressive educators can utilize multiple sorts of formative student performance data to contribute to evidence-based research on how best to remedy student deficiencies and enhance skills, creating an educational environment that will facilitate the actualization of maximal student intellectual development and potential. The emphasis on and incorporation of evidence-based decision-making in PK-AD curricula help make the point that if educational practitioners are using evidence-based research and data to

inform decisions, then superintendents – who help create and commission educational policy – should also be consumers of evidence-based research to ensure that educational practice and policy are both well informed.

Dweck and Duckworth are helping to establish a modern trend in education that acknowledges that students who persistently commit themselves to a vision can achieve success even if they are not the most talented or gifted students in their cohorts. Because limited research has been conducted on these trends, however, it is essential for superintendents to ensure that policymakers are aware that more time should be allowed for research to be conducted on the topic before politicians should strongly consider these trends when developing educational policy.

With increasing demands to use evidence-based research in decision-making, the process of utilizing evidence in school district central offices is sophisticated, spans multiple sub-activities, and requires administrators to make sense of evidence and its implications (Honig & Coburn, 2008). Hoylman (2017) found that West Virginia local school boards relied on evidence-based research the least of all sources to stay informed and relied on local superintendents over 60% of the time to keep them informed. Considering these findings, it may be beneficial to determine local superintendents' experience with the production, consumption, and use of evidence-based research. This study aims to understand what those experience levels are among West Virginia school county superintendents regarding production, consumption, and use of evidence-based research.

Barriers to the Use of Evidence-Based Research

Several barriers exist that limit access to and utilization of evidence-based research by consumers. Peer-reviewed academic journals, for example, require university connections

and/or expensive subscriptions to academic journals (Hoylman, 2017). Hoylman also found that many potential consumers of evidence-based research also see it as convoluted and unnecessarily confusing, which impedes their use of research findings to inform educational policy.

There is broad agreement on these points. Oliver, Innvar, Lorenc, Woodman, and Thomas (2014), reporting on facilitators and barriers to the use of evidence-based research in multiple disciplines, found that the most frequently reported barriers were the lack of access to research, lack of relevant research, lack of time or opportunity to locate and use research evidence, policymakers' lack of skill in understanding research methods, and costs.

Through analysis of multiple research studies, Nelson et al., (2009) also reported that the most common barriers to the use of research evidence are the complexity of research reports and their lack of relevance, timeliness, and accessibility (p. 24). Balfanz (2012) likewise reported that one reason more evidence-based approaches have not carried the day is that, until recently, the tools and tactics necessary to gather sufficient evidence upon which to make more informed decisions have not existed or been supported sufficiently to gather widespread application (p. 1), an observation that is consistent with the finding of Oliver et al., (2014) that lack of skill in research methods constitutes a barrier to the use of evidence-based research. Newman's (2012) finding that some cannot/will not use evidence-based research in a policymaking context because it is too complicated/complex echoes Nelson et al., (2009). Boaz, Grayson, Levitt, and Solesbury (2008) also focused on relevance, arguing that evidence presented to influence policymaking must be relevant in context; evidence may appear on the surface to be relevant to a particular policy decision, but may have occurred in a different context or time, which renders the evidence immaterial. Boaz et al., (2008) asserted that research intended to appropriately

influence policy must be very recent and have been conducted in a very similar context to be relevant to policymakers.

In order for evidence-based research to directly influence policymaking, the means of communication should also be improved and streamlined (Weiss, 1979). Asen, Gurke, Conners, Solomon, and Gumm (2013), like Hoylman (2017) found that local school board members are busy individuals without professional staffs to help them gather relevant information; the structure and formality of local board of education meetings place severe limitations on who speaks, how long they speak, and what information is presented to the board to influence decision-making; additionally, school board members' perceptions of presenters as either cooperative or adversarial individuals may drastically influence how information presented will be used in the policymaking process (p. 37). All of these issues help to explain why they are inclined to rely on superintendents to provide the necessary information to guide their decision-making. Superintendent training levels and experience in the production and consumption of evidence-based research (e.g., whether their graduate education was limited to content knowledge as opposed to research skills), therefore, could exercise a substantial influence on the extent to which they view academic research as relevant to their professional duties of helping to guide and inform local board of education policymaking.

According to Oakley (2015), superintendents in Illinois reported they felt concerned regarding their preparation to influence state-level education legislation and policymaking. Oakley's sample population of Illinois public school superintendents felt that their graduate course work neither impeded or aided their abilities to influence state-level education legislation. Oakley used a Likert-type scale of 1 to 5 with 1 being that graduate coursework was an impediment and 5 being the greatest aid to helping the superintendents to influence state-level

politics. Because the mean score of the Likert-type responses was 2.91, just below neutral, Oakley suggests that the coursework was not as much an impediment as other possibilities such as lack of preparation or coverage. The superintendents indicated that aids to influence were school districts' finances and locale, relationships with legislatures, political connections, and affiliations with educational organizations. Oakley said that interviews conducted with the superintendents did not shine any further light on these findings. Based on Oakley's findings, we can hypothesize that the superintendents saw their graduate coursework as means to an end. Since kindergarten, they have been taught education is functional in nature. They believed their graduate studies were instrumental in helping them achieve their aims of landing administrative positions; therefore, they did not value their education as useful in developing intellectual reservoirs of evidence-based knowledge that will enhance their potential to influence state-level education legislation.

Pointing out that research policymaking is often used symbolically to argue for policies that legislators wish to promote rather than to craft or guide policy development and provisions, Wu (2008) agreed, noting that "knowledge generated by research communities does not dominate public policy with compelling empirical evidence, but instead shapes the contextual vocabularies of policymakers, which indirectly influences public policy" (p. 356).

This discussion of barriers to the use of evidence-based research in policymaking makes clear that policymakers – many of whom lack relevant training regarding the production, consumption, and use of evidence-based research -- need a competent and reliable method of receiving succinct and pertinent research for decision-making. Ideally, superintendents in particular, who Hoylman (2017) found were the most relied upon source to inform local board of education policymaking, would have appropriate training and experience levels in the production

and consumption of evidence-based research to adeptly inform policymaking. This study aims to explore that issue.

Facilitators to the Use of Evidence-Based Research

One assumption regarding research utilization in policymaking is that it provides empirical evidence and conclusions that help to solve policy problems (Weiss, 1979). Facilitators to the use of research can help decrease limitations identified in the previous section to the use of evidence-based research in policymaking. Policymaking should incorporate research from many different fields, and it is essential to ensure that evidence-based research has a direct connection to the policymaking process.

LaPointe-McEwan, Deluca, and Klinger (2017) found that a number of support strategies that allowed school districts and regions to build their capacity for data/research literacy and evidence use included regular cross-district collaborative facilitator-learning sessions, involvement of pedagogical and research experts, and the ability to adapt professional learning content and processes to specific needs of school districts; of these, the most important is the involvement of pedagogical and research experts who helped build the capacity in research practices and inquiry processes. These individuals' expertise was an essential support to appropriately utilizing data to inform future steps or decisions making.

Frequently reported facilitators to the use of evidence-based research include availability and access to research, including improved dissemination, collaboration, and clarity and relevance (Oliver et al., 2014). Research consumers often lack the expertise or knowledge to appropriately understand and interpret raw research evidence (Treadway, 2015). This lack of understanding can repulse policymakers -- and educational professionals -- biasing them against evidence-based research. That being the case, opportunities for intermediaries to enhance the

consumption and utilization of evidence-based research by policymakers become increasingly prevalent. According to Solesbury (2002), competition from the commercial research and consultancy sector has shown researchers the importance of conducting research in ways that users view as helpful. "How to structure a report, write in plain English, make a five-minute presentation; these are skills which are now seen to be as important as how to design a questionnaire, conduct an interview or analyze data" (Solesbury, 2002, p. 91).

Researchers have proposed a number of methods to facilitate the transfer of information to consumers, among them the use of intermediaries to compile, summarize, and distribute research evidence (Treadway, 2015). Intermediaries become translators and processors that compile research evidence and present it in a language that is appropriate to the ability level of the information consumer (Sin, 2008). Academic research findings are shared via a limited number of outlets and in a very limited number of forms, often because researchers lack resources, abilities, or time to explore other potential dissemination routes (Sin, 2008). In school systems, superintendent training and experience with evidence-based research can become a significant facilitator in packaging and presenting succinct summaries of research-based evidence to advise school board members.

Timing and presentation are key to facilitating the use of evidence-based research in policymaking. Researchers must understand what politicians are planning, align evidence accordingly, and communicate it clearly (Petticrew, Whitehead, Mcintyre, Graham, & Egan, 2004). Researchers must keep it interesting and tell a good story, while maintaining the credibility of the research (Petticrew et al., 2004). Additional facilitators to the use of evidence-based research in policymaking could include better acquainting researchers with policymakers. According to Brown (2012), researchers with strong ties to policymakers are in a

good position to consistently disseminate "flavoured research," which proves to be more effective than attempts to "inject unflavoured ideas" into the minds of policymakers (p. 455). Although academics report a range of benefits arising from research collaborations with governmental and non-governmental partners, there are still significant impediments to research translation and uptake (Cherney, Head, Boreham, Povey, and Ferguson, 2012). Researchers must figure out how to engage and network with politicians to create a steady stream of evidence-based information flowing to the policymaking arena. "Policy makers and practitioners use research in various ways, including instrumental, conceptual, political, imposed and processes uses; increasing knowledge of these nuances should enable researchers to produce more useful work and better engages with policy makers, practitioners, and intermediaries" (Tseng, 2012).

Role of Intermediaries

Treadway (2015) found many higher education administrators surprisingly do not often utilize evidence-based research despite their close proximity to it and the fact they are in charge of leading the organizations that produce it. Higher education administrators also make use of intermediaries to consume evidence-based research and present relevant data to administrators for advisory purposes. Administrators in turn would use these relevant evidence-based data to keep boards of governors informed (Treadway, 2015).

Hoylman (2017) operationalized the term intermediary: "an individual or organization that transfers information between producers and consumers (e.g., professional or membership organizations, universities or individual researchers, nonprofit and for-profit organizations or government agencies, trusted individuals)" (p. 6). Within the context of her study, intermediaries were frequently cited as the trusted sources of information to inform

policymaking decisions at the local school board level (Hoylman, 2017). "Researchers and policymakers are Mars and Venus; they are oil and water; they are different worlds"; it takes a skilled intermediary to shuttle relevant information between these two worlds in an efficient and functional manner (Folz, 2005, p. 334). Research should be transferred into actionable messages, which can profile and place in context a particular study when relevant (Lavis, Robertson, Woodside, McLeod, & Abelson, 2003).

Relevance, timeliness, and clarity are not the only factors necessary to facilitate the use of evidence-based research in policymaking; for research findings to have influence, systems must be in place creating an efficient process of identifying, synthesizing, and disseminating research to policymakers in tasteful but credible succinct pieces (Petticrew et al., 2004). An essential piece to the pathway of incorporating evidence-based research into policymaking is a reliable intermediary capable of consuming relevant evidence-based research and tactfully injecting it into the policymaking process. Intermediaries should be well-trained and educated expert advisors to policymakers.

"A key characteristic of modern policymaking is the ability to draw on many sources of information, analytical skills and relevant scientific disciplines in order to act as an 'intelligent customer' for complex policy evidence" (House of Commons, 2003). When policymakers are interested in solutions with little time and desire to invest in consuming evidence-based research, the training levels of intermediaries (in the case of this study, superintendents) and experience in consuming and extrapolating evidence based-research becomes essential. Intermediaries must use these skills to inform policymakers and influence their decision-making by speaking truth backed by evidence-based research.

Intermediaries in the public school arena sit at the junction between the political world and the academic research world. Scientists are interested in questions and policymakers are interested in answers; the ability to speak the language of both worlds while maintaining credibility and intellectual integrity is a key task of an intermediary (Shonkoff, 2000): "The credibility of the messenger delivering the message – whether the messenger is an individual, group, or organization – is important to successful knowledge-transfer interventions, but has never been tested" (as cited in Lavis et al., 2003). Superintendents in public school systems stand in the estuary of politics and research; their job is to ensure a healthy brackish mix of evidence-based research and educational policymaking is produced.

In a national study, Cooper, Fusarelli, and Carella, (2000) found that superintendent education levels differ across the county; 43% of superintendents in small rural school districts earned a doctorate compared to 79% in large districts and 75% in medium-sized districts. Superintendents from smaller more rural school districts may be passed over for positions in larger urban districts or they may select only rural jobs – the relationship may go both ways (Cooper et al., 2000). In general, superintendents in smaller rural school districts may have less experience in the production and consumption of evidence-based research when compared to their more educated colleagues in larger and medium-sized urban school districts. Cooper et al., (2000) speculate that more superintendents in the future will possess a doctorate and that professors of educational administration should revise programs to emphasize closer ties between school districts and university programs. The programs should be revised to place emphasis on the production and consumption of evidence-based research and how to use it to appropriately influence policymaking. Cooper et al., (2000) reported that 96% of their respondents agreed that their relationship with the school board was critical in making important

educational decisions. Universities' revising their educational administration graduate programs to better prepare students to be producers and consumers of evidence-based research to influence policymaking could remedy the issues Oakley (2015) found that Illinois superintendents had with their graduate programs in preparing them for their duties as superintendents. These program revisions could be opportunities to develop students' understanding of the role of a superintendent as an intermediary in the consumption of evidence-based research to inform school board members adeptly.

The superintendency has evolved beyond traditional conceptualizations and this is what they are now: educators of educators, managers, statesmen, and applied social scientists (Kowalski, 2005). Obviously, superintendents must hone their abilities to balance budgets and enhance their skills as statesmen to develop good relations with board members, but their duties as social scientists should be a part of their statesmanship. Superintendents should infuse their statesmanship with a steady flow of evidence-based research. In a sense, one could add an additional role to Kowalski's (2005) aforementioned modern responsibilities: the superintendent as a highly skilled educator of policymakers.

The typical tenure of a superintendent is two to three years (Armsbruster, 2011), leading Cooper et al., (2000) to suggest that the profession will continue to experience high turnover rate and a serious shortage of qualified applicants for the future. In addition, the trend of younger leaders in superintendent positions is in smaller school districts. Since West Virginia predominantly consists of small rural school districts and superintendent turnover in general is high, it could be important for aspiring superintendents to study in graduate programs that help candidates become deft producers and consumers of evidence-based research to credibly inform policymakers before passing the torch to the next capable superintendent.

Using Research

The instrumental use of the research involves the direct influence of the research on a policy or practice (Hoylman, 2015). The second use of research is political; politicians may use research in a teleological manner to justify decisions (Hoylman, 2015). Cooper et al., (2009) examined the growing interest in evidence-based research to inform policy and practice; they called this growth of interest a "knowledge mobilization (KM)" (pp. 159-160). "School board trustees obtain information for making decisions from three main resource categories: online articles, social media, and repository services." (Kay & Carruthers, 2017, p. 3).

Understanding how local boards of education operate is essential to understanding how or if the utilization of research will occur or be an essential piece to the policymaking process. "Examining what information school board leaders are accessing, and how they ensure its trustworthiness, is crucial to ensuring that decisions made are sound and more likely to lead to positive student outcomes" (Kay & Carruthers, 2017, p. 2). According to Kay and Carruthers, board of education members frequently use online articles in the form of news, research papers, and journals to stay informed, and they consulted online news twice as often as formal research-based resources (p. 13).

Local board of education members usually are professionals within the community and have their own lives and careers from which they allocate time to offer their services as elected officials endowed with the authority to vote for policy creation and change. These limitations may negatively influence the quality of research which school board members may use to inform their decisions. This reality places superintendents (as intermediaries) in unique positions of influence to policymakers, as they have open and frequent communication with school board members beyond the constraints placed on community members wishing to present concerns or

information to influence policymaking. Considering this, it may be beneficial for superintendents to have advanced research training. It is essential for researchers to understand how to strengthen the supply of and demand for research utilization in practice, and superintendents can play an integral role in actualizing this process (Tseng, 2012).

Summary

Following this review of relevant literature, it is clear that policymakers in the K-12 arena – most of whom lack relevant training regarding the production, consumption, and use of evidence-based research – ought to have a competent and reliable method of receiving succinct and relevant research for decision-making. The research shows that policymakers tend to not utilize research evidence to inform policymaking because of a perceived lack of practicality; therefore, intermediaries – such as superintendents with appropriate training and experience in the production, consumption, and utilization of evidence-based research – should be in positions that work directly with policymakers, should be well socialized with them, and have an adroit understanding of the most appetizing methods of serving evidence-based research to them to influence policymaking.

As intermediaries to the utilization of research evidence in policymaking, superintendents must use their skills and experience with the production and consumption of evidence-based research. Superintendents have relationships with local boards of education that are shared by few others. They sit in a tremendously opportunistic position, as they can see the policy planning take shape and can use their experience and training in the production and consumption of evidence-based research to advise boards as nascent policy is shaped.

CHAPTER THREE

RESEARCH METHODS

Superintendents of West Virginia's 55 county school systems were the sample population of this non-experimental, descriptive study. The purpose of this study is to explore the sources used by West Virginia public school superintendents to stay informed; how useful they find evidence-based research; the perceptions they have to the overall usefulness/credibility of evidence-based research; the barriers that exist to the use of evidence-based research; and whether there are relationships between selected demographic variables and superintendents' consumption of evidence-based research. This study continues the work of Treadway (2015) and Hoylman (2017) in the local public education arena. A cross-sectional survey instrument was designed to collect data through the use of Likert-type responses from all of West Virginia's 55 county superintendents and assistant/deputy superintendents. The Qualtrics program was used to operationalize the research instrument, and the Statistical Package for the Social Sciences (SPSS) program, version 25, was used to analyze the data collected by the research instrument.

Research Questions

1. How often do superintendents consume evidence-based research to stay informed?
2. To what extent, if any, do superintendents find evidence-based research useful to executing their professional responsibilities?
3. What perceptions do superintendents have related to the overall credibility/trustworthiness of evidence-based research?
4. What barriers exist to the use of evidence-based research?
5. Are there relationships between selected demographic variables and superintendents' consumption of evidence-based research?

Population and Sample

The study population ($N = 106$) included all of West Virginia's county school board superintendents, deputy, associate, and assistant superintendents. West Virginia Department of Education Policy 5202 requires that a legally constituted entity such as a board of education employ a chief administrative officer or superintendent (2017).

The survey was sponsored by the West Virginia Association of School Administrators (WVASA) and was distributed to all West Virginia county school county superintendents and deputy, assistant, and associate superintendents (N=106) by the WVASA executive director. Of the sample population, 59 professionals chose to participate which yields a 55.6% return rate.

Instrumentation

The instrument for this study was developed and adapted from the research instrument created by Hoylman (2017) when she sought to understand what sources of information West Virginia county school board members used to stay informed when making board-related decisions. The Qualtrics program was used to operationalize the research survey, and the survey was deployed to the sample population via a hyperlink embedded in an email. The survey is available in Appendix C.

The first question on the survey was designed to understand how useful superintendents find information obtained from members of the general public; school-based personnel; members of professional organizations; professional journals; printed popular media; social media; broadcast media; intuition; personal experience; and professional experience. Respondents were instructed to use a Likert-type scale to identify the usefulness of each of the previously stated sources on a range of six selections – the first being "not useful at all" and the last (sixth) being "very useful."

The second question was designed to understand how often superintendents consume information from the general public; school-based personnel; members of professional organizations; professional journals; printed popular media; social media; broadcast media; intuition; personal experience; and professional experience. Respondents were instructed to use a Likert-type scale to identify on a range of six selections how often they consume information from the previously stated sources – the first being "never" and the last (sixth) being "often."

The third question was designed to understand the extent to which superintendents agreed with assertions such as "the length of research-based reports is frustrating"; "it is not practical to find time to consume research"; "data and statistics in most evidence-based research studies are difficult to understand"; "the volume of research available in databases is overwhelming"; and "it is difficult to find evidence-based research online." Respondents were instructed to use a Likert-type scale to identify on a range of six selections – the first being "strongly disagree" and the last (sixth) being "strongly agree."

The fourth question was designed to understand how certain qualities related to evidence-based research affect its overall credibility/trustworthiness. Respondents were asked to respond on a Likert-type scale of six with the first being "no effect" and sixth being "substantial effect" to statements related to the credibility/trustworthiness of evidence-based research based on such issues as who conducted the study; whether the study had been conducted by other researchers prior to publication; scope of the study; and whether the study has been replicated in similar circumstances elsewhere.

As the area of inquiry for this study was to understand where West Virginia county superintendents get their information to advise policymaking, question five was designed to understand how often superintendents use evidence-based research to inform board of education

members, inform policymakers, inform members of the public, and in public relations. A Likert-type scale was used with one being "never" and six being "often."

Questions six through 10 were demographic questions designed to gather information on how many years respondents have served as superintendents and as building level administrators, the size of their respective school districts based on student enrollment, the highest education levels obtained, and the certification methods for director and/or superintendent licenses.

Data Analysis

Data were analyzed using SPSS version 25 software to create statistical analyses of responses from the survey instrument. Quantitative data analysis relied on frequencies, Pearson bivariate correlations, and cross tabulation.

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS AND DATA ANALYSIS

The purpose of this non-experimental descriptive study was to understand where West Virginia county superintendents and deputy, assistant, and associate superintendents get their information to stay informed on questions of educational policy. Data were collected using a researcher adapted survey instrument from Hoylman's (2017) study operationalized using Qualtrics, and the instrument was disseminated to the population of all superintendents and deputy, assistant, and associate superintendents in West Virginia (N=106) via hyperlink embedded in an email. The survey instrument (See Appendix C) was designed to understand which sources of information West Virginia county superintendents use and how often they use evidence-based research to inform policymakers. Hoylman (2017) found that members of West Virginia county school boards consulted their respective superintendents five times more frequently than any other source. They relied almost exclusively on their respective superintendents to be knowledgeable, leading Hoylman (2017) to recommend that a future study explore superintendents' experience with the production and consumption of evidence-based research. The following research questions were designed to investigate this query.

1. How often do superintendents consume evidence-based research to stay informed?
2. To what extent, if any, do superintendents find evidence-based research useful to executing their professional responsibilities?
3. What perceptions do superintendents have related to the overall credibility/trustworthiness of evidence-based research?
4. What barriers exist to the use of evidence-based research?

5. Are there relationships between selected demographic variables and superintendents' consumption of evidence-based research?

Population and Sample

Table 1 details the demographics of the sample population ($N = 106$) which included West Virginia county superintendents and deputy, assistant, and associate superintendents.

Table 1

Survey Population (Administrative Role)

Role	*N*	Percent
Superintendents	55	51.9%
Deputy Superintendents	2	1.9%
Associate Superintendents	5	4.7%
Assistant Superintendents	44	41.5%
Total	106	100.0%

Of the population, a sample of 59 professionals chose to participate, yielding a 55.6% return rate for this study. All participants in the study were from one of West Virginia's county public school districts. In an attempt to enhance the return rate, participants were not required to respond to every question to complete and submit the survey, which explains why the sample size in some of the tables to follow will be below $n = 59$. The process of contacting each superintendent was streamlined with an endorsement from the WVASA -- the professional organization which represents all superintendents in West Virginia public school systems. As the survey was completed anonymously, it is impossible to determine which superintendents participated in the survey. Demographic data were collected from the superintendents to better understand their unique situations. Table 2 details the number of years survey participants have served in a superintendent capacity.

Table 2

Years Served as a Superintendent

Years		*n*	Percent
1 – 5		21	42%
6 – 10		17	34%
11 – 20		10	20%
21 – 30		2	4%
	Total	50	100%

In addition to experience in a superintendent capacity, respondents also reported their years of experience as building level administrators; these data proved to be valuable to research question five, which will be discussed later in this chapter.

Table 3

Years Served as a Principal

Years		*n*	Percent
1 – 5		21	42.0%
6 – 10		11	22.0%
11 – 20		12	24.0%
21 – 30		6	12.0%
	Total	50	100.0%

The number of schools and students varied substantially among counties as does the level of responsibility of superintendents at all levels. Table 4 shows that 60% of West Virginia's school districts represented in this study have an enrollment below 7,500 students.

Table 4

District Size Based on Student Enrollment

Enrollment		*n*	Percent
0 – 7,499		30	60.0%
7,500 – 14,999		12	24.0%
15,000 – 22,499		0	0.0%
22,500 – 30,000		8	16.0%
	Total	50	100.0%

The education levels of superintendents were gathered from survey participants, showing 58% having earned a post-master's certificate and 24% having earned a doctoral degree.

Table 5

Education Levels of Superintendents

Education Level		*n*	Percent
Bachelor's		0	0.0%
Master's		9	18.0%
Post-Master's Certificate		29	58.0%
Doctorate		12	24.0%
	Total	50	100.0%

Sixty percent of survey participants earned a master's degree in education leadership, and three respondents stated they had earned their superintendent licenses through alternative routes. No additional data were offered, however, to suggest what those alternative routes were.

Table 6

Superintendent Method of Certification

Certification Method		*n*	Percent
Master's Degree in Education Leadership		30	60.0%
Post-Master's Certificate		17	34.0%
Alternative Route		3	6.0%
	Total	50	100.0%

Findings

Information detailed in tables 7 through 10 were gathered from questions 1 and 2 on the survey instrument, requiring respondents to use a six-point Likert-type scale. The data reported in tables 7 through 10 are responses from only the extreme ends of the Likert-type scale (i.e., points 1 and 6).

RQ1: How often do superintendents consume evidence-based research to stay informed?

The first question on the survey was designed to understand which information sources superintendents rely on most heavily. Information sources investigated were members of the general public; school-based personnel; members of professional organizations; professional journals; printed popular media; social media; broadcast media; intuition; personal experience; and professional experience. A Likert-type scale was used to identify how often each of the previously stated sources is consulted on a range of six selections – the first being "never" and the last (sixth) being "often."

Table 7 shows percentages and frequencies of responses to "often" (i.e., point 6 on the Likert scale of survey question 2. Sixty percent of the superintendents reported their most reliable source of information was professional experience. Professionals closest to superintendents, or board office personnel, were the second most relied upon source at 54%, with

personal experience being 52%. Finally, 40% of superintendents reported relying on their building level administrators to keep them informed.

Table 7

Information Sources Most Relied Upon by Superintendents

Sources	Frequency	Percent
Professional Experience	30	60.0%
Board Office Personnel (superintendents, deputy superintendents, associate, assistant, directors, and coordinators, etc.)	27	54.0%
Personal Experience	26	52.0%
School-Based Personnel (principals, teachers, custodians, etc.)	20	40.0%
Intuition or Instinct	14	28.0%

Table 8 shows percentages and frequencies of responses to "never" (i.e., point 1 on the Likert scale of survey question 2. In terms of the least consulted sources, 20% reported they never consult social media for policymaking information, and 10% reported they never use information from broadcast media for that purpose. Only 4.1% reported relying on printed popular media and only 4% relied on their own intuition or instinct as information sources. Two percent reported they never use the evidence-based research in professional organization journals to stay informed professionally.

Table 8

Information Sources Least Relied Upon by Superintendents

Sources	Frequency	Percent
Social Media (Facebook, Twitter, etc.)	10	20.0%
Broadcast Media (television, radio)	5	10.0%
Printed Popular Media (newspapers, magazines, websites, etc.)	2	4.1%
Intuition or Instinct	2	4.0%
Professional Organization Journal (*American School Board Journal, Educational Leadership, American Educator, Education Week, etc.)*	1	2.0%

RQ2: To what extent, if any, do superintendents find evidence-based research useful to executing their professional responsibilities?

A second area of inquiry in this study was to understand what sources of information superintendents find most useful in carrying out their professional duties. Table 9 shows the sources respondents identified as "very useful" on the favorable end of the continuum (i.e., point 6 on the 6-point Likert-type scale). The source reported as being the most useful to superintendents was professional experience, and half of respondents believed the people working closest to them -- board office personnel – to be their second most useful source to stay informed. Personal experience was reported by 42.3% of superintendents as a valuable source of information, and 30.8% asserted that building level principals in the field were useful sources to stay informed. Members of professional organizations were also useful to superintendents as 19.2% of respondents reported this as a valuable source. Evidence-based research from

professional association publications was reported by 17.3% of superintendents to be useful to staying informed professionally. These figures are shown in Table 9.

Table 9

Most Useful Sources

Sources	Frequency	Percent
Professional Experience	28	53.8%
Board Office Personnel (superintendents, deputy superintendents, associate, assistant, directors, and coordinators, etc.)	26	50.0%
Personal Experience	22	42.3%
School-Based Personnel (principals, teachers, custodians, etc.)	16	30.8%
Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)	10	19.2%
Professional Organization Journal (*American School Board Journal, Educational Leadership, American Educator, Education Week, etc.)*	9	17.3%

On the low end of the response continuum (i.e., point 1 on the 6-point Likert-type scale), superintendents identified sources of the information they felt were "not useful at all" which was the first choice in the response continuum. Table 10 identifies sources that superintendents felt were not useful at all beginning with 19.2% of respondents reporting that social media was not useful at all to their professional duties. Broadcast media were reported by 9.8% as not useful at all to staying informed professionally. School based personnel were identified by 1.9% of superintendents as being not useful at all, and 1.9% of superintendents believed that evidence-based research was not useful at all.

Table 10

Least Useful Sources

Sources	Frequency	Percent
Social Media (Facebook, Twitter, etc.)	10	19.2%
Broadcast Media (television, radio)	5	9.8%
Members of the General Public	1	1.9%
School-based personnel (principals, teachers, custodians, etc.)	1	1.9%
Professional Organization Journal (*American School Board Journal, Educational Leadership, American Educator, Education Week, etc.)*	1	1.9%
Intuition or instinct	1	1.9%

Tables 11 and 12 detail data gathered from question 5 of the survey instrument. Question 5 asked respondents to use a Likert-type scale of six points to identify how often respondents share evidence-based research with board of education members, policymakers, members of the general public, and in public relations. Unlike tables 7 through 10, tables 11 and 12 detail percentages of responses from all six points on the Likert-type scale on survey question 5.

Considering the use of evidence-based research to inform policymaking, respondents in this study reported to have shared research with policymakers frequently. Viewing responses on the favorable side of the Likert-type scale (i.e., 4-6), 92% of respondents indicated that evidence-based research was used to inform board of education members, and 70% of responses indicated that evidence-based research is used to inform policymakers.

On the "never" of the six-point scale, 8.0% of responses indicated that evidence-based research is rarely shared with county board of education members, and 30% of responses

indicated that evidence-based research was rarely used to inform policymakers; additionally, it was indicated by 2% of respondents that evidence-based research was never used to inform policymakers.

Table 11

Use of Evidence-Based Research by Superintendents to Inform Policymaking

Likert-Type Responses	Informing board of education members	Informing policymakers (WVDE, Legislators, etc.)
1 – Never	--	2.0%
2	2.0%	4.0%
3	6.0%	24.0%
4	32.0%	16.0%
5	30.0%	34.0%
6 – Often	30.0%	20.0%

Considering the data from superintendents' responses regarding the use of evidence-based research in informing board of education members and policymakers, similar frequencies were observed in their responses to how often this information is shared with the general public or in public relations. On the "often" side of the scale, (i.e., 4-6), 89.9% of responses indicated that evidence-based research was shared with members of the general public, and 82% of responses indicated that evidence-based research was used in public relations. On the less favorable side of the Likert-type scale, 10.2% of responses indicated that evidence-based research was less often used to inform members of the general public, and 18% of responses indicated that research was used less often in public relations, with 2% indicating that it was never used.

Table 12

Use of Evidence-Based Research by Superintendents to Inform the Public

Likert-Type Responses	Informing Members of the General Public	In Public Relations
1 – Never	--	2.0%
2	4.1%	4.0%
3	6.1%	12.0%
4	32.7%	26.0%
5	32.7%	26.0%
6 – Often	24.5%	30.0%

RQ3: What perceptions do superintendents have related to the overall credibility/trustworthiness of evidence-based research?

Research question three was designed to understand the factors that contribute to superintendents' perceptions of the trustworthiness of evidence-based research. Table 13 details data gathered from survey question 4, which required respondents to identify on a Likert-type scale of six (i.e., point 1 being "no effect" and point 6 being "substantial effect") the extent to which selected qualities of evidence-based research affected respondents' perception of the overall credibility/trustworthiness of research.

No data were recorded from the lower side of the six-point scale (i.e., 1-2). All responses recorded were on the upper or "Substantial Effect" side of the scale (i.e., 3-6), indicating that respondents believed the evidence-based research qualities listed in survey question 5 did affect their perceptions of evidence-based research credibility/trustworthiness. Whether the research had been peer reviewed had a large effect on credibility as well, as did its scope and whether or not the study had been replicated.

Table 13

Qualities Affecting Overall Credibility of Evidence-Based Research

Likert-Type Responses	Who conducted the study (university researchers, professional organizations, think tanks, etc.)	Whether the study has been reviewed by other researchers prior to publication.	Scope of the study (local, regional, national, etc.)	Whether the study has been replicated in similar circumstances elsewhere.
3	8.0%	18.0%	8.2%	14.0%
4	18.0%	16.0%	20.4%	26.0%
5	46.0%	44.0%	46.9%	34.0%
6 – Substantial Effect	28.0%	22.0%	24.5%	26.0%

RQ4: What barriers exist to the use of evidence-based research?

The fourth question addressed issues regarding barriers to the use of evidence-based research. Table 14 details information gathered from survey question 3 which required respondents to identify on a Likert-type scale of six points (i.e., point 1 being "strongly disagree" and point 6 being "strongly agree") how strongly they agree or disagree with five statements. No data were recorded from the lower side of the six-point scale (i.e., 1-3). Respondents agreed that the impractically of finding time to thoroughly read research reports was the greatest barrier to the use of evidence-based research in their professional duties (66%). The second largest barrier was the overwhelming volume of available research at 58%.

Table 14

Barriers to the Use of Evidence-Based Research

Likert-Type Responses	The length of research-based reports is frustrating.	It is not practical to find time to consume research reports.	Data and statistics in most evidence-based research studies are difficult to understand.	The volume of research available in databases is overwhelming.	It is difficult to find evidence-based research online.
4	22.0%	30.0%	22.0%	20.0%	22.4%
5	18.0%	24.0%	16.0%	22.0%	12.2%
6 – Strongly Agree	2.0%	12.0%	2.0%	16.0%	2.0%

RQ5: Are there relationships between selected demographic variables and superintendents' consumption of evidence-based research?

Question five was designed to explore any possible relationships between demographic variables reported by superintendents and their consumption of evidence-based research. A significant relationship (i.e., two-tailed test, $p = 0.01$) emerged related to barriers and the use of evidence-based research and years served as a building level principal. Table 15 shows that the longer respondents served as building level administrators, the more likely they were to report that they found information in evidence-based research difficult to understand.

Table 15

Bivariate Correlation Between the Years Served as a Building-Level Administrator and Understanding of Evidence-Based Research.

	Building Level Experience	Data & Statistics Hard to Understand
Building Level Experience	--	.376**
Data & Statistics Hard to Understand	.376**	--

**Correlation is significant at the 0.01 level (two-tailed).

A second relationship i.e., (two-tailed test, $p = 0.05$) involving years of experience as a building level administrator emerged with the sheer volume of evidence-based research available in databases. This relationship is shown in Table 16 below.

Table 16

Bivariate Correlation Between the Years Served as a Building-Level Administrator and Overwhelming Volume of Evidence Based Research

	Building Level Experience	Volume of Research
Building Level Experience	--	.325*
Volume of Research	.325*	--

*Correlation is significant at the 0.05 level (two-tailed).

Finally, there was a significant relationship between the method of certification for superintendents' licenses and the highest education levels attained. Table 17 shows that the higher the education attainment level of superintendents, the more likely they attained their

superintendent licenses via alternative routes other than master's degrees in education leadership or post-master's certificate programs.

Table 17

Bivariate Correlation Between Highest Education Level and Certification Method

	Highest Education Level	Certification
Highest Education Level	--	.491**
Certification Method	.491**	--

**Correlation is significant at the 0.01 level (two-tailed).

Summary

The purpose of this study was to understand what sources West Virginia county superintendents and deputy, assistant, and associate superintendents use to stay informed on questions of educational policy. The findings reported in this chapter with implications, conclusions and recommendations, will be discussed in the following chapter.

CHAPTER FIVE

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Purpose of the Study

According to Hoylman (2017) West Virginia county school boards consulted their respective county superintendents five times more frequently than any other source when making school board-related decisions. Evidence-based research was consulted neither frequently nor with any depth by members of West Virginia's county school boards; only 2% of county school board members heavily used professional academic journals and 60% did not use professional journals at all in the decision-making process (Hoylman, 2017). They relied almost exclusively on their respective superintendents' perceived knowledge, leading Hoylman (2017) to recommend that a future study explore superintendents' experience with the production and consumption of evidence-based research. We know their board members believe they are well-informed, but the primary source(s) of their information remained unclear.

The purpose of this study was to understand what sources West Virginia county superintendents and deputy, assistant, and associate superintendents consult to stay informed on questions of educational policy; how useful they find evidence-based research; the perceptions they have to the overall usefulness/credibility of evidence-based research; the barriers that exist to the use of evidence-based research; and whether there are relationships between selected demographic variables and superintendents' consumption of evidence-based research.

Research Questions

1. How often do superintendents use evidence-based research to stay informed?
2. To what extent, if any, do superintendents find evidence-based research useful to executing their professional responsibilities?

3. What perceptions do superintendents have related to the overall credibility/trustworthiness of evidence-based research?
4. What barriers exist to the use of evidence-based research?
5. Are there relationships between selected demographic variables and superintendents' consumption of evidence-based research?

Population and Sample

A relatively small population size was used for this study ($N = 106$); the population is all of West Virginia county school board superintendents, deputy, associate, and assistant superintendents. The West Virginia Department of Education policy 5202 requires that a legally constituted entity such as a board of education to employ a chief administrative officer or superintendent (2017). Single stage sampling was used.

Method

The research instrument to collect data for this study was developed and adapted from the research instrument created by Hoylman (2017) when she sought to understand what sources of information West Virginia county school board members used to stay informed when making board-related decisions. The Qualtrics program was used to operationalize the research survey, and the survey was deployed to the population ($N = 106$) via a hyperlink embedded in an email. The survey may be seen in Appendix C. Of the populations, a sample of 59 professionals chose to participate, yielding a 55.6% return rate for this study.

Data were analyzed using SPSS version 25 software to create statistical analyses of responses from the survey instrument. Quantitative data analysis relied on descriptive statistics, bivariate correlations, and crosstabulations.

Summary of Findings and Conclusions

Research Question 1: How often do superintendents use evidence-based research to stay informed?

Superintendents in the West Virginia public school system relied most heavily on professional experience to stay informed. Professionals closest to the superintendents, or board office personnel, were the second most relied upon source, personal experience was third, with building level administrators being the fourth, and intuition or instinct being the fifth.

Respondents identified social media and broadcast media as sources they felt were not useful. The third least consulted source of information by superintendents was printed popular media, followed by their own intuition or instinct. Evidence-based research in professional organization journals was reported by superintendents to be among the least relied upon sources of information to stay informed professionally.

Treadway (2015) found that higher education administrators within the West Virginia higher education system also relied most heavily on their previous professional experience to stay informed, while Hoylman (2017) found that West Virginia's county level board of education members reported their respective superintendents as the most heavily used information source, but trusted their professional experience as well. It seems clear that in the administrative and policymaking realm of West Virginia's public and higher education systems, personal experience and individuals close to the decision-makers are the most frequently used and influential inputs to the decision-making process. Respondents could have distinguished professional experience from personal life experiences.

According to Treadway (2015), printed popular media, peer-reviewed publications, broadcast media, and members of the general public were considered the least reliable sources of

information used by West Virginia higher education administrators of boards of governors. According to Hoylman (2017), professional journals were among the least frequently consulted information sources among West Virginia public school board members with 13% of respondents indicating that professional journals were not useful at all.

Research Question 2: To what extent, if any, do superintendents find evidence-based research useful to executing their professional responsibilities?

The top source reported by superintendents as being the most useful in helping them execute their professional duties was their own professional experience. This finding is similar to Treadway's (2015) finding that West Virginia higher education administrators relied most heavily on previous professional experience when making policy decisions. In addition to professional experience, respondents to this study responded favorably (i.e., selected options 4-6 on the 6-point Likert scale) to board office personnel, personal experience, school-based personnel (e.g., principals, teachers, custodians, etc.), and members of professional organizations (e.g., West Virginia School Boards Association [WVSBA], NSBA, AFT, NEA, WVEA, etc.), and evidence-based research as valuable sources of information to executing their professional duties. Evidence-based research, however, was identified by only 17.3% of respondents as being very useful information to staying informed professionally.

Superintendents identified on the response continuum that social media were "not useful at all" to executing their professional duties, followed by broadcast media. Members of the general public, school-based personnel, intuition or instinct, and evidence-based research in professional organization journals were reported by some superintendents as being not useful in executing their professional duties (i.e., items 1-3 on the 6-point Likert scale).

Superintendents were asked in which areas, if any, do they use evidence-based research; a Likert-type scale was used to identify how often each of the previously stated sources is consulted on a range of six selections – the first being "never" and the last (sixth) being "often." Regarding the use of evidence-based research in policymaking, it is seemingly paradoxical that superintendents in this study reported to have shared research with policymakers frequently (92% with local school board members and 70% with state level policymakers), since only 17.3% of the respondents indicated they found professional journals useful sources of information. Perhaps they viewed evidence-based research as synonymous with general information related to decision making.

Similar to the findings regarding the use of evidence-based research to inform board of education members and policymakers, superintendents in this study also reported they share evidence-based research with members of the general public and in public relations.

Research Question 3: What perceptions do superintendents have related to the overall credibility/trustworthiness of evidence-based research?

Factors contributing to superintendents' perceptions of the trustworthiness of evidence-based research were the focus of research question three. All factors listed were viewed by superintendents as being necessary and having a substantial effect on their judgment of research credibility. Whether the research was peer reviewed, broad in scope, and had been replicated were reported as having large effects on credibility.

Research Question 4: What barriers exist to the use of evidence-based research?

Barriers to the use of evidence-based research were reported. Superintendents reported it difficult to find time to consume evidence-based research as the number one barrier in its use of research, followed by the overwhelming volume of research available in databases. Frustration

with the length of research-based reports was reported as the number three barrier, followed by difficulty in understanding data and statistics in research-based reports. The fifth and final barrier to the use of evidence-based research reported by superintendents was difficulty in finding evidence-based research online.

Research Question 5: Are there relationships between selected demographic variables and superintendents' consumption of evidence-based research?

The SPSS version 25 software was used to determine if there were relationships present between selected demographic variables and superintendents' consumption of evidence-based research. A significant and positive correlation was observed between the years superintendents had served as building level administrators and how difficult they found it to process the statistics and other data analyses in evidence-based research. This seems an odd finding given that 82% of those reporting held post-master's certificates or doctoral degrees through which they were surely introduced to both research consumption and production. A modest and positive correlation was also observed between the number of years superintendents had served as building level administrators and how overwhelming they found the volume of research available in research data bases. The longer superintendents served as building level administrators, the more overwhelming they found the volume of research available in databases. Perhaps superintendents' experiences in the daily intensity of running a school as a principal i.e., managing day-to-day operations, trained them to develop a habit of saving time wherever possible e.g., sending short emails, skimming information, quickly switching between different tasks throughout each day. The volume of research in databases and the time required to find and analyze evidence-based research relevant to professional duties may have seemed like a

convoluted and time-consuming process that infringed on their ability to efficiently manage the day-to-day operations of their schools.

Finally, a significant correlation was observed between the highest level of education obtained and the method of certification for superintendent's license. The higher the degree level obtained, the more likely superintendents were certified for their jobs via an alternative route; however, we do not know what those alternate routes were.

Implications

Treadway (2015) wrote that "in order to make a mindful, well-informed decision, however, a policymaker must devote time and energy to seeking out as much relevant, useful, and reliable information as possible in the shortest amount of time, a task made ever more difficult by the sheer volume of information available and the limited amount of time to find, scrutinize, and apply it to the decision-making process" (p. 99). Hoylman (2017) agreed: "To the extent that credible, evidence-based research has (or should have) a role to play in the crafting of 'well-informed decisions,' understanding how policymakers use such research is vital – not only to the researchers who produce it, but to the entire education enterprise" (p. 57). Superintendents in public school systems stand in the estuary of politics and research; their job is to ensure a healthy mix of evidence-based research and educational policymaking is produced.

Although the majority of respondents reported relying on evidence-based research to a degree, superintendents relied most heavily on professional experience, board office personnel, personal experience, and school-based personnel as sources to stay informed and execute their professional duties. These findings are similar to Treadway's (2015) findings in the higher education arena that administrators surprisingly do not often utilize evidence-based research. If superintendents are consuming evidence-based research, why is evidence-based research not one

of the most useful and often consumed sources of information in staying informed and in executing professional duties? Perhaps superintendents simply do not read enough evidence-based research to bother applying it.

The study also revealed that the more frequently superintendents consulted with members of professional organizations such as WVSBA, NSBA, AFT, NEA, WVEA, etc., the more frequently they consumed evidence-based research. This could suggest that the more involved superintendents are in networking with other professionals engaged in life-long learning and professional development, the more likely they are to read evidence-based research to supplement their professional reservoirs of knowledge to grow professionally. This finding substantiates Oakley's (2015) finding that superintendents' affiliation with educational organizations were aids to influence state-level legislation. Additionally, the more frequently superintendents consumed information from printed popular media such as newspapers, magazines, websites, etc., the more frequently they consumed evidence-based research. These findings could suggest that the more time superintendents dedicate to reading as a method of consuming information, the more likely they are to read evidence-based research. "Not all readers are leaders, but all leaders are readers." – Harry S. Truman.

Superintendents reported using evidence-based research to inform board of education members despite using it very little to inform their professional duties; in fact, 92% of respondents indicated that they use evidence-based research to inform board of education members. In addition to informing board of education members, 70% of respondents indicated that they also use evidence-based research to inform policymakers such as members of the WVDE, legislators, etc. These figures, however, do not seem to conform to the figure of only 17.3% who reported they used evidence-based research themselves. Perhaps superintendents do

acquire evidence-based research to pass along to board members or policymakers, but neither vet it nor use it for their own purposes. It appears that although evidence-based research is not a frequently used source to inform superintendents in the execution of their professional duties, they do report using it to an extent to assist policymaking.

Evidence-based research was reported by superintendents to be used in informing members of the general public and in public relations. Most superintendents indicated that they used evidence-based research to inform members of the general public (92%) and in public relations (70%). Perhaps the explanation for this is the same as for why superintendents do not report using evidence-based research for their own consumption, but instead share it with a broader audience. This would be consistent with Wu's (2008) observation that research in policymaking is used symbolically to argue for policies that legislators wish to promote rather than to craft or guide policy development and provisions; evidence-based research does not dominate public policy with compelling empirical evidence, but rather shapes contextual vocabularies of policymakers indirectly influencing policymaking (p. 356).

Barriers to the use of evidence-based research found by Treadway (2015) and Hoylman (2017) were substantiated by this study. Superintendents reported an understanding of how certain characteristics of evidence-based research influence its credibility (i.e., who conducted it, whether it is peer reviewed, whether it's been replicated, etc.). Superintendents reported an inability to find time to consume research reports and difficulty in finding evidence-based research online, which substantiates the findings of Oliver et al., (2014) that barriers to the use of evidence-based research included lack of access to research and lack of time or opportunity to locate and use research evidence. Nelson et al., (2009) finding that a common barrier to the use of evidence-based research included complexity of research reports was also further

substantiated by this study's finding that data and statistics in research studies can be difficult to understand. According to Treadway (2015), policymakers have little time to devote to conducting research, so they rely on intermediaries. If researchers want their research to be reviewed by policymakers, intermediaries – superintendents – should practice brevity, and present well-written and informative summaries of lengthy research to policymakers.

Regarding the finding that there is a relationship between having been a building level administrator and believing evidence-based research is too complex and its volume is overwhelming, it may be that new superintendents (the majority of the respondents had fewer than five years' experience as superintendents) have carried with them their habits as principals to the superintendency. Building level administrators are tremendously busy developing the visions for their schools, overseeing implementation of initiatives, and managing and leading day-to-day operations. If little time to read evidence-based research as a building level principal was the norm, it may be perceived that there is little time to read as a superintendent.

Future Research Recommendations

This study presented some valuable insights into West Virginia public school superintendents and their consumption and use of evidence-based research. From this study's findings, the following recommendation can be made to researchers.

1. Evidence-based research was reported by superintendents to be used in informing policymakers such as local board of education members, members of the West Virginia Department of Education (WVDE), legislators, etc. The extent to which they use evidence-based research for their own knowledge and development, however, is not well understood, and this study presented some contradictory findings. A misalignment of sorts was observed between the reportedly high use of evidence-based research for

purposes of informing policymaking and its minimal reported application to the professional duties of superintendents. Future studies could explore why evidence-based research, though consumed by superintendents to a certain degree, is not often used by superintendents to stay informed and in executing their professional duties.

2. Superintendents reported using evidence-based research to varying degrees to inform the general public and in public relations. Future studies could explore exactly how superintendents employ evidence-based research in these capacities.
3. This study sought to identify relationships between selected demographic variables and superintendents' consumption of evidence-based research, of which two were found. A significant relationship was observed between the number of years superintendents served as building level administrators (i.e., principals, associate principals, and assistant principals) and how complex they found evidence-based research studies to be. A modest relationship was observed as well: the longer superintendents had served as building level administrators prior to moving to the superintendency, the more overwhelming they found the volume of research available in databases. Future studies could explore these findings.
4. A significant relationship was observed between the higher the education levels (i.e., bachelor's and master's degrees, post-master's certificates, and doctoral degrees) reported by superintendents and the methods through which they were certified for licenses; the higher the level of education reported by superintendents, the more likely they were to have earned their certification via an alternative method. Future studies could explore this relationship as well.

5. This study was limited to superintendents in the West Virginia public education arena. Future studies could use a much larger population that could make the results more generalizable.

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APPENDICES

Appendix A: IRB Approval Letter

MARSHALL UNIVERSITY
www.marshall.edu

Office of Research Integrity
Institutional Review Board
One John Marshall Drive
Huntington, WV 25755

FWA 00002704

IRB1 #00002205
IRB2 #00003206

February 1, 2019

Barbara Nicholson, PhD
Leadership Studies, MUGC

RE: IRBNet ID# 1385193-1
At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Nicholson:

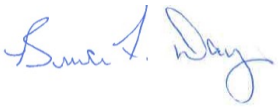
Protocol Title:	[1385193-1] Staying Informed: Superintendents and Their Experience With Evidence-Based Research in the West Virginia Public School System	
Site Location:	MUGC	
Submission Type:	New Project	APPROVED
Review Type:	Exempt Review	

In accordance with 45CFR46.104(d)(2), the above study was granted Exempted approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Designee. No further submission (or closure) is required for an Exempt study **unless** there is an amendment to the study. All amendments must be submitted and approved by the IRB Chair/Designee.

This study is for student Gabriel King.

If you have any questions, please contact the Marshall University Institutional Review Board #2 (Social/Behavioral) Coordinator Bruce Day, ThD, CIP at 304-696-4303 or day50@marshall.edu. Please include your study title and reference number in all correspondence with this office.

Sincerely,

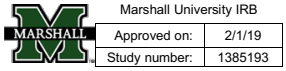


Bruce F. Day, ThD, CIP
Director, Office of Research Integrity

Appendix B: Consent to Participate

Anonymous Online Survey Invitation and Informed Consent

Date xxx xx, 2017



Dear Colleague:

You are being invited to participate in a statewide research project entitled *Staying Informed: Superintendents and Their Experience with Evidence-Based Research in the West Virginia Public School System*. This research project is being conducted to better understand how West Virginia public school superintendents are supplementing their professional reservoirs of knowledge and how often evidence-based research is consumed through this process. The study is being conducted by Gabriel D. King, EdD candidate, and his faculty advisor Dr. Barbara Nicholson from the College of Education and Professional Development at Marshall University (University). The study is being conducted in partial fulfillment of the requirements for the degree of Doctor of Education in Leadership Studies at Marshall University.

Participation in this study is completely anonymous and voluntary. The survey is comprised of a series of multiple choice and Likert scale questions and should take approximately five minutes to complete. Do not enter your name or other identifying information anywhere on the survey. Your IP address will not be collected, and once you complete the survey, you can delete your browsing history for added security. Results will be reported only in aggregate form. There will be no reporting of individual responses.

There are no known risks involved in participating in this study. Participation is completely voluntary, and there will be no penalty or loss of benefits if you choose not to participate or to withdraw from the research study. If you choose not to participate, you may leave the survey site. You may also choose to not answer any question by simply leaving it blank. Once you begin the survey, you may end your participation at any time by simply closing your browser. Completion of the online survey indicates your consent to use your responses as part of this study. If you have questions about the study, you may contact Dr. Barbara Nicholson at 304-746-2094 or at bnicholson@marshall.edu, or Gabriel King at king250@marshall.edu.

If you have questions concerning your rights as a research participant, you may contact the Marshall University Office of Research Integrity at 304-696-4303.

By completing this survey, you are confirming that you are 18 years of age or older.

Please print this page for your records.

If you choose to participate in this study, please access the survey at (insert web address).

Appendix C: Survey Instrument

Superintendent Experience Levels with Evidence-Based Research

1. How useful do you find information from the following sources?

	1 Never	2	3	4	5	6 Often
Members of the general public	☐	☐	☐	☐	☐	☐
Board Office personnel (Superintendents, deputy superintendents, associate, assistant, directors, and coordinators, etc.)	☐	☐	☐	☐	☐	☐
School-based personnel (principals, teachers, custodians, etc.)	☐	☐	☐	☐	☐	☐
Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)	☐	☐	☐	☐	☐	☐
Professional organization journals (American School Board Journal, Educational Leadership, American Educator, Education Week, etc.)	☐	☐	☐	☐	☐	☐
Printed popular media (newspapers, magazines, websites, etc.)	☐	☐	☐	☐	☐	☐
Social media (Facebook, Twitter, etc.)	☐	☐	☐	☐	☐	☐
Broadcast media (television, radio)	☐	☐	☐	☐	☐	☐
Intuition or instinct	☐	☐	☐	☐	☐	☐
Personal experience	☐	☐	☐	☐	☐	☐
Professional experience	☐	☐	☐	☐	☐	☐
Other (Please specify.) _____						

2. How often do you consume information from the following sources?

	1 Not at all useful	2	3	4	5	6 Very useful
Members of the general public	☐	☐	☐	☐	☐	☐
Board Office personnel (Superintendents, deputy superintendents, associate, assistant, directors, and coordinators, etc.)	☐	☐	☐	☐	☐	☐
School-based personnel (principals, teachers, custodians, etc.)	☐	☐	☐	☐	☐	☐

Members of professional organizations (WVSBA, NSBA, AFT, NEA, WVEA, etc.)	☐	☐	☐	☐	☐	☐
Professional organization journals (American School Board Journal, Educational Leadership, American Educator, Education Week, etc.)	☐	☐	☐	☐	☐	☐
Printed popular media (newspapers, magazines, websites, etc.)	☐	☐	☐	☐	☐	☐
Social media (Facebook, Twitter, etc.)	☐	☐	☐	☐	☐	☐
Broadcast media (television, radio)	☐	☐	☐	☐	☐	☐
Intuition or instinct	☐	☐	☐	☐	☐	☐
Personal experience	☐	☐	☐	☐	☐	☐
Professional experience	☐	☐	☐	☐	☐	☐
Other (Please specify.) _____						

3. How strongly do you agree with each of the following statements?

	1 Strongly Disagree	2	3	4	5	6 Strongly Agree
The length of research-based reports is frustrating.	☐	☐	☐	☐	☐	☐
It is not practical to find time to consume research reports.	☐	☐	☐	☐	☐	☐
Data and statistics in most evidence-based research studies are difficult to understand.	☐	☐	☐	☐	☐	☐
The volume of research available in databases is overwhelming.	☐	☐	☐	☐	☐	☐
It is difficult to find evidence-based research online.	☐	☐	☐	☐	☐	☐

4. To what extent, if any, do the following qualities effect your assessment of the credibility/trustworthiness of research?

	1 No Effect	2	3	4	5	6 Substantial Effect
Who conducted the study (University researchers, professional organizations, think tanks, etc.)	☐	☐	☐	☐	☐	☐
Whether the study has been reviewed by other researchers prior to publication.	☐	☐	☐	☐	☐	☐
Scope of the study (Local, regional, national, etc.)	☐	☐	☐	☐	☐	☐
Whether the study has been replicated in similar	☐	☐	☐	☐	☐	☐

Circumstances elsewhere.
Other _____

5. **In which of the following areas, if any, do you use evidence-based research?**

	1 Never	2	3	4	5	6 Often
Informing board of education members	☐	☐	☐	☐	☐	☐
Informing policymakers (WVDE, Legislators, etc.)	☐	☐	☐	☐	☐	☐
Informing members of the public	☐	☐	☐	☐	☐	☐
In public relations	☐	☐	☐	☐	☐	☐

Other _____

2. **How many years have you served as a superintendent, deputy superintendent, associate superintendent, or assistant superintendent?**

1-5	☐
6-10	☐
11-20	☐
21-30	☐

3. **How long did you serve as a building level administrator (Principal, associate principal, assistant principal)?**

1-5	☐
6-10	☐
11-20	☐
21-30	☐

4. **What is the size of you school district based on student enrollment?**

0 to 7499	☐
7500 to 14,999	☐
15,000 to 22,499	☐
22,5000 to 30,000	☐

5. **What is your highest degree level?**

Bachelor's	☐
Master's	☐
Post-Master's certificate	☐
Doctorate	☐

6. How were you certified for your director and/or superintendent license?

Master's degree in education leadership	☐
Post-master's certificate in educational leadership	☐
Alternative route	☐

Appendix D: Curriculum Vitae

Gabriel D. King

Principal
South Charleston High School
One Eagle Way
South Charleston, WV 25309
304-766-0352
gking@mail.kana.k12.wv.us

EDUCATION

2019	Doctor of Education, Marshall University (Leadership Studies) Dissertation -- *Staying Informed: Superintendents and Their Experience with Evidence-Based Research in the West Virginia Public School System*
2016	Master of Arts, Marshall University (Leadership Studies)
2013	Bachelor of Science, West Virginia State University (Education)

WORK EXPERIENCE

2018 – Present	Principal South Charleston High School, South Charleston, WV
2018	Administrative Assistant Principal Riverside High School, Belle, WV
2017 – 2018	Assistant Principal & Director of Athletics Scott High School, Madison, WV
2016 – 2017	Teacher, Social Studies George Washington High School, Charleston, WV
2013 – 2016	Teacher, Social Studies Lincoln County High School, Lincoln County, WV

PRESENTATIONS

2017	Staying Informed: Superintendents and Their Experience with Evidence-Based Research Presenters: King, Gabriel and Nicholson, Barbara 58th Annual Southern Regional Council on Educational Administration (SRCEA) Conference, New Orleans, LA

OTHER ACTIVITIES

2017	Co-Instructor LS 660 (Capstone for School Principalship Post-Master's Certificate) Professor: Dr. Barbara Nicholson Marshall University
2014 – 2015	Data Collector Integrating Writing into the Curriculum (Research Project) Lead Researcher: Dr. Barbara O'Byrne Marshall University and Lincoln County Schools, WV

PROFESSIONAL CERTIFICATIONS/LICENSES

2016	Professional Administrative Certificate Superintendent (PK-AD) Supervisor of General Instruction (PK-AD) Principal (PK-AD) West Virginia Department of Education
2013	Professional Teaching Certificate Social Studies (5-AD) West Virginia Department of Education