QUALIFICATIONS OF THOSE ADMINISTERING AND INTERPRETING COGNITIVE (IQ) ASSESSMENTS FOR SPECIAL EDUCATION PLACEMENT WITHIN MISSOURI: PERCEPTIONS OF SPECIAL EDUCATION DIRECTORS AND PROCESS COORDINATORS

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Doctor of Education

by
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DIAGNOSTIC COMPETENCIES OF THOSE ADMINISTERING AND INTERPRETING COGNITIVE (IQ) ASSESSMENTS FOR SPECIAL EDUCATION PLACEMENT WITHIN MISSOURI: PERCEPTIONS OF SPECIAL EDUCATION DIRECTORS AND PROCESS COORDINATORS

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And hereby certify that, in their opinion, it is worthy of acceptance.

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DEDICATION

I dedicate my work to those who struggle.

Some of us struggle with family. We never measure up, they never measure up, some family members are just mean, and others we seek approval from till we die. Others struggle with careers. We never seem to meet our goals, others impede our path, we get fired, we get hired, we cannot seem to make it to the top-and the pay is never good. There are those who struggle with faith. Who do we believe in, what do we believe in, if its good-why is their bad, and why does it matter? In fifty years, I have not seen the struggle get easier, but have decided to…keep working, loving, and believing.

I hope you do the same.
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COGNITIVE (IQ) ASSESSMENTS FOR SPECIAL EDUCATION PLACEMENT
WITHIN MISSOURI: PERCEPTIONS OF SPECIAL EDUCATION DIRECTORS
AND PROCESS COORDINATORS

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ABSTRACT

This study explored the policies and laws established to govern the process school
districts within Missouri use to administer and interpret cognitive assessments, as well as
the perceptions of special education administrators and process coordinators. Archival
data from DESE as well as from the Missouri Association of School Psychologists were
examined to provide supporting information. This analysis was mixed methods in nature
while employing a pragmatic approach. The researcher sought to understand the
experiences of special education administrators and process coordinators as described by
the participants. Both the qualitative and quantitative portions of the findings provided
rich and dynamic insight into the participants’ perceptions regarding the current
assessment practices of Missouri K-12 districts. They also provided cognizance of the
qualifications of personnel utilized to administer and interpret cognitive assessments in
Missouri K-12 districts as well as how those qualifications compared to established law,
policies, and standards. These paralleled need for educational leadership at the state level
to provide clarity and communication to Missouri school districts as well as consider
measures of accountability, funding, and recruitment.
SECTION ONE

INTRODUCTION TO THE BACKGROUND OF THE STUDY
The cognitive (IQ) assessment contributes valuable information to the understanding of a child’s characteristics and capabilities. This assessment is often utilized within the State of Missouri (along with other sources of data) to determine if a child qualifies to receive special education services. While a number of factors can affect the reliability of a test’s scores and the eligibility determination of children for special services in Missouri K-12 schools, the focus of this research was on the role of the assessment professional and their qualifications.

**Background of the Study**

Evaluation criteria for Missouri school districts that conduct cognitive testing on students being considered for special education services is mandated through local school board policy (IGBA-1-AP (2), which can be found for districts in Missouri on The Missouri School Board Association’s (MSBA) webpage (Missouri School Board Association, 2020). While the MSBA proposes policies, those posted on its site for members of the association are altered at the discretion of the local school board and may not necessarily be written or implemented as proposed. The MSBA proposed policies can also be found on the same webpage under policy samples. These proposals include references to both state and federal laws as well as court cases that can impact board documents and action. The local district policies should adhere to the standards established by their state (Missouri Office of Special Education Compliance, 2020; Missouri Department of Elementary and Secondary Education, 2020) as well as the federal government (Individuals with Disabilities Education Act, 2004). In addition to the guidance and regulations provided through federal, state, and local policy, Pearson Assessments (2020a), the publisher of *The Wechsler Intelligence Scale for Children-Fifth*
*Edition*, the most common IQ assessment used within school districts, has recommended policy establishing qualifications for administration and interpretation of testing instruments on its website that is referred to by state and federal laws. It states that only those with appropriate training and expertise can administer and interpret their assessment. These qualifications are posted on Pearson’s website (Pearson Assessments, 2020a) and include the following:

A doctorate degree in psychology, education, or a closely related field with formal training in the ethical administration, scoring, and interpretation of clinical assessments related to the intended use of the assessment.

OR

Licensure or certification to practice in your state in a field related to the purchase (of the assessments).

OR

Certification by or full active membership in a professional organization (such as APA, NASP, NAN, INS) that requires training and experience in the relevant area of assessment. (para. 6, level C)

Both state and federal laws refer to the publishers of cognitive measurements as responsible for establishing criteria regarding this practice of administering and interpreting assessments (Individuals with Disabilities Education Act, 2004; Missouri Office of Special Education Compliance, 2020; Missouri Department of Elementary and Secondary Education, 2020). The Missouri School Board Association’s proposed policy IGBA-AP2 is also aligned with these qualifications by stating that a Licensed Psychologist, Certified School Psychological Examiner, or School Psychologist meet the
qualifications to administer cognitive (IQ) assessments (Missouri School Board Association, 2020).

**Statement of the Problem**

Defining the problem is considered a crucial first step of policy analysis (Bardach & Patashnik, 2020). Publishers’ standards for administering and interpreting cognitive assessments (Pearson Assessments, 2020a) are addressed by state and federal law; however, local Missouri K-12 school boards may adopt policies that are inconsistent with the specifications of the publishers’ standards for administration qualifications. Contributing to this problem is the ambiguity in the definition of roles and responsibilities employees within each district are required to assume regardless of policy. It is possible school districts within the state of Missouri are utilizing personnel to administer and interpret cognitive assessments that may not meet publisher’s requirements, and the results of these assessments determine whether a child receives special education services.

There are legal ramifications for school districts due to non-compliance. Parents could file a complaint with DESE; following due process, the district could potentially be required to fund compensatory education (G.L. v. Ligonier Valley Sch. Dist. Authority, 2015). The parents could bring litigation against the district, and should the court determine the school is at fault, they would be awarded attorney fees to be paid by the district (R.L. v. Miami-Dade Cty Sch. Bd., 2014). Also, if a parent enrolled their child in a different district during due process and the district was found out of compliance, the school district would be responsible for compensating that school for the education provided (Endrew v. Douglas Cty Sch. Dist., 2017). Further, the publishers may
withdraw a school’s purchasing rights to the assessments forcing them to contract with assessment companies, costing the district a massive amount of money it might have used to provide needed services to students (Pearson Assessments, 2020c).

The Missouri Department of Elementary and Secondary Education (DESE) governs public schools within the state and provides guidelines for special education assessment. However, DESE gathers no data on who administers or interprets the assessments, and thus does not provide oversight on the personnel used to fulfill this role. Special education administrators are then tasked with understanding how to work within the confines of local school board policy, ensuring their district is fully compliant with state and federal laws as well as publisher’s criteria that establish policies for administration and interpretation of cognitive (IQ) assessments.

While research regarding the training and qualifications of testing administrators and technicians within the field of psychology is abundant (Hall et al., 2005; Miller et al., 2020; Moreland et al., 1995), evidence of research within the field of education is practically nonexistent. Special education in recent years has come under increased pressure to accurately identify students with disabilities due to the revised version of the Individuals with Disabilities Education Act (IDEA, 2004), and reinforced by Every Student Succeeds Act (ESSA, 2015). These laws, supported by Missouri legislative action, mandate that districts provide quality assessments.

**Purpose of the Study**

The purpose of this study was to explore the perceptions of Missouri public school special education administrators and process coordinators regarding the qualifications of staff that administer and interpret cognitive assessments. This study also
sought to contribute to the existing body of knowledge on the difference between policy and practice in this area. Implications indicated there were gaps between what K-12 schools in Missouri were doing and what governing bodies expected them to be doing. This disparity between policy and practice created a significant challenge for special education administrators and process coordinators. This study sought to determine how districts were fulfilling their obligations to correctly assess and identify students with disabilities and what the perceptions of special education administrators and process coordinators were, regarding those practices.

**Research Questions**

Comparing policy and laws established to govern the process Missouri school districts use to administer and interpret cognitive tests required additional information regarding personnel. Three research questions were primary to this study.

1. What are the qualifications of current personnel who administer and interpret cognitive tests in Missouri K-12 districts?

2. How do these qualifications compare to:
   a. federal law
   b. state law (DESE policy)
   c. Missouri School Board Association policy and
d. Publishers Standards

3. What are the perceptions of the following personnel involved with the administration and interpretation of cognitive tests regarding the current practices of those administering and interpreting cognitive tests within Missouri K-12 districts?
a. process coordinators

b. special education directors

**Conceptual Framework**

The conceptual framework utilized for this study relied upon the structural frame (Bolman & Deal, 2017). The researcher also incorporated standards and assumptions from other organizational structure literature. The paradigm employed by Bolman and Deal (2017) involved four lenses through which one could evaluate and understand events, processes, or what is required within an organization. These four lenses or frames were political, human resource, symbolic, and structural. The current study utilized the structural frame to study and evaluate the perceptions of personnel involved in the processes of administering and interpreting cognitive tests. This framework concentrated on strategy by establishing practices and processes, setting measurable objectives, defining duties and responsibilities, and implementing systems of measurement. This process was referred to as reframing by Bolman and Deal (2017). Caldicott (2014) viewed reframing as essential for leaders: “This skill set involves framing difficult concepts quickly, synthesizing data in a way that drives new insight, and building teams that can generate future scenarios different from the world they see today” (para. 9). Personnel utilized within Missouri school districts to participate in the special education referral process by administering and interpreting cognitive assessments should be prepared for the duties they perform. This preparation should include established policies and procedures regarding that role, and an organizational structure that provides support and stability.
The structure of an organization can be viewed as an outline for the expectations and interactions of personnel within an organization and those the organization serves. The basic premise of this frame contended it was vital to put people into roles suited best for maximizing their potential in not only their duties but also their relationships with others (Bolman & Deal, 2017). Likewise, Mintzberg (1979) addressed the structure of organizations by creating five clusters of employees based on functions they provide. These were described as the operating core, middle line, support staff, technostructure, and strategic apex. Administering and interpreting cognitive assessments for children to be placed in special education would be a role within the support staff cluster. Where each person belongs within these groups is based upon the role they play and the influence they have within the organization.

The role of an assessment professional and the duties they should perform for school districts is defined by DESE and is supported by both state and federal laws. However, there is no state oversight at the local district level, so there is currently no accountability for school districts to employ qualified personnel to perform these duties. Also, a wide range of job titles and descriptions of roles reported yearly to the state suggests that there was no guidance or direction from those who oversee public schools within Missouri (Missouri Department of Elementary and Secondary Education, 2021). It is possible that local school boards and K-12 districts in Missouri have not hired individuals with required certification, and thus may have personnel serving in positions they are unqualified for or performing tasks that are not clearly defined.

The structural framework (Bolman & Deal, 2017) also considers how an organization is coordinated with either vertical or horizontal control. The vertical design
has authority figures in places that regulate the effort of subordinates through regulations and policies, preparation, and administration practices. The process coordinator’s role in each school district in Missouri is not defined uniformly by local school board policy and a special education director is most often the only administrator they are accountable or report to. Also, Missouri public schools have varying titles and job descriptions for those performing and interpreting cognitive assessments. Conversely, DESE, while responsible for upholding federal and state mandates that affect school districts, also recognizes the ultimate authority of all public schools lies with their elected school board officials. An established chain of command is vital within organizations to keep actions supported by policy and goals. According to Bolman and Deal (2017), authoritarian roles within schools are often vague or challenged.

Communication between the various agencies, organizations, legislatures, and boards that commit to the administration of public schools provides support to the apportioning of power. Similarities between authority and power become visible when viewing an organization through the structural lens (Bolman & Deal, 2017). Often either or both are lacking in school districts who make determinations based on the availability of funds and receive minimal oversight from state agencies. When decisions are made, the interests of those with voice and influence are well represented, while the apprehensions of absentees are often overlooked or disregarded (Lukes, 1974; Brown, 1986). Structural theorists emphasize leadership as the valid right to making requisite decisions. However, if an organization is unclear of the hierarchy or chain of command, and if those making serious decisions are uninformed due to a break-down in
communication, decisions can be made and enforced that are ill-advised or inadvertently breach policy.

Dilemmas within the structures of organizations can often be generated through the lack of clarity regarding responsibilities, goals, policies, or procedures as well as the knowledge of who is in command (Kvalnes & Nordal, 2019). Entry-level employees should be able to trust in a system that hires them based on minimum qualifications then provides additional training if needed. Those with authority at the middle level should be able to trust that upper management has provided them proper guidelines and procedures that ensure regulations are followed, and finally those at the top-level of governance should make every effort to ensure all legislative policies are received and implemented through their chain of command (Trevino et al., 1999). Bolman and Deal (2017) referred to the break-down of these key events as structural dilemmas, for example, “gap versus overlap” (p.73). This dilemma described what could happen if crucial assignments were not clearly designated. The problem of practice studied within this body of research was undoubtedly a structural dilemma based upon the evidence extrapolated from literature. Thus, it was a necessity to view it through the lens of the structural framework as described by Bolman and Deal (2017).

**Design of Study**

Educational research includes a variety of methods that include qualitative and quantitative approaches (Fink, 2017; Mertens, 2020) to gain information that is reliable and credible (Mertler, 2021). Qualitative methods used in research intend to deliver a detailed portrayal of a specific program, practice, or setting (Mertens, 2020). Maxwell (2013) claimed this approach allows the researcher to recognize the process and
dynamics that support a causal relationship without the need for evaluation or quantitative measurement. Quantitative research, on the other hand, requires the researcher to build trust by validating knowledge claims. This is done through the collection of evidence in the form of objective observations of relevant issues (Gall et al., 2015). This method results in findings that are most often precise and numerical (Merriam & Tisdell, 2016).

Employing a mixed-methods approach (Creswell, 2014), however, allowed for the compilation, evaluation, and interpretation of both quantitative and qualitative data. Patton (2015) shared the use of mixed methods can provide breadth, depth, and numerical data that gives the researcher a clearer view of the problem they are studying. Tashakkori and Creswell (2007) defined mixed methods as “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative methods in a single study or program of inquiry” (p. 4). Utilizing this method of research has particular value when the researcher is attempting to solve a problem that is present in a complex educational context (Teddlie & Tashakkori, 2010).

This research followed a concurrent mixed methods design with a pragmatic approach (Doyle et al., 2009). A survey instrument was used that contained close-ended (quantitative) data as well as open-ended (qualitative) data. Concurrent mixed methods designs are used when two types of data are collected and analyzed (Creswell, 2009). The pragmatic approach supported the collection of quantitative and qualitative data simultaneously (Mertens, 2020). Both forms of data were analyzed separately, and then compared to see if the data confirmed or disconfirmed each other (Creswell, 2014). This
yielded “a richer understanding of the subject under study” (Merriam & Tisdell, 2016. P48).

**Pragmatic Approach**

The pragmatic approach allowed the researcher to consider the questions posed as more important than the method used (Mertens, 2020). Using this philosophical paradigm to frame the research allowed for a ‘what works’ approach according to Youngs and Piggot-Irvine (2012). As the goal of this research was to search for useful points of connection between policy and practice, the pragmatic approach allowed for the choice of methods to be informed by the inferences revealed by the researcher. The focus of pragmatism is on ”lines of action, warranted assertions, and workability” (Morgan, 2007, p. 66).

Ethical concerns also supported the use of this approach. Morgan (2007) shared the goal of ethical research is to gain knowledge in the pursuit of desired ends. Dewey included strong ethical principles into pragmatism by seeing the value of engaging with multiple populations thus assisting the researcher to gain understanding from various points of view (Morgan, 2007). This body of research sought various opinions through elicitation of input from two different participant populations who had direct knowledge of the phenomenon studied. The epistemology of the pragmatic approach encouraged elicitation of data from participants with differing roles. The researcher interacted with diverse participants in order to both understand the dilemma and address it (Hall, 2013; Morgan, 2007).
Setting

This study was conducted across all 518 K-12 public school districts (charter schools were not included) located in the state of Missouri. The school districts were situated in all regions of the state and were in rural settings as well as urban and suburban settings. Of the 518 public school districts, there were 70 elementary school districts and 448 districts that maintained high schools. The largest school district was the Springfield Public School District located in south-central Missouri, while the smallest district was Missouri City School District #56 in the Kansas City Metropolitan Area.

According to the December 2020 data reports by the Department of Elementary and Secondary Education (Missouri Education Dashboard, 2019) there were 879,701 K-12 students in Missouri and 37,658 pre-kindergarten students. There were 119,926 school age children, and 12,606 early childhood students that qualified for special education services under 14 disability areas. In the 2018-2019 school year, 7,552 students were initially evaluated to determine eligibility for special education services.

Data were also gathered by DESE regarding staffing in special education. DESE reported that there were 260 special education directors. Personnel that could be potentially serving as process coordinators were as follows: 234 school psychological examiners, 289 school psychologists, and 241 educational diagnosticians. There were 1290 fully certified special education teachers for ages 3-5, and 8169 for ages 6-21. Shortage areas were identified by DESE as content areas for which positions were filled with unqualified teacher(s) or left vacant due to the absence of qualified candidates. There were 671 teachers identified as unqualified teaching the mild/moderate cross categorical, K-12 students. There were 316 teachers identified as unqualified teaching
early childhood special education. These were included on the list of critical shortage areas by the Missouri Commissioner of Education in December 2020.

**Participants**

Mertens (2020) identified many decisions a researcher must make when choosing participants. Each of the public (non-charter) school districts within the state of Missouri should have personnel possessing not only direct knowledge of the special education placement process but who are also responsible for assessment accuracy. The target population in this research was identified as possessing both these skills and expertise.

Two participant groups completed an electronic survey for this research. The first was all Missouri special education administrators. One of their primary duties is overseeing special education services and personnel. They report directly to the superintendent of schools or their designee. The second group was all personnel reported to DESE as Missouri process coordinators whose duties include: supervising and coordinating special education programs, policies, and diagnostic procedures as well as organizing and ensuring completion of all evaluation reports and IEPs. They report directly to the special education administrator. These two groups of respondents were chosen for several reasons. First, they had access to information needed for this body of research. Second, they were key stakeholders within the setting. Third, each of these personnel possessed expertise within the field of special education. Those with less than three years’ experience in their role were excluded from the study to ensure the information provided was based on the opinions of individuals with experience in their position.
Initial contact with all potential survey participants was made through email. All 260 (Missouri Department of Elementary and Secondary Education, 2021) special education administrators in Missouri were contacted, and participation was expected to be more than half. Not every district has a special education administrator. There are districts where the superintendent or other central office administrator serves in that capacity. Special education consortia also exist in Missouri, where multiple districts share the cost of one administrator as well as special education staff.

In addition, those who served in all 518 public (non-charter) schools in Missouri as process coordinators were contacted. Participation of those participants was expected to be more than half as well. Surveying all Missouri special education administrators and process coordinators ensured the maximum potential survey size. This sampling procedure was comprehensive and purposeful (Suri, 2011). Survey participants had a variety of educational skills and proficiencies related to their roles, and those individuals had an array of responsibilities that fell outside the realm of special education evaluations.

**Data Collection Tools and Procedures**

According to Mertens (2020), data collection is a means of collecting information related to procedures and people. The purpose of this study was to explore the perceptions of Missouri public school special education administrators and process coordinators regarding the competencies of staff that administer and interpret cognitive assessments. This study also explored the policies and laws established to govern the process school districts within Missouri used to administer and interpret cognitive assessments. A mixed methods design was used with a pragmatic approach (Mertens,
through the use of a survey that gathered both quantitative and qualitative data from the participants. Archival data was also gathered that assisted the researcher in finding patterns or themes.

**Human Subject Protection**

An application was submitted and acquired by the researcher for human subject’s protection via the University of Missouri’s Institutional Review Board. The researcher complied with all guidelines and methods established by this university. Also, the researcher safeguarded confidentiality of all contributors by limiting identifying criteria to include only the size and region of the district or personnel providing the data. An informed consent form was provided to every participant (see Appendix A). This was used to advise participants engaging in the survey of their risks. It also apprised them of the benefits, time commitment needed, confidentiality, and rationale for the study (Fink, 2017). To participate in the survey, agreement was required. All documents and data gathered or assimilated through electronic means was stored on the researcher’s private laptop. This was accessed by the researcher and their dissertation adviser only, and was password protected.

**Survey**

A survey designed by Qualtrics (see Appendix B) was the main data gathering method used for this study. According to Fink (2003), surveys are an excellent way to collect evidence from individuals that define or clarify their knowledge. By using a Qualtrics survey mailer (https://missouri.qualtrics.com), all responses were anonymized, and all personally identifiable information as well as IP addresses were removed from the data responses. Initial contact with Missouri special education administrators and process
coordinators was limited to a brief introductory email with the survey link. Communication with participants included no more than four total email contacts, consisted of three follow-up reminders to potential participants. This ensured special education directors and process coordinators had been provided ample opportunity to participate. This correspondence included emphasis on the closing of the survey opportunity (date and time) and, again, a link to the survey. This instrument was available for response for 21 days from the date of the initial email. The survey closed at the end of the three-week period. According to Percept Research (n.d.), there is diminishing value in extending a survey any further than that. The survey consisted of four qualitative, and eight quantitative items, as well as nine demographic items totaling 21 questions. The Qualtrics survey instrument was designed to collect, “information from or about people to describe, compare, or explain their knowledge, feelings, values and behavior” (Fink, 2017, p. 1). The first item was quantitative and sought the respondent’s opinions regarding any changes need for the special education evaluation process. Following that item were four quantitative items that identified roles and responsibilities as well as job titles of the respondents and other personnel that might be providing cognitive (IQ) assessments. Next, three qualitative items were posed requiring the respondent’s opinion on certifications required for the administering of (IQ) assessments, potential reasons their district may use staff that were neither a school certified psychologist or certified psychological examiner, and additional information the respondent might like to share.

After these qualitative items were four quantitative items that established the certifications, and job titles of the respondents as well as whether the district they served in was a member of the Missouri School Board Association. Finally, nine demographic
items were presented that sought to establish the sex, age, and ethnicity of the participants as well as their level of education, employment status, and years of service. The final two demographic items sought the size of the district the participants worked in as well as the region of the state in which they were located. This survey sought to fully answer all four of the research questions posed within this study.

**Archival Data and Job Descriptions**

Archival data refer to a variety of information that has been previously collected by others (Turiano, 2014). Data already collected represent savings of time and effort which are pragmatic advantages. Use of archival data has empirical advantages as well, because it allows the researcher to explore questions that might be difficult to study in any other way. The use of two different sets of archival data supported the inquiry this body of research created.

Archival data available from the Missouri Association of School Psychologists were accessed (Missouri Association of School Psychologists, 2019) through their website. This white paper was based on statistics the association gathered from Missouri special education administrators regarding the role of a school psychologist or psychological examiner. Acquiring various job titles, identifiers, and descriptions from the Department of Elementary and Secondary Education to compare education levels, job requirements, and job duties for assessment practitioners within Missouri was important as well. This was done through a data request on the DESE website. These descriptors needed to be current and reflect various positions that could be impacted by policy. In addition to these two pieces of archival data, policy available through each district that has online policy posted through the Missouri School Board association was gathered.
This allowed for comparison to the Missouri School Board Associations suggested policy (Missouri School Board Association, 2020).

**Data Analysis**

Analyzing the data gathered through the survey and archival data was ongoing and dynamic in nature. The results of this research were shaped by this collection and the analysis that ensued. Data analysis required the researcher to make interpretations of statistical results or illuminate themes or patterns that emerged from the data gathered (Creswell, 2009; Mertens, 2020). According to Merriam and Tisdell (2016), “Without ongoing analysis, the data can be unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed” (p. 197). Through this mixed methods study, the researcher sifted through the data in several steps to examine them for qualitative and quantitative contributions (Fink, 2017). The raw data collected was compiled for examination (Mertens, 2020), and credibility (Field, 2018) was confirmed through methods considered suitable for statistical and data analysis.

Participants' responses to the closed-ended questions contained within the survey provided quantitative data. Quantitative methods were used which focused on data analysis interpreted through statistical formulas befitting educational research (Field, 2018; Mertens, 2020; Creswell, 2014). The researcher also used descriptive statistics (Field, 2018) to draw inferences. Frequencies and percentages of all closed-ended responses were transcribed and used to illuminate findings. Participants' responses to the open-ended questions contained within the survey provided qualitative data. The researcher sought patterns and themes to emerge that were thought-provoking or applicable to the study through an initial coding process (Merriam & Tisdell, 2016). This
process was repeated with each group of data, and a horizontalization process was utilized by “laying out all the data for examination and treating the data as having equal weight” (Merriam, 2009, p. 26). Next, the researcher constructed categories that captured recurring patterns which often have a life of their own apart from the data (Glaser & Strauss, 1967). This grouping of open codes is occasionally referred to as axial coding (Corbin & Strauss, 2015). This can be described as coding that goes past descriptive coding; it is “coding that comes from interpretation and reflection on meaning” (Richards, 2015, p. 135). At this point, codes of themes were moved into “clusters of meaning” (Creswell, 2013, p. 82). The researcher then concentrated on patterns or themes that had been recognized through open coding (Emerson et al., 2011). The experiences of participants were produced through the identification of these patterns or themes (Creswell, 2013). They were utilized to assist the researcher in assimilating how the participants understood the experience (Merriam & Tisdell, 2016). Folders were utilized and assigned various codes which were kept by the researcher. A running list of direct quotes, thoughts, or impressions taken from each piece of data were put into a spreadsheet, and the researcher created a code memorandum to gather developing patterns and themes. To ensure the absence of researcher prejudice, all folders and codes were shared with the advisor (Sanjari et al., 2014).

Archival data were analyzed by creating a job title and description table to catalog all data gathered. These contributions were used to provide existing data regarding titles, roles, and responsibilities of those in Missouri school districts that are contributors to the assessment process as well as standards provided by the Missouri Association of School Psychologists. In addition, local district policy and the Missouri School Board
Association’s recommended policy were compared through the use of a qualitative comparative analysis (see Appendix D) to determine if there was a difference between recommended policy and practice. The sampling procedure for this was done utilizing probability sampling (Merriam & Tisdell, 2016) of every tenth district listed, allowing for strong statistical inferences to be drawn regarding the entire population of Missouri K-12 school districts that are members of the Missouri School Board Association.

**Efforts to Support Quality of Research**

The importance of having reliable and credible interpretations of findings is often referred to as validity. According to Merriam and Tisdell (2016), being able to trust research outcomes is especially significant to specialists in applied fields such as the education field examined in this research. Creswell (2009) suggested that numerous validity measures be employed to guarantee the study is sound. Teddlie and Tashakkori (2010) suggested that for mixed methods research, the term inference quality be used to incorporate what would be called internal validity in quantitative terms or trustworthiness in qualitative terms. This required the researcher to critically analyze the data using both quantitative and qualitative methods.

Quantitative research depends on internal validity, external validity, reliability, and objectivity. The researcher took measures to ensure that extraneous variables were controlled, and that the findings could be applied to another situation (Gall et al., 2015). Descriptive statistics (Field, 2018) were used to measure for internal consistency and objectivity was provided by including objective, closed-ended responses. Qualitative research depends on trustworthiness which involved several aspects. Credibility, or confidence in the accuracy of the findings and transferability, which showed the findings
had applications in other contexts was sought. Confirmability was also employed by describing the extent to which the findings were shaped by the respondents and not the researcher’s bias, influence, or attention (Lincoln & Guba, 1985). Further, dependability was provided through demonstrating that the findings were consistent and could be repeated.

Several limitations regarding this study were identified. Given her current job in special education, the researcher assumed some level of bias. Equally significant, the researcher accepted a level of affinity given her practice as a contract psychological examiner. In addition, those who chose to participate in the survey brought their own unique mindset that affected the way they responded. Surveys utilized for research are subject to human perception. In addition, quantitative research offers no jurisdiction over what may impact a participant’s answer. The researcher observed the environment as it naturally happened due to the absence of independent variable manipulation and random assignment to groups (Fink, 2017). This ensured the dependability of this body of research.

Another limitation was the researcher’s capacity to obtain accurate information regarding job descriptions and the organizational chain of command. The researcher employed data obtained from DESE, as well as the internet. The researcher recognized that while these methods might be implored due to ease of access, they might not have the most up-to-date data or deliver a thorough perspective. The data obtained from DESE might also have changed since the previous reporting cycle. The researcher also presumed that questions would be answered truthfully throughout the survey process. How the study will impact future research around Cognitive (IQ) Testing within Missouri
school districts was conveyed. Due to a variety of reasons, including constrictive budgets and lack of available personnel, there was a number of participants who had duties outside their specified job titles. The researcher was aware that these individuals might not be dedicated to delivering responses which applied to only the special education administrators or process coordinators duties. Questions pertaining to their experiences may have been distorted because of this.

The researcher conceded that limitations might be linked to the archival data or artifacts which were gathered. These were collected at the discretion of the special education coordinator at DESE, and they relied on central office personnel at each district for accuracy in reports. Efforts were made to clearly convey which artifacts were needed, but these individuals were responsible for supplying the resources. Furthermore, the researcher presumed school districts provided the most current data to DESE.

Dependability, which is proof that were the study to be repeated it would yield similar outcomes (Merriam & Tisdell, 2016), was sought. The researcher strived to ensure sample size through follow up emails, and the data from the survey and interviews were statistically analyzed. The researcher interrogated the data and cross-tabulated while searching for inferences. To establish credibility, peer debriefing was utilized. A minimum of two colleagues were asked to review the study for credibility and determined the results supported the data. Lincoln and Guba (1985) recommended peer debriefing as an external check on the process, and they also suggested that this provides a means to check preliminary findings and interpretations against raw data. Triangulation (Denzin, 1978), the use of multiple forms of data allowing for comparison and cross-checking, was also employed as another measure to establish credibility. Survey data and
data from archival resources was gathered and analyzed for comparisons or disparities. Patton (2015) shared triangulation boosts reliability and value by “countering the concern that a study’s findings are simply an artifact of a single method, a sole source, or a single investigator’s blinders” (p. 674).

**Researcher Positionality**

It was important that the researcher explored their own experiences of the challenge studied. Positionality is vital to the research process (Holmes, 2020), and the researcher attempted to be intentionally cognizant of this for participants, as well as self. Awareness of personal prejudice, perspectives, and beliefs must be retained (Merriam & Tisdell, 2016). The researcher acknowledged having prejudice as this body of research emerged from a domain within education in which the researcher has expertise and familiarity. Bracketing of these personal biases or assumptions ensured the ability to examine cognizance itself. This approach, as described by Tufford and Newman (2012), was setting aside personal beliefs to mitigate the harmful effects that one’s preconceptions may have on the research process. Self-reflection consistently took place for the duration of the study to defend it from any prejudices, distortions, or beliefs that became apparent (Merriam, 2009). Triangulation was achieved by conducting a survey with two different participant groups and collecting archival data related to the body of research. This ensured that the research reached saturation indicating further data collection and analysis were unnecessary (Saunders, et al., 2018). Consideration was given to the reality of insider status that the researcher held, and its effects on the process through active reflexivity (Merriam & Tisdell, 2016). The researcher strived throughout
this study to avoid apparent, deliberate, or systemic bias (Ormston et al., 2014) and to be as neutral as possible while gathering, interpreting, and clarifying information.

**Definitions of Key Terms**

**Cognitive Assessment.** This is also called intelligence testing and is used to determine an individual’s general thinking and reasoning abilities, which are also known as intellectual functioning or IQ (Sattler, 2001). This testing can assess various domains of cognitive capacity. It may be used to assess verbal comprehension, perceptual reasoning, working memory, and processing speed. Learning potential is often assessed through this tool as well (Pearson, 2020b).

**Intellectual Disability.** This term describes problems with one’s general mental abilities that affect functioning in two areas: intellectual functioning (such as learning, problem solving, and judgement) and adaptive functioning (activities of daily life such as communication and independent living) (Harris, 2006). Intellectual and adaptive deficit begin early in the developmental period (Patel et al., 2018).

**Policy Analysis.** This is the examination and evaluation of available options to address various economic, social, or other public issues (Dunn, 2015). Effective policy analysis, whether to enact new policies or amending existing ones, is critical in the policymaking process. This process can include many components, involving empirical research and statistical data collection as well as participation of key stakeholders and public officials charged with legislating policy (Dunn, 2015).

**Process Coordinator.** This is a job title given within a school district to individuals who are responsible for supervision of the special education process in public schools from screening through identification. They often supervise and
coordinate special education programs, policies, and diagnostic procedures. In addition to those responsibilities, they organize and ensure completion of all evaluation reports and individual education programs.

**Special Education Administrator.** This is a job title given to individuals overseeing special education programs in public school districts. The primary function of these programs is to ensure that children of all abilities are able to learn based on their own unique set of skills and challenges. In addition to overseeing these programs, special education administrators are also responsible for personnel, funding and ensuring their district complies with all laws and policies related to special education (Yell et al., 2018).

**Special Education Services.** These refer to a range of services tailored to meet the needs of students with disabilities with a focus on helping them learn. Children who qualify for these services in K-12 public schools have an individualized education program. They receive individualized teaching and other resources at no cost to their families. Specialists work with kids on strengths as well as challenges. (Osborne & Russo, 2020).

**Specific Learning Disability.** This is a neurodevelopmental disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written (Grigorenko et al., 2020). It may negatively impact a person’s ability to listen, speak, read, write, or make calculations. Since such disorders usually begin at an early age, they are typically diagnosed in early school-aged children (Fletcher et al., 2018).
Significance of Study

Assessment of a child’s intellectual ability is a critical element of the special education process in Missouri public schools. The Individuals with Disabilities Education Improvement Act (2004) mandates that if a district considers a student between the ages of 3 and 21 to have a disability that has a substantial effect on their learning or behavior, they are entitled to be assessed in all areas associated with the suspected disability. Further, the law also requires a reevaluation of a student identified with a disability at regular intervals throughout the time the child is in school (Osborne & Russo, 2020). Qualifying for special education services and supports is contingent on the results of assessments administered, while services and placement are reliant on the accuracy and interpretation of those assessments. This reality, as described by Farrell (2010), supports the critical nature of the role of the school psychological examiner or psychologist in the special education process.

Individuals being utilized by school districts within Missouri emerge from various related disciplines such as psychology, education, or speech and language therapy but only two roles are certified through DESE to practice as evaluation professionals. Those recognized as competent in performing the necessary tasks by this governing entity are the school psychological examiner and the school psychologist (Missouri Department of Elementary & Secondary Education, 2021). These professionals are responsible for administering and interpreting cognitive assessments that support the practice of establishing the existence of a disability. Since such assessments require specialized credentials, and they are affected by changes in evaluation instruments as well as changes
in federal and state criteria for determination of a disability, it is vital that districts utilize personnel that meet minimum criteria.

**Practice and Scholarship**

This research contributed to the practice of educational leaders and policy makers by providing insight into the assessment practices of public schools within Missouri. It provided the perceptions of special education administrators and process coordinators regarding this dilemma. This body of research manifested the need for state governing boards to set minimum competency requirements for this role, and that they seek compliance by local school districts with these mandates. These directives are proven necessary to ensure compliance with both federal and state laws and should be upheld. Ultimately, this body of research provided local districts, the Missouri Department of Elementary and Secondary Education, as well as professional organizations with a personal stake in this dilemma such as the Missouri Association of School Psychologists and the Council on Exceptional Children insight into whether policy review is needed both at the local and state level. This reexamination of policy would ensure that every child, regardless of the district in which they reside, receives an evaluation that is produced by competent, ethical, and qualified individuals.

**Summary**

This study explored the policies and laws established to govern the process school districts within Missouri use to administer and interpret cognitive assessments, as well as the perceptions of special education administrators and process coordinators. Archival data from DESE as well as from the Missouri Association of School Psychologists was examined to provide supporting information. This analysis was mixed methods in nature
while employing a pragmatic approach. The researcher sought to understand the experiences of special education administrators and process coordinators as described by the participants.
SECTION TWO

PRACTITIONER SETTING FOR THE STUDY
Introduction

Education policy refers to the collection of laws and rules that govern the function of education systems (Wiseman, 2012). The administrative teams that govern Missouri public schools must be well versed on a wide variety of school law and policy matters ranging from personnel issues, student rights, school finance, board policy and board governance, to special education issues and business-related legal issues (Anglum, 2020). The K-12 educational institutions in Missouri face an ever-changing legal landscape (Butler & Mathews, 2007). Whether it is a legislative change to the Individuals with Disabilities Education Improvement Act of 2004 (IDEA), the Missouri State Plan B, or recent case law decisions, school districts within Missouri rely heavily on the guidance and policies provided by the Missouri State Board of Education.

Considering how policies that govern public schools within the state of Missouri are established and then enforced required an analysis of the history and structure of this board. An organizational analysis was then necessary to allow for an understanding of the roles and responsibilities individuals within this governing body had. Examining their leadership structure provided further insight into the environment of the decision-making process. In addition, an examination of policies that contributed directly to this body of research are presented. Finally, implications this study may have on the governing organization are offered.

History and Structure of the Organization

The State of Missouri’s top elected official is the Governor, and it is organized into three branches of government. The Legislative branch consisting of the Senate and the House of Representatives, the Judicial Branch consisting of the Missouri court
system, and the Executive Branch (which the governor presides over) consisting of six statewide elected officials and sixteen executive departments (MO.gov – Official Missouri State Website, n.d.). One of those sixteen executive departments is the Department of Elementary and Secondary Education, which is governed by the State Board of Education (MO.gov – Official Missouri State Website, n.d.).

In 1945, the Missouri Constitution Article IX, Section 2a created the Commissioner’s office, and the State Board of Education (Bradshaw, 1945). The Commissioner of Education is the chief educational officer for the state. The Commissioner reports to the State Board of Education (Missouri Department of Elementary and Secondary Education, n.d.). The State Board of Education provides direction to the Department of Elementary and Secondary Education which in 1974 was reorganized and established in its present form by the Omnibus State Reorganization Act (MO.gov – Official Missouri State Website, n.d.) (see Figure 1). According to the Missouri Constitution, “The supervision of instruction in the public schools shall be vested in a state board of education” (Article IX, Section 2a). This board is made up of eight citizens appointed by the Governor and confirmed by the Senate. Two of their foremost duties include appointing the Commissioner of Education and setting policies for the Department of Elementary and Secondary Education (DESE). The Commissioner of Education directs DESE and fulfills other duties prescribed by law (Section 161.122, RSMo). Within DESE are two divisions, Financial and Administrative Services and Learning Services (Missouri Department of Elementary and Secondary Education, n.d.).
For the purposes of this body of research, the emphasis was on the Division of Learning Services. This division is responsible for all the department activities related to educational success of students, educators, and schools. This division also includes offices that manage the quality of schools, college- and career-readiness, special education, educator quality, early and extended learning, adult learning and rehabilitative services, and the data system management (Missouri Department of Elementary and Secondary Education, n.d.). Analyzing this organization through the lens of the structural frame provided by Bolman and Deal (2017), we see that it is hierarchical, and rules oriented. State government provides for clear allocation of work (differentiation) and
responsibilities (integration) which according to Bolman and Deal is the “keystone of structure” (2017, p. 53).

Organizational and Leadership Analysis

Conversation within local school districts regarding school policy often center around the oversight of DESE. This department, however, is actually organized under the State Board of Education and serves in an administrative, supervisory, and leadership role as provided by our constitution, state statutes, and board policy. The state board of education appoints a commissioner of education as DESE’s chief administrative officer (Missouri Department of Elementary and Secondary Education, n.d.). The commissioner is responsible for the supervision of DESE. Policymaking and the general oversight of public education does not rest with DESE, or the commissioner, but with the State Board of Education. While this portion of our state government provides leadership to public schools, and establishes and enforces policy, another branch of government also directly affects school policy through provision of local law and enforcement of federal law, the legislative branch (Missouri Department of Elementary and Secondary Education, n.d.).

Ideas for policy that would affect Missouri schools can be proposed to the state board of education or take root in the legislative branch of state government. The legislative route could be the best avenue to affect change if a completely new policy is needed, instead of the revamping of an existing one. One would need to decide if an existing law merely required authorization (something that allows a change in the law and then orders an agency to implement it) or would require appropriation (needs money to pay for implementation) (Eyler & Swaller, 2012). An idea can only move forward in this arena with sponsors, so it would be prudent to find state representatives that are
willing to take on the issue (Campbell, 2014). To get an idea turned into a bill that can be submitted, it must be sponsored by a state representative as well as a senator (MO.gov – Official Missouri State Website, n.d.). Getting the bill introduced once it is sponsored, can be accomplished in either the Missouri House of Representatives or the Senate. Once the bill is submitted, it is turned over to a committee that specializes in K-12 education (MO.gov – Official Missouri State Website, n.d.). Once the committee is finished working on the bill and has recommended it for further consideration, it begins the process of becoming a state statute, or not. There are a lot of steps to this process, but it does not necessarily have to become a law to have an impact. Bringing awareness through the legislative branch of government, can often lead to conversations within the executive branch that directly affect change through the board of education’s capacity to create state-wide policy.

The executive branch is the second route through which policy change or amendment can take place. This is often the preferred route when policy concerns denote amendments instead of new policy. A policy study would need to be presented in a concise manner (white paper) to the Director of Compliance Bev Luetkemeyer, via email. Legal counsel for the office of special education Bob Bedell, will recommend this be sent late summer/early fall, but prior to November 1st of the calendar year. One of the main responsibilities of the Director of Compliance is IDEA compliance, oversight, and technical assistance. The Compliance Section within the Office of Special Education supports the mission of the Department of Elementary and Secondary Education. They provide leadership in establishing standards as well as consistency in the procedures public agencies implement for meeting compliance with state and federal regulations.
The Director of Compliance reports to the Assistant Commissioner Dr. Stephen Barr who oversees the Department of Elementary and Secondary Education Office of Special Education. The information contained in the white paper would be reviewed by this department and should it be required, additional stakeholders’ input, and contribution might be sought at the request of those in the special education department.

Considerations for amendment to the state plan then proceed through an annual review process, which includes comment period. Should those reviewing the white paper intend for it to be reviewed by the State Board of Education, it would be submitted through their office, and during the comment period, it is possible they may seek additional input from the researcher. It is the opinion of the researcher that this body of research would best affect change through the executive branch of Missouri state government.

While both the Legislative and Executive branches of Missouri government operate independently of one another, there are instances when one branch impacts the other. However, they are both structured similarly. Mintzberg (1979, 2005) provided a structural model that can be used to examine the essential parts of an organization. For the intent of this section, the researcher will compose an examination of the Missouri Department of Elementary and Secondary Education operating under the auspices of the Missouri Board of Education. There are five parts that Mintzberg (1979, 2005) shared in his structural model: the strategic apex, middle line, operating core, technostructure, and supporting staff (see figure 2).

At the top of the figure is the strategic apex. According to Mintzberg (1997, 2005) the strategic apex represents the leadership of the organization or those who are in charge. This would include the Commissioner of Education as well as the State Board of
Education. Below that apex is the middle line. Mintzberg (1979, 2005) shared that these workers are affected by the flow of information and directives from the workers above them. The Deputy Commissioners who are over the Division of Learning Services as well as over the Division of Financial and Administrative Services serve in this capacity. At the organization’s base is the operating core. Mintzberg (1997, 2005) proposed that this department within the organization’s structure contained personnel who accomplished work related to output. The following areas within the Missouri Department of Elementary and Secondary Education would be included in this operating core: Office of Adult Learning and Rehabilitation Services, Office of College and Career Readiness, Office of Data System Management, Office of Early Learning, Office of Educator Quality, Office of Special Education, Office of Quality Schools, Accounting and Procurement, Food and Nutrition Services, Budget, Human Resources, and Financial and Administrative Services. On both sides of this figure are the technostructure and the support staff. These would include DESE’s Chief Counsel, Communications Department, and Governmental Relations staff. The personnel in these areas operate and provide support for the workers within all the other areas of the figure. Their work ensures that day-to-day tasks are uninterrupted.

Both the Legislative and Executive branches of Missouri government present vertical organization coordination. This is exhibited through administration that coordinates and controls the work of subordinates through rules and policies as well as control systems (Bolman & Deal, 2017). Forecasting and measuring are also achieved through each level of this organization. Mintzberg (1979) shared that there were two major approaches to this: performance control and action planning. Both approaches are
utilized at each level through the provision of directives, and then details provided on how to perform those directives. According to Bolman and Deal (2017), vertical coordination is “generally superior if an environment is stable, tasks are well understood and predictable, and uniformity is essential” (p. 61).

Figure 2

*The Five Basic Parts of Organizations*

Policy Analysis

Criteria for administering psychological (IQ) tests for children potentially qualifying to receive services as children with an Intellectual Disability or Specific Learning Disability within Missouri are governed by federal law, state law, and local policy. This body of research sought to examine potential dilemmas created by these laws and policies due to their vague and ambiguous nature. Confusing federal and state policy contributed to liberal interpretation at the local district level allowing for leeway in how policy has been implemented. In addition, DESE, whose responsibility is to supervise local districts, provided oversight regarding local practice or implementation of policy related to this matter.

The Individuals with Disability Act (IDEA) is a law that makes available a free, appropriate public education to eligible children with disabilities throughout the nation and ensures special education and related services to those children. IDEA governs how states and public agencies provide early intervention, special education, and related services to more than 7.5 million (as of school year 2018-19) eligible infants, toddlers, children, and youth with disabilities. Congress reauthorized the IDEA in 2004 and most recently amended the IDEA through Public Law 114-95, Every Student Succeeds Act, in December 2015.

In the law, Congress stated:

Disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our
national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities.

Section 300.304 of IDEA provides instructions that were crafted to ensure evaluations are individualized, conducted by a team, included personnel with expertise in areas of suspected disability, and that a variety of tools are utilized to assess the child. More specifically though, these federal regulations (iv and v) insisted that the assessments utilized be administered by trained and knowledgeable personnel, and be administered in accordance with any instructions provided by the producer of the assessments.

The Missouri State Plan for Special Education Part B, whose most recent update was completed and published in 2021, has regulations that comply with the federal statute previously shared. In Regulation III, Evaluation Procedures 34 CFR 300.304 (e), the following policy is provided:

Assessments and other evaluation materials used to assess a student are used for the purposes for which the assessments or measures are valid and reliable and are administered by trained and knowledgeable personnel in accordance with any instructions provided by the producer of the tests. If an assessment is not conducted under standard conditions, a description of the extent to which it varied from standard conditions (e.g., the qualifications of the person administering the test or the method of test administration) must be included in the evaluation report.

The most widely used publisher of cognitive (IQ) assessments is Pearson Assessments (Pearson, 2020b), who publishes the Wechsler Preschool and Primary Scale of Intelligence (WPPSI-IV), Wechsler Nonverbal Scale of Ability (WNV), Wechsler
Intelligence Scale for Children-Fifth Edition (WISC-V), Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV). These assessments require personnel to possess level C qualifications. Tests with a C qualification require elevated levels of expertise in test interpretation and can only be purchased by individuals with:

- A doctorate degree in psychology, education, or a closely related field with formal training in the ethical administration, scoring, and interpretation of clinical assessments related to the intended use of the assessment.

OR

- Licensure or certification to practice in your state in a field related to the purchase.

OR

- Certification by or full active membership in a professional organization (such as APA, NASP, NAN, INS) that requires training and experience in the relevant area of assessment.

Reviewing these three statutes and/or policies provides interpretations that vary because of the second sentence in the publisher’s qualifications statement.

Confirmation that school districts deduce that as applying to a variety of school personnel that include but are not limited to certified teachers with a four-year degree are found on the Missouri School Board Associations website that contains the school board policies of 229 districts in Missouri that are current members of this organization. These policies are coded as IGBA-1-AP (2): Special Education-Evaluation Criteria for District and Independent Evaluations. The policy suggestions by this same organization, based on best practices, state and federal laws, as well as court cases can also be found on their
The suggested policy denotes that Licensed Psychologists, Certified Psychological Examiners, and School Psychologists meet qualifications to perform cognitive (IQ) assessments (Missouri School Board Association, 2020).

**Implications for Research in Practitioner Setting**

While there exists statutes, laws, and policies surrounding the complete evaluation process for special education in Missouri, it appears clarity is still needed when determining specifically who is qualified to administer and interpret cognitive (IQ) assessments. According to Bolman and Deal (2017), “If key responsibilities are not clearly assigned, important tasks fall through the cracks (p.73). The findings from this research have implications at the state level within Plan B. This research revealed that policy must be amended at that level to provide local districts direction on who is qualified to conduct and interpret cognitive assessments. This body of research also revealed the need for oversight from the Missouri Department of Elementary and Secondary Education. The Department of Special Education (DESE) need to respond to this by providing tighter structure and guidance to local districts. Data gathered by this branch of state government need to be extended to include reports from local districts on who is administering and interpreting cognitive assessments and what their certifications are. This research also has implications for how the local school districts implement Plan B. It revealed that local school boards’ policies must be amended as well, to ensure compliance with not only the State Plan B, but with federal statutes and publisher’s policies. This research aimed to provide the Missouri State Board of Education with information regarding the current practices state-wide as well as perceptions of special education directors and assessment practitioners.
Summary

Communication within various departments of state government, as well as the federal government, and invested organizations as well as local districts is necessary to ensure public schools within Missouri are providing quality special education evaluations. Dilemmas can arise when the government relies on outside agencies to ‘police’ adherence to policy and statutes. While the publishers of assessments have insight into who should administer cognitive assessments, it is up to the Missouri Board of Education to ensure this takes place. When clarity regarding roles and responsibilities are lacking, or knowledge of who is in command is unclear, a break-down of quality of services can occur which creates a structural dilemma (Bolman & Deal, 2017). This body of research sought to contribute to the practice of educational leaders within the Department of Elementary and Secondary Education as well as policy makers on the Missouri State Board of Education by researching the extent to which individuals are performing cognitive (IQ) assessments in Missouri public school for the placement of children in special needs programs.
SECTION THREE

SCHOLARLY CONTEXT FOR THE STUDY
Introduction to the Literature Review

School districts within the State of Missouri have laws and policies established by the state (Missouri Office of Special Education Compliance, 2020, Missouri Department of Elementary and Secondary Education, 2020) and the federal government (Individuals with Disabilities Education Act, 2004) regarding the evaluation process for students being considered for special education services. In addition, there are district-specific board policies (Missouri School Board Association, 2020) to which each school district must adhere. These laws and policies provide broad parameters within which schools must operate, such as the need to use at least one individual qualified to conduct diagnostic assessments (e.g., a school psychologist, school psychological examiner, speech/language pathologist, a special education teacher or remedial reading teacher). They do not give solid clarification on what specific assessments to use or who is the most qualified to interpret those assessments, nor do they differentiate credentials for those who administer cognitive (IQ) or academic assessments.

Perceptions of special education directors or administrators and process coordinators regarding the practice school districts employ required further inquiry. Their experiences and observations were sought because they share responsibility for ethical practices in assessments. This section seeks to provide a review of relevant literature applicable to this study: determining perceptions of special education directors and process coordinators regarding the diagnostic competencies of those administering and interpreting psychometric tests for special education placement within Missouri.

At this time, there are currently no available data gathered by the Missouri Department of Elementary and Secondary Education regarding who is administering and
interpreting IQ tests. This could be a contributing factor in the over identification of students as needing special education services or not qualifying at all based on the administration and interpretation of cognitive (IQ) assessments by personnel not trained or qualified to do so. In addition, there is also a gap in relevant literature that explores this dilemma.

This scholarly review focused on three aspects of the learning environment with the objective of establishing a framework for this study. First, a synopsis of the conceptual framework that supports this study was investigated and justified. Second, conceptual underpinnings were presented in the following order: a history of special education in the United States, the origin and history of assessments as related to special education in the United States, and then the State of Missouri’s evaluation process. Lastly, existing literature on current issues and trends regarding the administration of cognitive (IQ) assessments for placement in special education was examined. By conducting this review, the researcher aimed to justify the importance of this study within the context of the literature reviewed.

**Conceptual Framework**

According to Merriam and Tisdell (2016), theory is present in all qualitative studies as they are designed around either explicit or implicit questions. As stated by Merriam (2009), research is constructed around the methods chosen to answer those questions, and a framework is considered essential for support. The framework, which often consists of concepts or theories that inform the body of research, provides structure for the study and is often in agreement with existing literature being reviewed (Maxwell, 2013, Merriam, 2009, Merriam & Tisdell, 2016). The structural frame presented by
Bolman and Deal (2017) was relied upon for the conceptual framework utilized within this study.

The structural frame contends for clearly established goals, policies, and objectives, as well as an appropriate division of labor, effective structure in strategy and workforce, and coordination and control for diverse individuals and departments. This perspective argues for ensuring the right individuals are in roles and relationships they are best suited for performing (Bolman & Deal, 2017). Two individuals contributed to the rise of this perspective. The first was Frederick W. Taylor (1919) who researched breaking jobs into small parts and training workers to maximize performance by minimizing wasted movements. Taylor (1919) shared that it was important to match workers to their jobs based on capability and motivation and to clarify roles while delegating responsibility. The second individual to contribute to the evolution of structural ideas was Max Weber (1947), a German sociologist, whose bureaucratic theories prioritized efficiency. Weber (1947) argued for task specialization, clearly defined roles and expectations, and a management structure organized in layers. While these two individuals pioneered the importance of the structural perspective, other theorists contributed to their initial findings.

Blau and Scott (2015) reviewed case studies, experimental research, and surveys, examining them for formal and informal systems, authority, and leadership traits. They presented a new focus: the formal organization. Instead of emphasizing the individual participants and work groups, Blau and Scott (2015) sought a broader understanding of organizations collectively. Later, Thompson (2003) further supported those foundational pieces of the structural perspective by conducting a multidisciplinary study of the
behavior of organizations. He emphasized that organizational structure and dynamics were heavily dependent upon the priorities of technology, objectives, environmental pressures, and management hierarchy.

Policy studies, systemic change, organizational analysis, and leadership studies are found in more current implementations of this paradigm. These include research conducted in K-12 administration (Campbell & Derrington, 2019; Corral, 2019; Webber et al., 2008) librarianship (Fleming-May & Douglass, 2014), education in medicine (Thammasitboon et al., 2017), university development, departmental, and interdepartmental work (Probst, 2011; Sriram & Farley, 2014; Shoepp & VanBalkom, 2007) and the dental profession (Lyon et al., 2014). While researchers and authors from critical and complexity theories speak to a broad spectrum of organizational and leadership challenges, they recognize the effectiveness of Bolman and Deal’s (2017) multi-paradigm perspective (Moen, 2017; Shoup, 2016).

During the early part of the 20th Century, viewing the educational system through the lens of the structural frame became progressively common. Callahan (1962) shared how school administrators utilized Taylor’s model to improve efficacy and generate quantifiable criteria for communities to identify. Callahan (1962) denoted this as a misfortune in which educational concerns were far less important than business considerations. More contemporary educational leaders met with greater success in utilizing the structural frame to implement change. Hall and Hord (2006) shared that this success was often based on identifying the concerns of those affected by initiatives and leveraging techniques of various strategies. Fullan (2011) supported this by asserting that focusing efforts on growing capabilities, staff preparation, systemic strategies, and
training resulted in skillful execution of reform initiatives that utilized the structural framework.

Two topics are essential to the structural framework: how to distribute responsibilities, and how to manage diverse endeavors after apportioning those responsibilities. According to Bolman and Deal (2017), effective organizations employ a plethora of practices to organize individual and group initiatives and to connect independent programs with system-wide intentions. They achieve this through two methods: vertically, through established hierarchical structures, and laterally, through board meetings, team meetings, coordinating responsibilities and systemic structures. These structures must be designed with a focus on strategy, the workplace atmosphere, the talents of the employees, and accessible resources.

How well an organization aligns its internal actions with external actions is dependent largely upon its structure pressure (Bolman & Deal, 2017). When crises force action, often reorganization or restructuring is required. Mintzberg (1979) and Helgesen (2005) both offered abstract conceptions of structural possibilities, but this can be a challenging course that results in a loss of money and time and does not produce successful results (Bolman & Deal, 2017). A sample of successful as well as struggling companies was studied by Miller and Friesen (1984) who found that restructuring was episodic in nature, with organizations reluctant to make changes needed resulting in even greater challenges faced. According to Bolman and Deal (2017), for restructuring to be successful, careful studying and planning must occur as well as the development of a new concept of organizational goals and strategies.
A History of Special Education in the United States

Since 1918, all states have had laws in place providing public education (Barnard and Best, 1961). According to Yell, et al. (1998), this compulsory education did not include children with disabilities. In 1919 the Wisconsin Supreme Court upheld exclusion in the case of Beattie v. Board of Education (1919) and denied the right of a child with cerebral palsy to attend school despite an intellectual capacity to achieve. Not until 1948 did the United States see a shift in this attitude. In that year, the University of Illinois established a disabled student program which became the model for disabled student programs and living centers across the nation (Brown, 2008). This program was led by a man named Tim Nugent who succeeded according to Brown (2008) in “shattering long standing, pervasive institutional, physical, economic, psychological, and other barriers that marginalized and ostracized people with disabilities” (p. 166).

In the early 1970’s, a few landmark cases regarding the education of students with disabilities began a movement. Advocates for children with disabilities shifted their emphasis to educational rights, an orientation strongly influenced by the civil rights movement. The Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania (1972) overturned a Pennsylvania law that denied schooling to anyone below the mental age of five. This was followed by Mills v. Board of Education (1972) which established that children could not be denied access to education due to limited funding.

Contesting a state law that specifically allowed public schools to deny services to children “who had not attained a mental age of five years” at the time they would ordinarily enroll in first grade, the case of PARC v. Commonwealth of Pennsylvania
(1972) was successful in its intentions. The findings were that the state agreed to provide full access to a free public education to all children regardless of disability and that each child be offered an education that was appropriate to their learning capabilities (Kirp, 1983). This case also created a precedence for the least restrictive placement of each child.

The District of Columbia public schools would have a suit brought against them next. In *Mills v. Board of Education* (1972) the school district admitted to an estimated 12,340 children with disabilities not being served during the 1971-72 school year because of budget restraints. The U.S. District Court found that school districts were constitutionally prohibited from deciding that they had inadequate resources to serve children with disabilities because of the equal protection clause in the Fourteenth Amendment (Shibla, 1972). Children with disabilities finally had a right to public education, and if districts wanted to change their status, they had rights they could assert if needed. Many of the protections afforded children through this law were later incorporated into Public Law 94-142 by Congress (Rains, 1998).

Public school responsibilities for children with disabilities were evolving. Once state and federal court decisions made clear the states’ responsibility for providing education for all, regardless of disability, states began advocating for federal leadership and federal subsidy of the costs. Congress responded by enacting two key pieces of legislation. In 1973, Congress passed Public Law 93-112 (Rehabilitation Act of 1973), at Section 504 that protected the civil rights of individuals with disabilities and required accommodations for disabled students in schools. Then, in 1975, the Education for All Handicapped Children Act (EAHCA) was passed which guaranteed and enforced the
right of children with disabilities to receive a free and appropriate education. This law provided for unique educational opportunities suited to the needs of the child while delivering those opportunities in the least restrictive environment possible. These laws combined, are the foundation of modern-day special education in the United States.

**Origin and History of Assessments as Related to Special Education**

Prior to 1954, exclusion of students who were deemed uneducable was common in schools across America. That year, the court battle *Brown v. Board of Education* (1954) started a progressive movement within education that challenged the notion that some students were not eligible for public education based on their ability levels. With the adoption of P.L. 94-142 (also known as the Education for All Handicapped Children Act) of 1975, by Congress, special education services in the United States became mandatory. Evaluation in some form has always been required as part of the qualification process in determining whether a child is eligible for special education services.

The origin of intelligence testing in the United States began with Henry Herbert Goddard (1866-1957) who went to Europe in 1908 to study the techniques employed by other researchers working with cognitively low-functioning individuals. During his time in Europe, he became aware of the intelligence test that Alfred Binet had invented and brought it back to the United States where he translated it from French into English and began using it with select children from public schools (Zenderland, 1998). Lewis Tyerman of Stanford University created the Stanford-Binet Intelligence Test in 1916 by adjusting the Binet test for the expressed purpose being the assessment of children (Sattler, 2001). Variations of these tests were employed extensively by the United States Army during the World Wars and into the 1950’s (Hockenbury & Hockenbury, 2008).
The measure provided by calculating the scores of the subtests within these tests is known as the Intelligence Quotient, or more commonly known as an IQ score.

The use of intelligence testing in schools gained prominence in 1958 after the launching of Sputnik by the Soviet Union (Bonner, 2010). Funding for states to evaluate the abilities of children in public schools was provided by the passage of the National Defense Education Act (1958) that emerged because of that occurrence. The United States was seeking, through these assessments, to identify outstanding students. Many in Washington were worried over America’s capacity to compete globally. The focus on the use of Intelligence Testing as a means for children to be placed in special education programs, however, came several years later and was a result of the enactment of The Education of All Handicapped Children Act of 1975 (PL 94-142). This law, later known as the Individual with Disabilities Education Act (2004) encouraged the use of intelligence quotients to identify students with disabilities. As a result, many states authorized the use of cognitive (IQ) tests to diagnose disabilities (Gibson et al, 2006).

This occurred until the revision of IDEA in 2004, which allowed for a framework of disability identification that did not automatically involve the use of cognitive assessment in the identification of a specific learning disability (IDEA).

Prior to this revision of IDEA, the role of the cognitive assessment professional was identified as preeminent in qualifying students with disabilities for special education services according to Mastropieri and Scruggs (2005). Since this revision, and the expansion of the factors to be considered for an educational diagnosis, a reflection and analysis of the evaluator’s role through the identification process is necessary. Although it is a multi-disciplinary team decision that determines a student’s disability and the
consequent need for services, the role of the assessment professional is exceptionally important in the team’s decision (Pierangelo & Giuliani, 2007).

**Special Education Evaluation in Missouri**

Children requiring special education or other services because of a disability must be between the ages of three to twenty-one, be properly evaluated, and meet the definitions provided by IDEA for the following disabilities: Hearing Impairment/Deafness, Sound System Disorder, Speech, Language Impairment, Visual Impairment/Blindness, Emotional Disturbance, Orthopedic Impairment, Autism, Intellectual Disability, Other Health Impairment, Specific Learning Disabilities, Deaf/Blind, Traumatic Brain Injury, Multiple Disabilities or Young Child with a Developmental Delay (Guerriero et al., 2021). Of the disabilities listed, Missouri only requires consideration of intelligence as a determining factor in two categories: Intellectual Disability and Specific Learning Disabilities (Missouri Office of Special Education Compliance, 2020).

For a student to be found eligible as having an Intellectual Disability (ID), the Missouri Department of Elementary and Secondary Education (2020) requires that a child perform 2.0 standard deviations (SD) below peers, that their adaptive behavior be consistent with cognitive abilities, and these both adversely affect his educational performance according to the compliance standards and indicators provided by the Department of Elementary and Secondary Education (2020). These standards and indicators (2020) allow for three paths towards the category of Specific Learning Disabilities (SLD). One is called a Response to Intervention (RTI) that provides for a method of determining eligibility without a formal IQ assessment. Another is
professional judgment, which is utilized when data do not match up with performance. While Missouri school districts may use the RTI method, they often employ the professional judgment option, but only after employing the discrepancy method that requires an IQ assessment as well as an academic assessment (Colker, 2013). According to Missouri guidelines, to be deemed eligible under the discrepancy method there must be a discrepancy of at least 1.5 standard deviations between the IQ score and an achievement score, along with the child exhibiting a pattern of strengths and weaknesses in performance, achievement, or both (Rothstein & Johnson, 2009). The remaining disabilities require input from other professionals. These professionals, according to Goldberg (2012), are experts at diagnosing those disabilities and some come from the medical profession. While IDEA provides federal requirements for the eligibility criteria, guidance is also provided through state legislation. In addition, local school districts design their own policies to comply with each of these. While evaluation timelines are time-bound, they can vary based on the suspected disability and the contribution of members on the multi-disciplinary team who also play a key role in the qualification process.

Student evaluations for both ID and SLD require the involvement of examiners trained in the interpretation and administration of intelligence testing as part of the identification process. Since this is a foundational piece to their ability to qualify for services, CFR 300.304 in IDEA says that trained and knowledgeable personnel must administer the evaluation.
Current Issues with Special Education Evaluation

Occupations within the field of education that become enveloped in challenges can benefit from the establishment of standards that are accepted by the profession as a whole and from the provision of training that enhances and supports practitioners (Drahmann & Cramer, 2021). Assessment professionals rely on both extensively. Training ensures that the basic knowledge base of practitioners is solid and provides methods for improvement. Those equipped with the right skills through training are bound to excel in the assessment profession (Welfare, 2020). Conversely, standards in the field of special education assessment define knowledge and skills needed. They also ensure that those practicing within this profession are accountable for their actions. Each of these pieces help those assessing students to identify values, knowledge, and skills that are distinctive to the assessment profession.

According to the Missouri Association of School Psychologists (2015) there is a current lack of state level principles that guide coursework content, credentialing, professional practices, and ethical behavior expected of school psychological examiners. They also share that some Missouri schools are using professional titles interchangeably and are unethically allowing people to use the professional title of school psychologist when they do not have this certification from DESE (2015).

Training

Assessing cognitive functioning as part of the process of evaluation for eligibility of special education services has been widely disparaged. Beaujean et al. (2018) stressed the impertinence of cognitive (IQ) assessments utilized to determine if a child has learning disabilities and as an alternative, recommended the use of an alternate method.
called Response to Intervention (RTI) in the identification of reading disabilities. Siegel (1989) asserted the inadequacy of IQ and achievement scores in establishing a disability. Reschly and Hosp (2004) suggested the possibility that some examiners hold a personal stake in the maintenance of IQ testing or individual motivations.

Notwithstanding the ongoing debate regarding how a disability diagnosis is achieved, the assessment professional continues to be a crucial contributor to team decisions that determine conclusions for children and adolescents in special education. (Maki & Adams, 2020; Marcus, 2018; Sullivan et al., 2019) stressed the importance of these professionals employed by school districts adjusting to changes and staying abreast of current research. Others continued to refer to the value of evaluations that went beyond the assessment of cognitive (IQ) ability simply for the achievement of an intelligence score enabling the child to qualify for services, and instead, focused on investigating the targeted skills that have presented the child with a challenge in the educational setting (Escolano-Perez et al., 2017; Froedge, 2017; Mather & Wendling, 2018; Nortvedt & Buchholtz, 2018; Pace et al., 2019; Petersen et al., 2018). A variety of methodologies, measurements, and implementations to assess reading and math difficulties are examined by these researchers with remediation in mind.

It is vital that those involved with the cognitive (IQ) assessment of children are professionally trained to meet the demands of evolving theories and changing expectations (Moss & Moss-Racusin, 2021). If cognitive (IQ) assessments are not being conducted by certified trained professionals, then according to Moss and Moss-Racusin (2021) change must be rendered in evaluators themselves. Breiger et al. (2014) emphasized the need for minimum competencies to be established at the state level, and
local school boards must scrutinize what procedures and practices their school districts are utilizing to stay up to date with current practices as suggested by the National School Boards Association (2020). Further, Mandlawitz (2016) suggested that legislators and policy makers be notified of evolving policies and trends based on current research to mandate proficiencies and minimum expectations which are coordinated with the needs of the assessment discipline.

Based upon the requirements of the state they practice in; the function of the special education evaluator may look different based upon differing policies and expectations (Zirkel & Krohn, 2008). Numerous states employ a certified school psychologist as a specialist in cognitive evaluations, while others utilize both the school psychologist and the psychological examiner as experts in special education assessment (Kritikos, 2010). The state of Missouri also recognizes the additional role of the process coordinator as one who oversees the special education process from referral through placement and provision of services (Missouri Office of Special Education Compliance, 2020). Many districts within Missouri do not have a school psychologist or school psychological examiner on staff, and therefore may utilize the process coordinator to administer cognitive (IQ) assessments. According to DESE and assessment publishers, these individuals do not possess the credentials required to administer said assessments, but could.

The acknowledgment and acquiescence to a collection of proficiency standards and expectations is considered essential to most professional fields as claimed by Krishna and Aquinas (2004) and is especially critical to those that affect the lives of others (Committee on Psychological Testing, I. V., 2015). A high degree of skill and principled
conduct is required for success in the field of education. An even greater degree of knowledge and ethical professionalism is required in special education where children are evaluated and diagnosed with disabilities (Kvarnung & Nordgren, 2017). Standards have been set forth by the state legislature and operationalized by the Department of Elementary and Secondary Education that reference minimum competencies required by cognitive (IQ) assessment publishers. These are evidence of their endeavors to guarantee that personnel conducting cognitive assessments for school districts have the necessary training and skills needed to contribute appropriately to the evaluation process.

Standards

Those invested in education recognize the indispensable contribution that standards provide when outlining special education as a vocation (Boscardin and Lashley, 2018). The responsibilities of those who perform in this discipline are enormous and top practitioners never stop learning about best practices. The history of standards-based edification emerged from the scholastic philosophies of Benjamin Bloom, through his analyses “Taxonomy of Educational Objectives” (1956). In this text, Bloom scrutinized the importance of demanding scholars to cultivate higher order intellectual expertise. Standards for instruction precipitated the need for standards for education instructors. The evolution of educator standards from that time period was gradual but gained more traction throughout the Reagan era, with the national educational goals that were emphasized in “A Nation at Risk” (United States, 1983). Then in the early 1990s, with the momentous development of the Goals 2000 movement, standards became more concrete. According to Swanson (1991), The National Education Goals were devised to
direct the progressive and changing field of instruction and the training of teachers who would be confronted by the requirements of learners in the 21st century.

Standards for exceptional teachers in the United States have been developed by the Council for Exceptional Children (CEC) and shared through print and presentations with the members of this professional association. The CEC is the biggest world-wide specialized association dedicated to enhancing the achievement of children and youth with disabilities and/or gifts and talents. In 1922, a small assembly of administrators, teachers, and students gathered at the Teachers College, Columbia University and formed this association (Lord, 1976). In 1965, standards were developed at a symposium dedicated to the construction of a collection of professional standards for special educators. At this symposium, members and contributors created and fashioned declarations of standards, which were then reviewed and deliberated at local meetings. Once they had received extensive feedback, the Council’s representative assembly appraised and sanctioned the final version of the standards. An assortment of issues such as instructor training programs, certification, and accreditation, continuing education, and morals and ethics within the practice were addressed (Swan and Sirvis, 1992). They served as a guide or handbook of reference for anyone interested in special education standards. This highly respected professional organization annually reviews and revises the areas of competencies and abilities that practitioners in this field must possess. Input is sought from membership as well as specialists in the field. As evidence that the CEC continues to utilize this cooperative process to confirm that its criterions are contemporary and research based, they recently updated their 2012 Initial K-12 Standards. This 2020 Initial Practice-Based Professional Preparation Standards for
Special Educators was released in July of 2021 (Council for Exceptional Children, 2020). These standards not only delineate the skills an aspiring educator must possess and be competent in, but also include a pointed emphasis on preparing instructors who will be teaching students in kindergarten through the twelfth grade.

The Council for Educational Diagnostic Services (CEDS) is a division of this professional organization, which seeks to be the voice and vision of exceptional and gifted instruction. Their main goal is to promote and support highly qualified, effective diagnostic/assessment professionals. They have standards that define the knowledge base and skills assessment professionals should have. Bruno and Walker (1995, 1997) studied national standards development for diagnosticians through CEDS. They discovered that the CEDS process of standards development was similar to that of CEC standards development for special educators. In 1997 these standards were approved and are reviewed annually for needed modifications or amendments.

Concern for excellence of practice among school psychological examiners and other assessment professionals is valid according to Salvia et al (2016). This is due to the fact that evaluation for special education identification is a communal practice not maintained exclusively by or restricted to any single profession or group of professionals (Zweback and Mortenson, 2002). Educational assessments within public schools are usually performed by a diverse assemblage of specialists that contribute unique perspectives and theoretical orientation (Salvia et al, 2016). School psychological examiners have a unique role in the evaluation process, as they “share an ability to assess and diagnose the learning problems of students” (National Clearinghouse for Professions in Special Education, 2000, p. 1) with disabilities. Their contribution is that when
juxtaposed to their equivalents outside the education profession, they may have tutored or counseled students with disabilities in real classroom settings.

The state of Missouri requires those seeking this certification to hold some form of prior teacher or school counselor certification. This enhances the contribution of the interpretation of evaluation outcomes and ensuing discussion with students and their families not provided by other assessment professionals. Smith (2007) argued for the role of a psychological examiner because they link assessment results with instruction. As growing quantities of struggling students are recommended for evaluation, the job potential to enlarge this field is vital to the public school’s approach to assessment and diagnosis. However, stakeholders hold concerns with the caliber and consistency of assessment procedures. While standards provided by national organizations like the CEC have tried to promote exacting guidelines and parameters within this field, it is apparent that oversight is needed. The National Certification of Educational Diagnostician (NCED) has also attempted to improve the quality of practice by providing practitioners with a Code of Ethics (Nationally Certified Educational Diagnostician, 2020).

Zweback and Mortenson (2002 proposed:

If the long-articulated goal of providing uniformly qualified educational diagnosticians is to be realized, then closer examination…of credentialing issues is needed…[in order to] promote greater quality control in this important area of practice. (para. 20)

A wide variety of titles, roles, and job descriptions used for assessment professionals at the district level as well as within DESE have also made uniformity of practice a challenge. Because the titles are not singular, it is possible that the professionals
conducting cognitive (IQ) assessments may not possess proper certification, nor adhere to the professional standards of these professions produced by the CEC or follow the Code of Ethics published by the NCEDB. The skilled and competent work of the school psychological examiner demands demonstration of proficiency and an intense sense of professionalism that appears elusive at the present time.

**Conclusion**

P.L. 94-142 provides for assessment of school children, and throughout each ensuing manifestation of that law, assessment has been a crucial element of the special education evaluation process. According to the National Center for Education Statistics (2020), the number of students aged three through twenty-one who received special education services under the Individuals with Disabilities Education Act (IDEA) was 7.1 million or 14 percent of all public-school students. Thirty-three percent of these students qualified with a specific learning disability and six percent qualified as having an intellectual disability during the 2018-19 school year based on data from the U.S. Department of Education as reported by the National Center for Education Statistics (2020). As stated above, eligibility for identification under ID and SLD in districts not utilizing the RTI model require the use of a cognitive (IQ) score. Based on this data, the importance of the role the assessment administrator or interpreter has in conducting these assessments and interpreting the results to ascertain whether a child meets eligibility criteria for special education services cannot be ignored.

There is intense debate regarding the continued use of IQ scores in determining the identification of students with specific learning disabilities within the education community. This has evolved into doubts being raised regarding its use in identifying
students as intellectually disabled (Holdnack, 2003). It is recognized, however, that in the hands of trained professionals, interpretation of a student’s performance on these measurements can provide understanding of the type of fundamental processing discrepancies and guidelines for beneficial accommodations or modifications required to support a child’s learning (Flanagan & Harrison, 2012; Kaufman et al., 2015). The utilization of trained personnel that are competent in not only the administration, but interpretation of cognitive (IQ) tests is critical to the fidelity of special education programs throughout the state. For special education services to be consistently offered state-wide, Missouri school districts must ensure that this is occurring. Based on the lack of data from the Missouri Department of Elementary and Secondary Education regarding the current personnel being utilized in each school district within our state, additional research was needed to understand the lack of oversight and possible breach in policy adherence.
SECTION FOUR
CONTRIBUTION TO PRACTICE-
POWER-POINT PRESENTATION

To be presented to

The Missouri State Board of Education
Good morning and welcome to this visual presentation based on my dissertation for the University of Missouri, Department of Education Research and Policy Analysis.

The title of my study is: Diagnostic competencies of those administering and interpreting cognitive assessments for special education placement within Missouri—perceptions of special education directors and process coordinators.
To start with, here is a table of contents that will provide you a framework for what I will be covering with you today.

I will review my purpose and methods briefly and provide some initial demographics to start things off.

Following that, I will present the findings to each of my research questions. Research Question one focused on qualifications, Research question two focused on comparing practice and policy, and Research question 3 focused on the perceptions of my research participants.

I will follow those three sections by providing recommendations and implications and invite your questions as well as discussion at the end of this presentation.
The three research questions that drove this study are listed here.

1. What are the qualifications of current personnel who administer and interpret cognitive tests in Missouri k-12 districts?

Research question 2: How do these qualifications compare to federal law, state law, MSBA policy, and publisher’s standards?

And finally, research question 3-what are the perceptions of process coordinators and special education directors regarding the current practices of those administering and interpreting cognitive tests within Missouri k-12 districts?

To answer these questions, I conducted a concurrent mixed methods study with a pragmatic approach. According to Creswell, employing a mixed methods approach allows for compilation, evaluation, and interpretation of both quantitative and qualitative
data. According to Teddlie and Tashakkori, utilizing this method has particular value when attempting to solve a problem that is present in a complex educational context. The pragmatic approach supported the collection of quantitative and qualitative data simultaneously.

The data collection tools for this research included a survey that was distributed to all special education administrators and process coordinators that the Department of Elementary and Secondary Education had on file. The survey contained nine demographic items, four qualitative and eight quantitative items. The survey sought to fully answer all three of the research questions posed within this study.

Archival data was also gathered. A white paper from the Missouri Association of School Psychologists was acquired that provided statistical information on the role of the school psychologist/psych examiner in Missouri. Local school district online policies were accessed, as well as the Missouri School Board Association suggested policy that is applicable to this study. A data request to the department of elementary and secondary education also provided job titles/descriptors and numbers of individuals serving in job capacities relevant to this research.

To analyze the data, a combination of three different methods were used. First, descriptive statistics were utilized to analyze the demographic data from the survey to get a picture of the participants involved in the study. This was also utilized to analyze the quantitative questions within the survey.
Qualitative Comparative Analysis was utilized to compare existing local Missouri district policies to the suggested Missouri School Board Association policies.

Finally, inductive/open coding was used with each qualitative question from the survey.
From a total of 518 school districts within Missouri, 134 special education administrators and process coordinators completed the survey. Of those, 35 responses were excluded from the research data as they indicated they had less than three years’ experience. This resulted in 99 total responses being utilized for this study - yielding a 19.11% response rate, and these responses came from every region of the state. This slide shows the basic descriptive statistics for the participants who completed the survey.
Next, we will cover the findings for research question one:

What are the qualifications of current personnel who administer and interpret cognitive tests in Missouri K-12 districts?
Statistic archival data was obtained from the Department of Elementary and Secondary Education which provided titles/roles of individuals serving in three capacities: psychological examiners, school psychologists, and educational diagnosticians. Attempting to obtain those with a counseling certificate proved problematic, as DESE collects data based on individuals serving in a guidance capacity (such as vocational special needs, vocational placement, High School, Junior High, Middle School, and Elementary Guidance or School Social Worker), and these individuals are not necessarily certified counselors. A request for data on who administers cognitive assessments was denied, as they do not gather that data at present.

Almost 20% of respondents indicated they had personnel performing cognitive assessments without certification, but over 50% of respondents indicated they should be!
More interesting, was the percentage of respondents who indicated they perform this duty (40%), yet only 20% indicated they were certified to do so.
The survey respondents provided the job titles of those who administer cognitive assessments within their districts, and the school psychological examiner was listed most often, with the school psychologist next. Thought-provoking to the researcher was the third title of Process Coordinator (22 participants), as the minimum certification required by DESE to serve in that role is a teacher certification.
Now, on to Research question 2

How do these qualifications compare to: federal law, state law, MSBA policy, and publisher’s standards?
In my body of work, I have compiled into a one-page figure, the four contributors to this part of the research: Federal and State Law, Publishers Standards, and the Missouri School Board Association proposed policy.

In that figure the full text from each law and policy is provided but, in this slide I have included a concise form of each specific law or policy. As you can see, both Federal and State Law refer to the producer of cognitive assessments. While the MSBA proposes three Missouri certified personnel as fitting those requirements. When it comes to publisher standards, it states that a doctorate degree, licensure/certification in a field related to purchase or member in a professional organization that requires training and experience in the relevant area of assessment.
These are the minimum requirements they require for one to purchase, administer, or interpret cognitive (IQ) assessments (not to be confused with academic assessments).
A comparison was done utilizing systematic sampling, a type of probability sampling. 46 districts’ IGBA-AP2 policies were compared to the proposed MSBA policy for this analysis.

Findings based on this analysis were that 15% of the policies analyzed were missing this specific policy completely, and 39% had personnel listed other than proposed by MSBA.

A survey question was asked to provide connection to this part of the research—which provided insight into how many respondents worked for districts that are members of MSBA (80%).
My final research question (3) is next:

What are the perceptions of process coordinators and special education administrators regarding the current practices of those administering and interpreting cognitive tests within Missouri K-12 districts?
Archival data was procured from the Missouri Association of School Psychologist. They reported that out of 207 Missouri districts, 76% stated that a lack of funding was the main reason for school psychologist vacancies and non-hires, and out of those districts almost 38% reported moderate to extreme concern regarding this.
Participants of the survey were asked why districts would utilize unqualified personnel.

Three themes emerged from the coding.

The first response that occurred most often—was lack of available personnel.

Not very many people complete these certifications, and they are very difficult to find in rural areas.”

“There are not enough staff with those qualifications to hire”

“They are almost impossible to find. When possible, we contract with a school psychologist. However, there are limited universities who offer the coursework for certification”
The next response that emerged from the findings was Lack of Funding

“We do not have the finances to contract testing through a school psychologist or school psychological examiner”

“It is difficult to hire a school psychologist in the range of pay we offer”

“Cost”
The third theme to emerge indicated that participants felt what their district was doing was sufficient.

“Both persons who give the Stanford Binet are highly qualified special education teachers and administrators in the school district. We have discussed going to take the required class to be able to give the WISC, but the class is not offered very often in the Northwest Missouri area, and when it is, it is not publicized. Also, at this stage in my career, I have a masters and specialist in K-12 admin and special ed admin. The idea of going and paying the cost to continue to get a school psych degree does not balance out when looking at the remainder of years I have.”

“We use whoever is available to test”
Participants were asked about needed changes to the evaluation process.

While most responses to this question provided recommendations regarding the process and practice of special education, the remaining responses provided excellent feedback to this body of research—out of which two themes clearly emerged:

- Address staff shortage
- Address a path for personnel to acquire certification
Most indicated staff shortages in this area were a concern

“More staff”

“Have a full-time examiner”

“A full-time person conducting evaluations”

Have more people available to give the IQ test”
Some participants address the need for more pathways for personnel to acquire certification

“Have more universities offer school psych examiner coursework and licensure opportunities”

“A simpler way for process coordinators to become certified to administer tests”

Another participant echoed a sense of desperation:

“For me in our district, being able to hire someone even part time to help. I am the elementary principal and special education director.”
So, based upon the findings of this study, five recommendations are found to be essential for the assessment process in K-12 Missouri schools.

1. The state board of education should consider formally establishing minimum qualifications based on degrees and certifications for those administering cognitive (IQ) assessments within Missouri schools. The findings for this body of research indicated that Missouri K-12 school districts are providing this service. Who they are utilizing to perform this task varies, as well as how they are certified or degrees they possess.

2. If the state board of education establishes minimum qualifications, this must be shared through various means to all special education directors, administrators, and process coordinators as well as colleges and universities throughout the state. This research found that respondents were invested in utilizing appropriate personnel but were unclear as to
who that was. If this communication is also provided to colleges and universities, it
would perhaps inspire degree programs that address the lack of qualified personnel that
was also indicated by research participants.

3. Once the state board of education has communicated their expectations to all
stakeholders, they could request DESE to require Missouri districts to report (as part of
core data) who is administering cognitive (IQ) assessments and their degrees or
certifications. This research found that data on who conducts and interprets cognitive
(IQ) assessments is not currently reported to the Department of Elementary and
Secondary Education by Missouri K-12 school districts. Guidelines are essential for those
in authority to put qualified personnel into the appropriate job roles and accountability
allows for governing bodies to ensure this occurs.

4. Should accountability be established, then the state board of education in conjunction
with the Department of Elementary and Secondary education should establish this
position as a top priority for funding efforts both at the local district level and state-wide.
Respondents indicated that this was one of the challenges they faced in the search for
qualified personnel.

5. The Department of Elementary and Secondary Education at the direction of the board
of education should partner with state colleges and universities to embed requirements for
this certification within certain approved master’s and/or specialist programs such as
counseling, education, special education, or special education administration. DESE
could publish universities and colleges with approved programs on their website and
allow for state colleges and universities to foster new pathways toward certifications that
increase the number of assessment professionals throughout the state.

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We are all aware that there exist many statutes, policies, and laws that provide schools with guidance when it comes to the special education process, but what becomes evident through this body of research is the need for clarity regarding the qualifications of individuals that perform cognitive assessments within Missouri K-12 school districts. Bolman and Deal state that if key responsibilities are not clearly assigned, important tasks fall through the cracks.

The findings from this body of research have implications at the state level within Plan B. It is possible, that policy amendments would provide local districts directions from the legislative body, instead of them relying solely on publisher's requirements (as interpretations could vary).
This body of research also reveals the need for oversight from the state board of education—which would provide structure and guidance to local districts. Accountability—through the gathering of data/reports by the Department of Special Education within the Department of Elementary and Secondary Education—could also ensure compliance with any changes required as a result of policy changes within Plan B.
Should the state board of education pass an amendment to Plan B (a policy amendment), establishing minimum competencies for diagnostic professionals within Missouri school districts that perform cognitive assessments, K-12 school districts would follow the new directives.

This will then require communication with key-stakeholders not only at the K-12 level such as superintendents, process coordinators, and special education directors, but also with higher education institutions throughout the state.

Once the new directives/mandates have been communicated, then the focus will shift within DESE to the gathering of data to ensure districts are employing individuals who
meet the criteria and allowing them to assist districts who are experiencing difficulty doing so.

Which brings us to funding….as we have seen with the most recent policy amendments regarding the screening and identification of dyslexic students within Missouri, we cannot ask K-12 Missouri school districts to make changes such as these without providing additional revenue/or means to do so.

There have been recent initiatives within DESE to address a comparable situation within the SLP-A world. This has allowed for school districts to employ qualified individuals to address speech concerns, it would be necessary for them to make a similar move in this situation.

Finally, creating a coalition with stakeholders at the higher education level to ensure that a pathway for this certification takes a permanent place within colleges and universities counseling, education, and special education departments is suggested. Perhaps stakeholders can work together to ensure new pathways are established.

The result of these proposed changes will have a significant impact on the special education evaluation process. Everyone (students, parents, school staff, and other key stakeholders) involved in the process of evaluation should be able to rely on the accuracy of assessments that have been administered by professionals trained and certified as experts in the cognitive assessment field.
The determination of whether a child qualifies or not for additional services within the public-school setting can have a life-long impact on how they struggle or succeed, whether they get a hand up/or hand off. It is the hope of this researcher that change occurs - ensuring Missouri K-12 school districts are doing the best they can to uphold accuracy and integrity within the Cognitive Assessment process for students referred for Special Education evaluation.
QUESTIONS?
Jewel L. Holloway
417-252-4203
hollowayjewel@gmail.com

Thank you so much for your time, are there any questions?
SECTION FIVE

CONTRIBUTION TO SCHOLARSHIP

TO BE SUBMITTED TO: THE JOURNAL OF SPECIAL EDUCATION

RESEARCH, POLICY, & PRACTICE
Abstract

This study explored the policies and laws established to govern the process school districts within Missouri use to administer and interpret cognitive assessments, as well as the perceptions of special education administrators and process coordinators. Archival data from DESE as well as from the Missouri Association of School Psychologists were examined to provide supporting information. This analysis was mixed methods in nature while employing a pragmatic approach. The researcher sought to understand the experiences of special education administrators and process coordinators as described by the participants. Both the qualitative and quantitative portions of the findings provided rich and dynamic insight into the participants’ perceptions regarding the current assessment practices of Missouri K-12 districts. They also provided cognizance of the qualifications of personnel utilized to administer and interpret cognitive assessments in Missouri K-12 districts as well as how those qualifications compared to established law, policies, and standards. These paralleled need for educational leadership at the state level to provide clarity and communication to Missouri school districts as well as consider measures of accountability, funding, and recruitment.
Introduction

School districts within the State of Missouri have laws and policies established by the state (Missouri Office of Special Education Compliance, 2020, Missouri Department of Elementary and Secondary Education, 2020) and the federal government (Individuals with Disabilities Education Act, 2004) regarding the evaluation process for students being considered for special education services. In addition, there are district-specific board policies (Missouri School Board Association, 2020) to which each school district must adhere. These laws and policies provide broad parameters within which schools must operate, such as the need to use at least one individual qualified to conduct diagnostic assessments (e.g., a school psychologist, school psychological examiner, speech/language pathologist, a special education teacher or remedial reading teacher). They do not give solid clarification on what specific assessments to use or who is the most qualified to interpret those assessments, nor do they differentiate credentials for those who administer cognitive (IQ) or academic assessments.

Perceptions of special education directors or administrators and process coordinators regarding the practice school districts employ required further inquiry. Their experiences and observations were sought because they share responsibility for ethical practices in assessments. The purpose of this study was to explore the perceptions of Missouri public school special education administrators and process coordinators regarding the competencies of staff that administer and interpret cognitive assessments. This study sought to contribute to the existing body of knowledge on the difference between policy and practice in this area. Implications indicated there are gaps between what K-12 schools in Missouri are doing and what governing bodies expect them to be
doing. This disparity between policy and practice has created a significant challenge for special education administrators and process coordinators. This study sought to determine how districts were fulfilling their obligations to correctly assess and identify students with disabilities and what the perceptions of special education administrators and process coordinators are regarding these current practices.

**Research Questions**

Comparing policy and laws established to govern the process Missouri school districts use to administer and interpret cognitive tests required additional information regarding personnel. Three research questions were primary to this study.

1. What are the qualifications of current personnel who administer and interpret cognitive tests in Missouri K-12 districts?

2. How do these qualifications compare to: federal law, state law, MSBA policy, and publisher’s standards.

3. What are the perceptions of process coordinators and special education directors (involved with the administration and interpretation of cognitive tests) regarding the current practices of those administering and interpreting cognitive tests within Missouri K-12 districts?

**Conceptual Framework**

The conceptual framework utilized for this study relied upon the structural frame (Bolman & Deal, 2017). The researcher also incorporated standards and assumptions from other organizational structure literature. The paradigm employed by Bolman and Deal (2017) involved four lenses through which one could evaluate and understand events, processes, or what is required within an organization. These four lenses or frames
are political, human resource, symbolic, and structural. The current study utilized the structural frame to study and evaluate the perceptions of personnel involved in the processes of administering and interpreting cognitive tests. This framework concentrated on strategy by establishing practices and processes, setting measurable objectives, defining duties and responsibilities, and implementing systems of measurement. This process was referred to as reframing by Bolman and Deal (2017). Caldicott (2014) viewed reframing as essential for leaders: “This skill set involves framing difficult concepts quickly, synthesizing data in a way that drives new insight, and building teams that can generate future scenarios different from the world they see today” (para. 9).

Personnel utilized within Missouri school districts to participate in the special education referral process by administering and interpreting cognitive assessments should be prepared for the duties they perform. This preparation may include established policies and procedures regarding that role and an organizational structure that provides support and stability.

The structure of an organization can be viewed as an outline for the expectations and interactions of personnel within an organization and those the organization serves. The basic premise of this frame contends it is vital to put people into roles suited best for maximizing their potential in not only their duties but also their relationships with others (Bolman & Deal, 2017). Likewise, Mintzberg (1979) addressed the structure of organizations by creating five clusters of employees based on functions they provide. These are described as the operating core, middle line, support staff, technostructure, and strategic apex. Administering and interpreting cognitive assessments for children to be placed in special education would be a role within the support staff cluster. Where each
person belongs within these groups is based upon the role they play and the influence they have within the organization.

The role of an assessment professional and the duties they should perform for school districts is defined by DESE and is supported by both state and federal laws. However, there is no state oversight at the local district level, so there is currently no accountability for school districts to employ qualified personnel to perform these duties. Also, a wide range of job titles and descriptions of roles reported yearly to the state suggests there is no guidance or direction from those who oversee public schools within Missouri (Missouri Department of Elementary and Secondary Education, 2021). It is possible that local school boards and K-12 districts in Missouri have not hired individuals with required certification, and thus may have personnel serving in positions they are unqualified for, or performing tasks that are not clearly defined.

The structural framework (Bolman & Deal, 2017) also considers how an organization is coordinated with either vertical or horizontal control. The vertical design has authority figures in places that regulate the effort of subordinates through regulations and policies, planning, and management practices. The process coordinator’s role in K-12 school districts within Missouri are not defined consistently and the only administrator they are accountable or report to is a special education director. Also, Missouri public schools have varying titles and job descriptions for those performing and interpreting cognitive assessments. Conversely, DESE, while responsible for upholding federal and state mandates that affect school districts, also recognizes the ultimate authority of all public schools lies with their elected school board officials. An established chain of command is vital within organizations to keep actions supported by policy and goals.
According to Bolman and Deal (2017), authoritarian roles within schools are often vague or challenged.

Communication between the various agencies, organizations, legislatures, and boards that commit to the administration of public schools provides support to the apportioning of power. Similarities between authority and power become visible when viewing an organization through the structural lens (Bolman & Deal, 2017). Often either or both are lacking in school districts who make determinations based on the availability of funds and receive minimal oversight from state agencies. When decisions are made, the interests of those with voice and influence are well represented, while the apprehensions of absentees are often overlooked or disregarded (Lukes, 1974; Brown, 1986). Structural theorists emphasized leadership as the valid right to making requisite decisions. However, if an organization is unclear of the hierarchy or chain of command, and if those making serious decisions are uninformed due to a break-down in communication, decisions can be made and enforced that are ill-advised or inadvertently breach policy.

Dilemmas within the structures of organizations can often be generated through the lack of clarity regarding responsibilities, goals, policies, or procedures as well as the knowledge of who is in command (Kvalnes & Nordal, 2019). Entry-level employees should be able to trust in a system that hires them based on minimum qualifications then provides additional training if needed. Those with authority at the middle level should be able to trust that upper management has provided them proper guidelines and procedures that ensure regulations are followed, and finally those at the top-level of governance should make every effort to ensure all legislative policies are received and implemented.
through their chain of command (Trevino et al., 1999). Bolman and Deal (2017) referred to the break-down of these key events as structural dilemmas, for example, “gap versus overlap” (p.73). This dilemma describes what can happen if crucial assignments are not clearly designated. The problem of practice studied within this body of research is undoubtedly a structural dilemma based upon the evidence extrapolated from literature. Thus, it is a necessity to view it through the lens of the structural framework as described by Bolman and Deal (2017).

Design of Study

Educational research includes a variety of methods that consists of qualitative and quantitative approaches (Fink, 2017; Mertens, 2020) to gain information that is reliable and credible (Mertler, 2021). Qualitative methods used in research intend to deliver a detailed portrayal of a specific program, practice, or setting (Mertens, 2020). Maxwell (2013) claimed this approach allows the researcher to recognize the process and dynamics that support a causal relationship without the need for evaluation or quantitative measurement. Quantitative research, on the other hand, requires the researcher to build trust by validating knowledge claims. This is done through the collection of evidence in the form of objective observations of relevant issues (Gall et al., 2015). This method results in findings that are most often precise and numerical (Merriam & Tisdell, 2016).

Employing a mixed-methods approach (Creswell, 2014), however, allowed for the compilation, evaluation, and interpretation of both quantitative and qualitative data. Patton (2015) shared the use of mixed methods can provide breadth, depth, and numerical data that gives the researcher a clearer view of the problem they are studying. Tashakkori
and Creswell (2007) defined mixed methods as “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative methods in a single study or program of inquiry” (p. 4). Utilizing this method of research has particular value when the researcher is attempting to solve a problem that is present in a complex educational context (Teddlie & Tashakkori, 2010).

This research followed a concurrent mixed methods design with a pragmatic approach. A survey instrument was used that contained close-ended (quantitative) data as well as open-ended (qualitative) data. Concurrent mixed methods designs are used when two types of data are collected and analyzed (Creswell, 2009). The pragmatic approach supported the collection of quantitative and qualitative data simultaneously (Mertens, 2020). Both forms of data were analyzed separately, and then compared to see if the data confirmed or disconfirmed each other (Creswell, 2014). This yielded according to Merriam and Tisdell (2016) “a richer understanding of the subject under study” (p. 48).

**Pragmatic Approach**

The pragmatic approach allowed the researcher to consider the questions posed as more important than the method used (Mertens, 2020). Using this philosophical paradigm to frame the research allowed for a ‘what works’ approach according to Youngs and Piggot-Irvine (2012). As the goal of this research was to search for useful points of connection between policy and practice, the pragmatic approach allowed for the choice of methods to be informed by the inferences revealed by the researcher. The focus of pragmatism is on “lines of action, warranted assertions, and workability” (Morgan, 2007, p. 66).
Ethical concerns also supported the use of this approach. Morgan (2007) shared the ethical goal of research is to gain knowledge in the pursuit of desired ends. Dewey included strong ethical principles into pragmatism by seeing the value of engaging with multiple populations, thus assisting the researcher to gain understanding from various points of view (Morgan, 2007). This body of research sought various opinions through elicitation of input from two different participant populations having direct knowledge of the phenomenon studied. The epistemology of the pragmatic approach encourages elicitation of data from participants with differing roles. The researcher must interact with diverse participants in order to both understand the dilemma and address it (Hall, 2013; Morgan, 2007).

**Setting**

This study was conducted across all 518 K-12 public school districts (charter schools were included) located in the state of Missouri. The school districts are situated in all regions of the state and are in rural settings as well as urban and suburban settings. Of the 518 public school districts, there are 70 elementary school districts and 448 districts that maintain high schools. The largest school district is the Springfield Public School District located in south-central Missouri, while the smallest district is Missouri City School District #56 in the Kansas City Metropolitan Area.

According to the December 2020 data reports by the Department of Elementary and Secondary Education (Missouri Education Dashboard, 2019), there were 879,701 K-12 students in Missouri and 37,658 pre-kindergarten students. There were 119,926 school age children, and 12,606 early childhood students that qualified for special education
services under 14 disability areas. In the 2018-2019 school year, 7,552 students were initially evaluated to determine eligibility for special education services.

Data were gathered from DESE regarding staffing in special education. They reported there were 260 special education directors. Personnel that could be potentially serving as process coordinators are as follows: 234 school psychological examiners, 289 school psychologists, and 241 educational diagnosticians. There were 1290 fully certified special education teachers for ages 3-5, and 8169 for ages 6-21. Shortage areas were identified by DESE as content areas for which positions were filled with unqualified teacher(s) or left vacant due to the absence of qualified candidates. There were 671 teachers identified as unqualified teaching the mild/moderate cross categorical K-12 students. There were 316 teachers identified as unqualified teaching early childhood special education. These were included on the list of critical shortage areas by the Missouri Commissioner of Education in December 2020.

**Participants**

Mertens (2020) identified many decisions a researcher must make when choosing participants. Each of the public (non-charter) districts within the state of Missouri should have personnel possessing not only direct knowledge of the special education placement process but who are also responsible for assessment accuracy. The target population for this research was identified as possessing both these skills and expertise.

Two participant groups completed an electronic survey for this research. The first was special education administrators. One of their primary duties is overseeing special education services and personnel. They report directly to the superintendent of schools or their designee. The second group was a set of personnel called process coordinators
whose duties include: supervising and coordinating special education programs, policies, and diagnostic procedures as well as organizing and ensuring completion of all evaluation reports and IEPs. They report directly to the special education administrator. These two groups of respondents were chosen for several reasons. First, they had access to information needed for this body of research. Second, they were key stakeholders within the setting. Third, each of these personnel possessed expertise within the field of special education. Those with less than three years' experience in their role were excluded from the study to ensure the information provided was based on the opinions of individuals with experience in their position.

Initial contact with all potential survey participants was made through email. All special education administrators or directors (Missouri Department of Elementary and Secondary Education, 2021) were contacted, and participation was expected to be around 20%. Not every district has a special education administrator. There are districts where the superintendent or other central office administrator serves in that capacity. Special education consortia also exist in Missouri, where multiple districts share the cost of one administrator as well as special education staff.

In addition, those who serve in all 518 public (non-charter) schools in Missouri as process coordinators were contacted. Participation of those participants was expected to be around 20% as well. Surveying all Missouri special education administrators and process coordinators ensured the maximum potential survey size. This sampling procedure was comprehensive and purposeful (Suri, 2011). Survey participants had a variety of educational skills and proficiencies related to their roles, and these individuals
may have had an array of responsibilities that fell outside the realm of special education evaluations.

**Data Collection Tools and Procedures**

According to Mertens (2020), data collection is a means of collecting information related to procedures and people. This study explored the policies and laws established to govern the process school districts within Missouri use to administer and interpret cognitive assessments as well as the perceptions of special education administrators and process coordinators. A mixed methods design was used with a pragmatic approach (Mertens, 2020) through the use of a survey that gathered both quantitative and qualitative data from the participants. Archival data were also gathered that assisted the researcher in finding patterns or themes.

**Survey**

A Qualtrics survey was the main data gathering method used for this study. According to Fink (2003), surveys are an excellent way to collect evidence from individuals that define or clarify their knowledge. By using a Qualtrics survey mailer (https://missouri.qualtrics.com), all responses were anonymized, and all personally identifiable information, as well as IP addresses, were removed from the data responses. Initial contact with Missouri special education administrators and process coordinators was limited to a brief introductory email with the survey link. Communication with participants included no more than four total email contacts, consisting of three follow-up reminders to potential participants. This ensured special education directors and process coordinators were provided ample opportunity to participate. This correspondence included emphasis on the closing of the survey opportunity (date and time) and, again, a
link to the survey. This instrument was available for response for 21 days from the date of the initial email. The survey closed at the end of the three-week period. According to *Percept Research* (n.d.), there is diminishing value in extending a survey any further than that. The survey consisted of 4 qualitative items, and eight quantitative items, as well as nine demographic items, totaling 21 questions. The survey instrument was designed to collect, “information from or about people to describe, compare, or explain their knowledge, feelings, values and behavior” (Fink, 2017, p. 1). The first item was quantitative and sought the respondent’s opinions regarding changes need for the special education evaluation process. Following that item were four quantitative items that identified roles and responsibilities as well as job titles of the respondents and other personnel that might be providing cognitive (IQ) assessments. Next, three qualitative items were posed requiring the respondent’s opinion on certifications required for the administering of (IQ) assessments, potential reasons their district may use staff that are neither a school certified psychologist or certified psychological examiner, and additional information the respondent would like to share.

After these qualitative items were four quantitative items that established the certifications and job titles of the respondents as well as whether the district they served in was a member of the Missouri School Board Association. Finally, nine demographic items were presented that sought to establish the sex, age, and ethnicity of the participants as well as their level of education, employment status, and years of service. The final two demographic items sought the size of the district the participants worked in as well as the region of the state in which they were located. This survey sought to fully answer all four of the research questions posed within this study.
Archival Data and Job Descriptions

Archival data refer to a variety of information that has been previously collected by others (Turiano, 2014). Data already collected represent savings of time and effort, which are pragmatic advantages. Use of archival data has empirical advantages as well because it allows the researcher to explore questions that might be difficult to study in any other way. The use of three different sets of archival data supported the inquiry this body of research created.

Archival data available from the Missouri Association of School Psychologists were accessed (Missouri Association of School Psychologists, 2019) through their website. This white paper was based on statistics the association gathered from Missouri special education administrators regarding the role of a school psychologist or psychological examiner. This white paper provided for a richer analysis of influencing factors for the first and third research question. Secondly, acquiring various job titles, identifiers, and descriptions from the Department of Elementary and Secondary Education to compare education levels, job requirements, and job duties for assessment practitioners within Missouri were collected. This was done through a data request on the DESE website. These descriptors needed to be current and reflect various positions that could be impacted by policy. The third set of archival data gathered was district policy available online through the Missouri School Board Association. This data provided input for research question two by allowing for a comparison to be made to the Missouri School Board Association’s suggested policy (Missouri School Board Association, 2020) that was obtained as well.
Data Analysis

Analyzing the data gathered through the survey and archival data was ongoing and dynamic in nature. The results of this research were shaped by this collection and the analysis that ensued. Data analysis required the researcher to make interpretations of statistical results or illuminate themes or patterns that emerged from the data gathered (Creswell, 2009; Mertens, 2020). According to Merriam and Tisdell (2016), “Without ongoing analysis, the data can be unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed” (p. 197). Through this mixed methods study, the researcher sifted through the data in several steps to examine them for qualitative and quantitative contributions (Fink, 2017). The raw data collected were compiled for examination (Mertens, 2020), and credibility (Field, 2018) was confirmed through methods considered suitable for statistical and data analysis.

Participants' responses to the closed-ended questions contained within the survey provided quantitative data. Quantitative methods were used that focused on data analysis interpreted through statistical formulas befitting educational research (Field, 2018; Mertens, 2020; Creswell, 2014). The researcher also used descriptive statistics (Field, 2018) to draw inferences. Frequencies and percentages of all closed-ended responses were used to illuminate findings. Participants' responses to the open-ended items contained within the survey provided qualitative data. The researcher sought patterns and themes to emerge that were thought-provoking or applicable to the study through an initial coding process (Merriam & Tisdell, 2016). This process was repeated with each group of data, and a horizontalization process was utilized by “laying out all the data for examination and treating the data as having equal weight” (Merriam, 2009, p. 26). Next,
the researcher constructed categories that captured recurring patterns which often have a life of their own apart from the data (Glaser & Strauss, 1967). This grouping of open codes is occasionally referred to as axial coding (Corbin & Strauss, 2015). This can be described as coding that goes past descriptive coding; it is “coding that comes from interpretation and reflection on meaning” (Richards, 2015, p. 135). At this point, codes of themes were moved into “clusters of meaning” (Creswell, 2013, p. 82). The researcher then concentrated on patterns or themes that were recognized through open coding (Emerson et al., 2011). The experiences of participants were produced through the identification of these patterns or themes (Creswell, 2013). They were utilized to assist the researcher in assimilating how the participants understood the experience (Merriam & Tisdell, 2016). Folders were utilized and assigned various codes which were kept by the researcher. A running list of direct quotes, thoughts, or impressions taken from each piece of data was put into a spreadsheet, and the researcher created a code memorandum to gather developing patterns and themes.

Archival data were analyzed by creating a job title and description table to catalog all data gathered. These contributions were used to provide existing data regarding titles, roles, and responsibilities of those in Missouri school districts that are contributors to the assessment process as well as standards provided by the Missouri Association of School Psychologists. In addition, local district policy and the Missouri School Board Association’s recommended policy were compared through the use of a qualitative comparative analysis (see Appendix D) to determine if there was a difference between recommended policy and practice. The sampling procedure for this was done utilizing systematic sampling, a type of probability sampling. This sampling (Merriam & Tisdell,
2016), of every tenth district listed, allowed for strong statistical inferences to be drawn regarding the entire population of Missouri K-12 school districts that are members of the Missouri School Board Association.

Findings

The Missouri Department of Elementary and Secondary Education responded to a request to obtain contact information for all special education administrators or directors and process coordinators in the state of Missouri. This yielded 564 potential participants that had been reported by K-12 school districts as special education administrators and 632 potential participants reported by K-12 school districts as process coordinators. The electronic survey was emailed to all of these potential participants. Of the 1,196 candidates contacted, 87 did not have up-to-date email addresses. Of the 1,109 participants emailed with functioning email addresses, 12.08% (134 of 1,109 eligible participants) completed the survey. Those that had less than three year’s experience were excluded from the research data. This resulted in 99 total responses being utilized for this study. From a total of 518 K-12 school districts within Missouri, 99 responses yielded a 19.11% response rate. As shown in Table 1, these responses came from every region of the state.
Table 1

*Region of the State Represented by Respondents*

<table>
<thead>
<tr>
<th>Region of the State</th>
<th>N</th>
<th>% of Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Girardeau-Southwest RPDC Counties</td>
<td>9</td>
<td>9.1%</td>
</tr>
<tr>
<td>Columbia-Heart of Missouri RPDC Counties</td>
<td>6</td>
<td>6.1%</td>
</tr>
<tr>
<td>Kansas City-RPDC Counties</td>
<td>20</td>
<td>20.2%</td>
</tr>
<tr>
<td>Kirksville-Northeast RPDC Counties</td>
<td>7</td>
<td>7.1%</td>
</tr>
<tr>
<td>Maryville-Northwest RPDC Counties</td>
<td>6</td>
<td>6.1%</td>
</tr>
<tr>
<td>Rolla-Southcentral RPDC Counties</td>
<td>8</td>
<td>8.1%</td>
</tr>
<tr>
<td>Springfield-Southwest RPDC Counties</td>
<td>22</td>
<td>22.2%</td>
</tr>
<tr>
<td>St. Louis-RPDC Counties</td>
<td>8</td>
<td>8.1%</td>
</tr>
<tr>
<td>Warrensburg-West Central RPDC Counties</td>
<td>12</td>
<td>12.1%</td>
</tr>
<tr>
<td>St Joseph-West RPDC Counties</td>
<td>1</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

The most responses (41; 41.4%) came from districts that were between 1,001 to 5,000 students, while the least responses (6; 6.1%) were provided by participants serving in districts of 15,001 or greater. Demographic data (see Table 2) included in the survey were gender, age, of Hispanic/Latino/ or Spanish origin, ethnicity, level of education, and current employment status.
Table 2

*Demographic Data of Survey Participants (N=99)*

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Choices</th>
<th>N</th>
<th>% of N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>9</td>
<td>9.1%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>90</td>
<td>90.9%</td>
</tr>
<tr>
<td></td>
<td>Non-binary</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Prefer not to say</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Age</td>
<td>20-30</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>18</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>51</td>
<td>51.5%</td>
</tr>
<tr>
<td></td>
<td>51+</td>
<td>28</td>
<td>28.3%</td>
</tr>
<tr>
<td>Hispanic, Latino, or of Spanish origin</td>
<td>No</td>
<td>99</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>94</td>
<td>94.9%</td>
</tr>
<tr>
<td></td>
<td>Black or African American</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>American Indian or Alaska Native</td>
<td>1</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Native Hawaiian or Pacific</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Islander</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td></td>
<td>Two or More</td>
<td>2</td>
<td>2.0%</td>
</tr>
<tr>
<td></td>
<td>Prefer not to answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Degree or Level of Education</td>
<td>Bachelor’s Degree</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Completed</td>
<td>Master’s Degree</td>
<td>45</td>
<td>45.5%</td>
</tr>
<tr>
<td></td>
<td>Specialist’s Degree</td>
<td>43</td>
<td>43.4%</td>
</tr>
<tr>
<td></td>
<td>Doctorate or Higher</td>
<td>11</td>
<td>11.1%</td>
</tr>
<tr>
<td>Current Employment Status</td>
<td>Full-Time</td>
<td>95</td>
<td>96.0%</td>
</tr>
<tr>
<td></td>
<td>Part-Time</td>
<td>3</td>
<td>3.0%</td>
</tr>
<tr>
<td></td>
<td>Contracted Employee</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1</td>
<td>1.0%</td>
</tr>
</tbody>
</table>
Research Question 1

What are the qualifications of current personnel who administer and interpret cognitive tests in Missouri K-12 districts?

Statistic archival data obtained from the Missouri Department of Elementary and Secondary Education Dashboard (2019) indicated there were 234 individuals reported serving as psychological examiners, 289 serving as school psychologists, and 241 as educational diagnosticians. The Department of Elementary and Secondary Education does not currently gather data on who is administering cognitive (IQ) assessments or their certifications.

The results from the survey administered to process coordinators and special education administrators yielded additional information. Of the respondents, 18.18% indicated that staff administering and interpreting cognitive (IQ) assessments for special education evaluations for their districts were not certified as a Missouri school psychologist or psychological examiner, yet 51.5% agreed or strongly agreed they should be. Of the respondents, 40.4% indicated they regularly or as needed administered and interpreted cognitive (IQ) assessments for special education in their districts, yet only 14.1% said they were certified as either a psychological examiner, school psychologist, or a school counselor. Of those surveyed, 13.1% indicated that administering and interpreting cognitive (IQ) assessments for special education evaluations was a service they contracted. When asked about the job titles of those administering and interpreting cognitive assessments within their districts, responses varied (see Table 3) with school psychological examiners being reported most often.
Table 3

Job Title(s) of those who Administer and Interpret Cognitive (IQ) Assessments within Respondents’ Districts.

<table>
<thead>
<tr>
<th>Job Title</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Psychological Examiner</td>
<td>49</td>
</tr>
<tr>
<td>School Psychologist</td>
<td>23</td>
</tr>
<tr>
<td>Process Coordinator</td>
<td>22</td>
</tr>
<tr>
<td>Educational Diagnostician</td>
<td>18</td>
</tr>
<tr>
<td>Counselor</td>
<td>16</td>
</tr>
<tr>
<td>Contracted Service</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
</tr>
<tr>
<td>Special Education Director</td>
<td>9</td>
</tr>
<tr>
<td>Special Education Certified Teacher</td>
<td>4</td>
</tr>
<tr>
<td>Speech/Language Pathologist</td>
<td>3</td>
</tr>
<tr>
<td>Regular Education Certified Teacher</td>
<td>1</td>
</tr>
<tr>
<td>Licensed Professional Counselor (LPC)</td>
<td>1</td>
</tr>
</tbody>
</table>

Research Question 2

How do these qualifications compare to: federal law, state law, MSBA policy and publisher’s standards?

Evaluation criteria for Missouri school districts that conduct cognitive (IQ) testing on students being considered for special education services are mandated through local school board policy. Each school board in Missouri is responsible for adhering to federal and state law as well as policies provided by the publishers of cognitive (IQ) assessments (see figure 1). They also have at their disposal guidance provided by the legal counsel of the Missouri School Board Association who work to ensure implemented policies comply with the law (see figure 1).
Figure 1

*Qualifications to Administer Cognitive Assessments in K-12 Missouri School Districts.*

<table>
<thead>
<tr>
<th>Federal Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>300.304/c/l/iv and 300.304/c/l/v: Assessments are administered by trained and knowledgeable personnel and are administered in accordance with any instructions provided by the producer of the assessments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missouri state regulations implementing part B of the Individuals with Disabilities Education Act of 2004 (DESE):</td>
</tr>
<tr>
<td><strong>Section III</strong></td>
</tr>
<tr>
<td>Evaluation Procedures 34 CFR 300.304: Assessments and other evaluation materials used to assess a student are used for the purposes for which the assessments or measures are valid and reliable and are administered by trained and knowledgeable personnel in accordance with any instructions provided by the producer of the tests. If an assessment is not conducted under standard conditions, a description of the extent to which it varied from standard conditions (e.g., the qualifications of the person administering the test or the method of test administration) must be included in the evaluation report.</td>
</tr>
<tr>
<td><strong>Regulation VIII: Personnel Standards</strong></td>
</tr>
<tr>
<td>Listed as able to administer evaluations: licensed professional counselors, school psychologists, licensed psychologists, and school psychological examiners. All must possess a minimum of a master’s degree.</td>
</tr>
</tbody>
</table>

| Missouri School Board Association Proposed Policy |
| IGBA-AP2 Criteria for district and independent educational evaluations (IEE). District evaluations and IEEs must meet all requirements detailed in this section. The district will pay for IEEs only when these requirements are met. |
| Assessment: Intellectual/Cognitive Qualifications: Licensed psychologist, certified school psychological examiner, or school psychologist. |

| Publishers Standards |
| To purchase or use a cognitive (IQ) assessment from Pearson, one must meet qualification level C: |
| A doctorate degree in psychology, education, or a closely related field with formal training in the ethical administration, scoring, and interpretation of clinical assessments related to the intended use of the assessment. |
| Or |
| Licensure or certification to practice in your state in a field related to the purchase |
| Or |
| Certification by or full active membership in a professional organization (such as APA, NASP, NAN, INS) that requires training and experience in the relevant area of assessment. |
As both state and federal laws refer to the publisher’s standards, data reported from research question one was compared to these standards. Based on a comparison to archival data from DESE and taking into consideration the total number of students (859,332) enrolled during the Fall 2020-21 within the state, the results would suggest that there is a substantial shortage in personnel meeting publisher’s standards employed within Missouri K-12 school districts.

No comparison to data from the state or federal law can be made regarding qualifications as that data are not reported. However, a comparison can be made to data gathered, through the survey administered for this body of research. About 16% of process coordinators and 24% of special education administrators indicated that personnel conducting cognitive (IQ) assessments for special education evaluations for their district were not certified as a Missouri school psychologists or psychological examiners. Results from the survey also showed that process coordinators, educational diagnosticians, special education teachers, regular education teachers, and special education directors were all being utilized to administer these assessments. These findings would suggest that personnel administering cognitive assessments might not meet publisher’s standards or minimum criteria.

In comparing qualifications to MSBA’s proposed policy IGBA-AP2, additional archival data were obtained utilizing systematic sampling, a type of probability sampling to obtain the district policy in place of every tenth K-12 district that is currently a member of MSBA. Proposed MSBA policy and actual district policies were then compared utilizing an artifact analysis. A total of 46 districts’ IGBA-AP2 policies were compared. Seven (about 15%) of the policies analyzed were missing the MSBA policy in
its entirety, and 18 (about 39%) had personnel listed other than proposed by MSBA. Of note, 78.8% of the survey respondents indicated that their districts were members of the Missouri School Board Association. These results suggest that many local school districts are not fully following the guidance of the Missouri School Board Association.

**Research Question 3**

*What are the perceptions of process coordinators and special education administrators (involved with the administration and interpretation of cognitive tests) regarding the current practices of those administering and interpreting cognitive tests within Missouri K-12 districts?*

Archival data in the form of the most recent white paper were obtained from the Missouri Association of School Psychologists. This paper was based on a state-wide survey with 207 school districts within Missouri responding. Of the districts participating, 76% reported that lack of district funds was the main reason for school psychologist vacancies/non-hires. Participants (who were special education administrators and directors) rated their level of concern regarding the shortage of school psychologists with 34.6% reporting as somewhat concerned, and 37.5% reporting moderate to extreme concern.

Results of the qualitative portion of the survey administered for this body of research supported these quantitative findings. When asked for reasons why districts would use unqualified personnel, 71 (71.72%) of the participants offered no response, but of those that did, three main themes emerged. The lack of available personal was indicated by 19 (19.19%) respondents. While many simply stated there were none available, others gave reasons they felt were causing the shortage. “Not very many people
complete these certifications, and they are very difficult to find in rural areas,” was shared by one respondent. Several others shared the challenge of being located in rural areas. “There are not enough staff with those qualifications to hire” was shared by another respondent, while one simply stated that even though their district paid a competitive salary, “for whatever reason, they just aren’t able to hire any.” One respondent hinted at a possible cause by sharing that, “They are almost impossible to find. When possible, we contract with a school psych. However, there are limited universities who offer the coursework for certification.”

The second theme that emerged was the ability of a district to afford personnel with proper certifications. Nine (9.09%) of respondents shared that funding was the primary reason their district did not have certified assessment professionals. “We do not have the finances to contract testing through a school psychologist or school psychological examiner” was one respondents’ position, while another stated “It is difficult to hire a school psychologist in the range of pay we offer”. One respondent summed her answer up with one word, “cost.”

The third theme that emerged was shared by six (6.06%) of the respondents who indicated they felt the personnel their district was utilizing were sufficiently qualified based on other determining factors. One respondent shared the following in-depth perspective:

Both persons who give the Stanford Binet are highly qualified special education teachers and administrators in the school district. We have discussed going to take the required class to be able to give the WISC, but the class is not offered very often in the Northwest Missouri Area, and
when it is, it is not publicized. Also, at this stage in my career, I have a masters and specialist in K-12 admin and special ed admin. The idea of going and paying the cost to continue to get a school psych degree does not balance out when looking at the remainder of years I have.

One other respondent shared their thoughts by noting, “they use whoever is available to test.”

A qualitative question was posed to respondents asking for three things they would want to change about the special education evaluation process. Sixty-five percent of participants responded to this question with 35% indicating no changes were needed. About 75% (146) of the recommendations were regarding the process and practice of special education and might be utilized to inform future studies. The remaining responses yielded two major themes.

The first theme that emerged was the concern for staff shortage as indicated 26 (13.4%) times. Most responses were to the point, “more staff,” “have a full-time examiner,” “a full-time person conducting evaluations,” and “have more people available to give the IQ test.” Another echoed a sense of desperation, “for me in our district, being able to hire someone even part time to help. I am the elementary principal and special education director.” One response indicated a future of uncertainty, “find new staff now, because we have limited years before retirement with current staff.”

Of all the respondents, 22 (11.34%) provided the second major theme by indicating that training, or a means for personnel to acquire certification, was needed. Some referred to higher education, “have more universities offer school psych examiner coursework and licensure opportunities,” while others referred to the path for
certification, “a simpler way for process coordinators to become certified to administer
tests is needed.”

Seeking respondents’ thoughts on areas not addressed within the survey, one
question asked for additional information regarding the evaluation process the
respondents might feel important to share. One strong theme emerged, with 13 (26%)
responses indicating concerns with certification and proper training. “Those
administering the assessment should be certified and highly qualified” shared one
respondent, while another stated, “It is important the individual administering and
interpreting the assessment is trained on the specific assessment.”

Summary of Findings

Data for research question one yielded results that indicated those administering
and interpreting cognitive (IQ) assessments for Missouri K-12 school districts come from
a wide variety of disciplines. Almost half of those participating in this research indicated
that while their formal job titles were special education administrators or process
coordinators, they performed cognitive (IQ) assessments. Over half of the participants
also indicated that while proper certification was a priority to their district, less than one
in five of the respondents possessed that certification. Almost one of every five
participants indicated that staff currently conducting cognitive assessments in their
district were not certified as a school psychologists or psychological examiners. This
would indicate that clarity regarding minimum certifications is needed.

Reviewing the findings for research question two yielded a comparison that
provided insight into discrepancies between policy and practice. By analyzing the
perception of participants, it was found that there was some disparity in the manner in
which Missouri K-12 districts interpreted or followed established guidelines. Participants indicated that while a variety of personnel were used to perform cognitive assessments in school districts, almost one of every five districts had unqualified personnel doing so. This was supported by an analysis of archival data. About two thirds of districts’ policies that were compared utilizing an artifact analysis had personnel performing cognitive assessments not recommended by the Missouri School Board Association. This would support the need for clarity to be provided by governing bodies as well as communication and accountability.

In summation of the findings for research question three, it is evident there is a lack of qualified personnel that possess appropriate assessment certifications available for employment in Missouri K-12 school districts as reported by almost one-fifth of participants. It was also manifested that lack of funding to hire appropriately certified personnel (indicated by almost 10% of the respondents) was another challenge to some districts. Archival data obtained from the Missouri Association of School Psychologist supported this claim by indicating that almost three out of four of Missouri K-12 districts reported funding was a challenge to hiring appropriately certified personnel. Each of the themes contained input from participants that indicated the need for funding and recruitment.

**Discussion**

Children requiring special education or other services because of a disability must be between the ages of three to twenty-one, be properly evaluated, and meet the definitions provided by IDEA for 14 disability categories. Of the disabilities they recognize, Missouri requires consideration of intelligence as a determining factor in only
two categories: Intellectual Disability (ID) and Specific Learning Disabilities (SLD) (Missouri Office of Special Education Compliance, 2020).

Student evaluations for both ID and SLD require the involvement of examiners trained in the interpretation and administration of intelligence testing as part of the identification process. Since this is a foundational piece to their ability to qualify for services, CFR 300.304 in IDEA says the evaluation must be administered by trained and knowledgeable personnel.

Occupations within the field of education that become enveloped in challenges can benefit from the establishment of policy and standards that are accepted by the profession as a whole and from the provision of training that enhances and supports practitioners (Drahmann & Cramer, 2021). Assessment professionals should rely on both extensively. Training ensures that the basic knowledge base of practitioners is solid and provides methods for improvement. Those equipped with the right skills through training are bound to excel in the assessment profession (Welfare, 2020). Conversely, policy and standards in the field of special education assessment define knowledge and skills needed. They also ensure those practicing within this profession are accountable for their actions. Each of these pieces help those assessing students to identify values, knowledge, and skills that are distinctive to the assessment profession.

According to the Missouri Association of School Psychologists (2015), there is a current lack of state level principles that guide coursework content, credentialing, professional practices, and ethical behavior expected of school psychological examiners. They also share that some Missouri schools are using professional titles interchangeably and are unethically allowing people to use the professional title of school psychologist
when they do not have this certification from DESE (Missouri Association of School Psychologists, 2015).

**Implications for Practice**

Based on the results of this study, five implications were found that impact policy, practice, and subsequent research as they pertain to the assessment process in K-12 Missouri schools.

1. Clarity. The Missouri State Board of Education should consider formally establishing minimum qualifications based on degrees and certifications for those administering cognitive (IQ) assessments within Missouri schools. The findings for this body of research indicated Missouri K-12 school districts are providing this service. Who districts are utilizing to perform this task varies, as well as their degree and certification.

2. Communication. If the Missouri Board of Education establishes minimum qualifications, this must be shared through various means to all special education directors, administrators, and process coordinators as well as colleges and universities throughout the state. This research found that respondents were invested in utilizing appropriate personnel but were unclear as to who that was. If this communication is also provided to colleges and universities, it would perhaps inspire degree programs that address the lack of qualified personnel that was also indicated by research participants.

3. Accountability. Once the Missouri Board of Education has communicated their expectations to all stakeholders, they could request DESE to require Missouri districts to report (as part of core data) who is administering cognitive (IQ) assessments and their degrees or certifications. This research found data on who conducts and interprets cognitive (IQ) assessments are not currently reported to the Department of Elementary
Guidelines are essential for those in authority to put qualified personnel into the appropriate job roles and accountability allows for governing bodies to ensure this occurs.

4. Funding. Should accountability be established, then the Missouri Board of Education in conjunction with the Department of Elementary and Secondary Education, should establish this position as a top priority for funding efforts both at the local district level and state-wide. Respondents indicated that this was one of the challenges they faced in the search for qualified personnel.

5. Recruitment. The Department of Elementary and Secondary Education at the direction of the Missouri State Board of Education should partner with state colleges and universities to embed requirements for this certification within certain approved master’s and/or specialist programs such as counseling, education, special education, or special education administration. DESE could publish universities and colleges with approved programs on their website and allow for state colleges and universities to foster new pathways toward certifications that increase the number of assessment professionals throughout the state.

Implications for Research

While there exists statues, laws, and policies surrounding the complete evaluation process for special education in Missouri, it appears clarity is still needed when determining specifically who is qualified to administer and interpret cognitive (IQ) assessments. According to Bolman and Deal (2017), “If key responsibilities are not clearly assigned, important tasks fall through the cracks (p.73)”. The findings from this research have implications at the state level within Plan B. The research revealed that
policy amendments would provide local districts direction on who is qualified to conduct and interpret cognitive (IQ) assessments. This body of research also revealed the need for oversight from the Missouri Department of Elementary and Secondary Education (DESE). The Department of Special Education within DESE may respond to this by providing structure and guidance to local districts. Data gathered by the branch of state government need to be extended to include reports from local districts regarding who is administering and interpreting cognitive assessments and what their certifications include. This research also has implications for how the local school districts implement Plan B. It revealed that local school boards’ policies may require amending to ensure compliance with not only the State Plan B, but with federal statues and publisher’s policies.

**Conclusion**

Assessment of a child’s intellectual ability is a critical element of the special education process in Missouri public schools. The Individuals with Disabilities Education Improvement Act (2004) mandates that if a district considers a student between the ages of 3 and 21 to have a disability that has a substantial effect on their learning or behavior, they are entitled to be assessed in all areas associated with the suspected disability. Further, the law also requires a reevaluation of a student identified with a disability at regular intervals throughout the time the child is in school (Osborne & Russo, 2020). Qualifying for special education services and supports is contingent on the results of assessments administered, while services and placement are reliant on the accuracy and interpretation of those assessments. This reality, as described by Farrell (2010), supports
the critical nature of the role of the assessment professional in the special education process.

Individuals being utilized by school districts within Missouri may emerge from various related disciplines such as psychology, education, or speech and language therapy but only two roles are certified through DESE to practice as evaluation professionals. Those recognized as competent in performing the necessary tasks by this governing entity are the school psychological examiner and the school psychologist (Missouri Department of Elementary & Secondary Education, 2021). These professionals are responsible for administering and interpreting cognitive assessments that support the practice of establishing the existence of a disability. Since such assessments require specialized credentials and they are affected by changes in evaluation instruments as well as changes in federal and state criteria for determination of a disability, it is vital that districts utilize personnel that meet minimum criteria. The findings from this research support this premise through a thorough analysis of supporting archival data, a complete review of policy and law applicable to the assessment process, as well as input from special education directors and process coordinators.
References


Missouri Department of Elementary and Secondary Education. (2021). *The administrative arm of the State Board of Education that works with legislators, government agencies, community leaders and citizens to maintain a strong public education system*. https://dese.mo.gov/


SECTION SIX

SCHOLARLY PRACTITIONER REFLECTION
Introduction

Having served as a special services educator for twenty years within the public-school system, I have often benefited from conclusions procured as the result of research. Entering into a dissertation-in-practice based on educational leadership and policy analysis, I secured an extensive and comprehensive knowledge of the role of research within my field. Educational research is a social science research that endeavors to evaluate ideas or hypotheses concerning educational policy and practice. Typically, significant queries or problems are posed that can be investigated analytically. Mertens (2020) suggested that research within education emphasized generating new knowledge that was transferrable to other settings. Connections to established research with relevance must be achieved, and methods employed allowing for direct investigations of the dilemma. Sometimes research within education generates strategies and techniques to address challenges. However, it can also allow for the construction of frameworks, generating innovative approaches to see obstacles or prepare for difficulties not previously anticipated. Research concentrated on discovery and understanding from the participant’s viewpoint has been suggested by Merriam & Tisdell (2016) as offering the most significant impact on people’s lives.

Throughout the dissertation development, great emphasis was placed on the following five themes:

- Leadership Theory and Practice
- Organizational Analysis
- Policy Analysis
- Content and Context for Learning
• Ethics and Diversity

While exploring theories, organizations, policies, and ethical practices, I allowed myself to draw upon coursework and professional practice insights. I also learned from research scholars about relevant perspectives and theories and consistently applied lessons learned to my current professional practice. Throughout this scholarly practitioner reflection, I will be disclosing what I have learned regarding these themes and revealing how I have practiced relating those experiences to my current organization, position, and body of research.

How has the Dissertation Influenced my Practice as an Educational Leader?

During this dissertation, Kotter’s (2011) premise that effective leaders needed to possess leadership and management skills guided my research. Kotter did not suppose that leadership and management skills competed, but that they should be applied simultaneously to provide support and balance (Kotter, 2011). Kotter (2011) stated, “Management is about coping with complexity…leadership, by contrast, is about coping with change” (p.38). I also discovered that organizations could not thrive if they are disorganized and wasteful of their time and resources. Kotter (2011) described planning and budgeting as part of the managerial process when they involved regulating an organization’s daily activities and performing ongoing problem solving. However, planning also becomes a leadership skill when the leader actively pursues opportunities for improvement instead of merely reacting to situations.

It became imperative for me to utilize the trait approach when conducting leadership analysis for this body of research. Researching great leaders required gathering data and examining their traits to determine if they were strong leaders. According to
Northouse (2019), “Some of the important traits consistently identified in many [trait approach] studies are intelligence, self-confidence, determination, integrity, and sociability” (p. 39). Of particular interest to me was the study of transformational leadership. According to Northouse (2019):

Transformational leaders are recognized as change agents who are good role models, who can create and articulate a clear vision for an organization, who empower followers to meet higher standards, who act in ways that make others want to trust them, and who give meaning to organizational life. (p. 192)

Transformational leadership resonates with me as I have committed to treating others equally, regardless of social or economic standing or gender. I pledged to employ my research with mindfulness of the traits that transformational leaders use.

A focus of my dissertation has also been organizational analysis, through which I assessed a perceived dilemma in the Missouri K-12 public schools. I chose to examine adherence to specific policy. This was accomplished by utilizing different organizational frames with theories and concepts while analyzing staff and focusing on my ethical concerns. While examining staff roles, it was discovered that individuals may not have been performing their duties as defined by federal and state policy as well as local school policy and job descriptions. “If people abdicate their responsibilities, performance suffers (Bolman & Deal, 2017, p.75). While viewing the organization through the structural frame touted by Bolman and Deal (2017), it was also found that an absence of communication between the levels of management produced a potential lack of clarity and direction. When it became evident that individuals were unaware of policy
compliance challenges, a need for change, or restructuring became apparent. Bolman and Deal (2017) explained resistance to organizational restructuring by saying the following:

Organizations are reluctant to make major changes because a stable structure reduces confusion and uncertainty, maintains internal consistency, and protects the existing equilibrium. The price of stability is a structure that grows increasingly misaligned with the environment. Eventually, the gap gets so big that a major overhaul is inevitable (p. 87).

While examining the organization it was also discovered that ethical struggles were influencing matters. Leadership may have used discretion to modify policy without viable and necessary input. Those in power or coalitions controlled the flow of communication reaching those that created policy. These, and many other challenges ascertained through my analysis, brought awareness of challenges my body of research would examine.

After extensive research, a need for organizational reframing was apparent. “When the world seems hopelessly confusing, and nothing is working, reframing is a powerful tool for gaining clarity, regaining balance, generating new questions, and finding options that make a difference” (Bolman & Deal, 2017, p. 23). Reframing led to recommendations for change.

By focusing on both management and leadership values throughout my research for this dissertation, I realized that both are equally important in leading an organization. While we learned about many different theories and concepts to analyze an organization, the one I preferred to focus on during this research supported the value of management and leadership. I also championed the strategy presented by Bolman and Deal (2017) that
addresses the four fundamental issues in organizations and provides ways to successfully ‘reframe’ for change.

An additional focus during this research was analyzing policy. I used current policies that govern Missouri K-12 school districts to focus upon and examined districts for potential discrepancies in how they adhere to policy that complied with federal and state laws. This process allowed me to define the problem, a crucial first step in policy analysis (Bardach & Patashnik, 2020). Through research, I uncovered specific federal and state laws that provide governance in crafting local policy. I was then able to reveal local school district policies and analyze for discrepancies between policy and practice.

Accountability is vital to the success of all organizations. It is essential for leadership to be able to not only correct flawed policy but admit mistakes as they become apparent. As Bolman and Deal (2017) shared:

The most important responsibility of leaders is not to answer every question or get every decision right. They cannot escape their responsibility to track budgets, motivate people, respond to political pressures, and address culture, but they serve a deeper and more enduring rule if they are models and catalysts for values like excellence, caring, justice, and faith. (p. 396)

**How has the Dissertation Process Influenced me as a Scholar?**

As I exited my thirties and entered what many refer to as ‘middle-age’, patterns for learning that I had given considerable diligence to in earlier years, became second-nature or transparent as I continued to pursue added knowledge and proficiencies. This quest for advanced degrees and the passion for acquiring additional competencies made this journey of researching leading and learning, especially gratifying. We all go about
our daily lives learning little bits along the way, every day, but how this occurs for adults differs from how we learned in the K-12 setting. Cueva (2010) explained that these differences enhance the adult learning experience by allowing one to question assumptions. Being a scholar in an education field required me to view hypotheses and theories through the lens of experts in pedagogy and gain insight or context into successful initiatives. While children have few responsibilities other than learning and preparing for adulthood, adults have a plethora of responsibilities. Adults seeking knowledge past the high-school setting face the challenge of balancing those obligations with acquiring education. They also have what many might perceive to be an advantage over youth in that they possess wisdom and insight gained through experiences that young learners have yet to encounter. While I have learned that I bring a unique set of motivations into the field of learning, I have been made aware that these skills enable me as a scholar, to lead and educate others with a distinct understanding of adult-learning motivators. According to Merriam and Bierema (2014), the three types of adult learning are goal oriented, activity oriented, and learning oriented. Utilizing what I have learned will allow for me to build rapport with those I lead and challenge and engage them through collaboration. As reported by Bruffee (1999), collaboration through conversation is also key to successful education.

Reflecting on my growth as a scholar while focusing on the traits and attributes of other great leaders, it became evident that ethical scholarship was also vital to success. Integrity in education may also require uncomfortable action. If the focus is on helping both students and the organization grow, I must be ready to exit my comfort zone and engage in challenging learning both to myself and others. According to Brockett (1988),
the educational profession that I practice in is characterized by, “…extreme diversity in both ideology and practice” (p. 1). As a result, the need to be conscientious in practicing transformative learning in my personal and professional life is of utmost importance. Teaching others to think critically about their beliefs and behaviors, while challenging my predispositions and prejudgments will, according to Ettling (2012), allow me to be intentionally researching and learning for change.

During any future research it will be necessary to address how I will present myself in a morally responsible manner. It will be crucial for me to adhere to the Code of Ethics by the American Research Association, and I will also want to seek approval through an Institutional Review Board (IRB). It will be vital that my research is for the benefit of others according to the American Education Research Association Code of Ethics (2011) and that while conducting research, I treat all participants with respect and courtesy. Ensuring that those who bear the risk are the ones who benefit from it will be essential for its success as well. I will seek to follow ethical principles proposed and supported by the United Nations Declaration of Human Rights, the Nuremberg Code, the Declaration of Helsinki, and the Belmont Report. According to the most recent report conducted by the Association of Internet Researchers (AoIR), Markham and Buchanan (2012) suggested that all policies and documents support the following basic tenants:

- Human Dignity
- Autonomy
- Protection
- Safety
- Respect for Persons, Justice, and Beneficence
I have been challenged throughout this research to examine my values. Values are stronger than ethics or morals, as they often form the basis of how we think, act, or feel. They also play a vital role in how we make decisions. The value I place on independent thoughts and actions or my freedom to decide what I do and how I do it is paramount to other strong values I possess. I learned this might challenge me when studying groups of people that believe in conformity and restraint or following the rules and laws of others. Tanggaard (2009) shared that all our stories are closely intertwined with others, so I would consider it particularly important to use other researchers’ input and multiple pieces of data to ensure unbiased research. During this dissertation, I learned to reevaluate participants impressions and challenge assumptions and hypotheses continually. I practiced asking peers to review and examine my data allowing for discussion regarding the process of my studies, emerging findings, and tentative interpretations as proposed by Merriam and Tisdell (2016).

This study exposed cultural bias as well. It will be an inherent tendency for me to research based on a deficit perspective within a minority population. This viewpoint might cause me, if left unchecked, to report on perspectives based solely upon bias instead of researching the external influences such as culture, poverty, and norms. Mertens (2020) recommends that a researcher begin by describing their personal values and frameworks and then, consult with peers to detect when their cultural lens becomes problematic.
Conclusion

Holding multiple positions in the education setting, but without the traditional leadership titles often associated with administrators in this field, it was not easy to acknowledge I was a leader. Throughout this dissertation research, which has been both reflective and forward-thinking, I came to see otherwise. I lead my students both at the K-12 and higher education setting, lead colleagues through various teams and committees, and I play a significant role in leading team decisions through the assessment services I provide to a special education team. Leadership is more than a title or degree; it is a descriptor of the role we play in the transformation of others.

Donald McGannon once said, “Leadership is an action, not a position”. This scholarly practitioner reflection necessitated an understanding of how I learn, research, and improve my ability to communicate and lead. Analyzing great leaders in education and business and the role ethics and integrity played in their decision-making was action to improve the quality of my research. Finally, acknowledging I can and should have a lasting impact on the growth of those around me occurred. Being challenged to look for my blind spots and prejudgments while embracing the process of transformative learning I was myself, transformed. I purpose to embrace all future initiatives, research based or otherwise, with mindful acts entwined with integrity and virtue.


Bloom, B. S. (1956). *Taxonomy of educational objectives; The classification of educational goals.* Longmans, Green.


Clarivate Analytics. (2021) 2021 *Journal Impact Factor, Journal Citation Report*


Fullan, M. (2011). *Choosing the wrong drivers for whole system reform* (pp. 3-4). The Centre for Strategic Education.


G.L. v. Ligonier Valley Sch. Dist. Authority, 802 F.3d 601 (3rd Cir. 2015)


Missouri Department of Elementary and Secondary Education. (2020). *Missouri state plan for special education regulations for implementation of Part B.*
https://dese.mo.gov/special-education/state-plan-special-education

Missouri Department of Elementary and Secondary Education. (2021). *The administrative arm of the State Board of Education that works with legislators, government agencies, community leaders and citizens to maintain a strong public education system.*
https://dese.mo.gov/


Retrieved from https://dese.mo.gov/special-education/compliance/standards-indicators


National Center for Education Statistics (2020). *Students with disabilities*. 


National Clearinghouse for Professions in Special Education. (2000). Educational diagnostician: Making a difference in the lives of students with special needs.


National School Boards Association (2020) *Reports and guides*. 
https://www.nsba.org/Resources


  https://www.pearsonassessments.com/store/usassessments


  https://www.pearsonassessments.com/footer/legal-policies.html


State ex Rel. Beattie v. Board of Edn. City of Antigo, 169 Wis. 231 (Wis. 1919)


APPENDICES
Appendix A

CONSENT FORM TO PARTICIPATE IN A RESEARCH STUDY

NAME(S) OF RESEARCHER(S): JEWEL L. HOLLOWAY

PROJECT IRB #: 

STUDY TITLE: Diagnostic Competencies for those Administering and Interpreting Psychometric Tests for Special Education Placement within Missouri: Perceptions of Special Education Directors and Process Coordinators.

This research study is an exploration of policies and laws that govern who administers and interprets cognitive (IQ) assessments for special education placement within Missouri as well as the opinions and perceptions of those that practice or govern this area within districts. I am doing this study to understand the experiences of special education administrators or process coordinators as described by the participants.

I invite you to take part in this research study, because you are either a special education administrator, or process coordinator. This consent form tells you why I am doing the study, and what will happen if you join the study. Please take as much time as you need to read this consent form. You can discuss it with your family, friends, or anyone you choose. If there is anything you do not understand, please ask me to explain. Then you can decide if you want to take part in the study or not. Research studies help us to answer questions that may improve our understanding of human behavior, attitudes, beliefs, and interactions. Taking part in a research study is voluntary. You are free to say yes or no. I will only include you in this study if you give me your permission first by signing this consent form.

WHY IS THIS STUDY BEING DONE?

The purpose of this research is to understand the experiences of special education administrators and process coordinators as described by the participants.

HOW MANY PEOPLE WILL BE IN THIS STUDY?

Approximately 150-200 special education administrators and process coordinators via survey will take part in this study.

WHAT WILL HAPPEN IF I TAKE PART IN THIS STUDY?

If you provide consent to participate in this research at the beginning of the survey, it will allow you to proceed.

HOW LONG WILL I BE IN THE STUDY?

You will be asked to participate less than 30 minutes, one time.
CAN I STOP BEING IN THE STUDY?

Taking part in this study is entirely your choice. If you decide to take part but later change your mind, you may stop at any time. If you decide to stop, you do not have to give a reason and there will be no negative consequences for ending your participation. Also, the researcher may decide to take you off this study at any time, even if you want to stay in the study.

ARE THERE ANY BENEFITS TO TAKING PART IN THIS STUDY?

There might be no direct benefit to you from taking part in this study. However, the information we learn from you during this study may help us learn more about the cognitive (IQ) testing process within Missouri school districts.

ARE THERE ANY RISKS FROM BEING IN THIS STUDY?

There are no known risks (emotional, psychological risks/discomforts) associated with participating in this study.

WILL INFORMATION ABOUT ME BE KEPT PRIVATE?

A Qualtrics survey (see Appendix B) will be the main data gathering method used for this study. By using a Qualtrics survey mailer (https://missouri.qualtrics.com), all responses will be anonymized, and all personally identifiable information as well as IP addresses will be removed from the data responses.

WILL I BE PAID FOR TAKING PART IN THIS STUDY?

You will not be paid for taking part in this study.

WHAT ARE MY RIGHTS AS A STUDY PARTICIPANT?

Taking part in this study is voluntary. If you do decide to take part, you have the right to change your mind and drop out of the study at any time. Whatever your decision, there will be no penalty to you in any way. I will tell you about any new information discovered during this study that might affect your health, welfare, or change your mind about taking part.

WHO CAN I CALL IF I HAVE QUESTIONS, CONCERNS, OR COMPLAINTS?

If you have more questions about this study at any time, you can call Jewel L. Holloway at 417-252-4203 or email hollowayjewel@gmail.com. You may contact the University of Missouri Institutional Review Board (IRB) if you:

- Have any questions about your rights as a study participant.
- Want to report any problems or complaints; or
- Feel under any pressure to take part or stay in this study.
The IRB is a group of people who review research studies to make sure the rights of participants are protected. Their phone number is 573-882-3181. If you want to talk privately about your rights or any issues related to your participation in this study, you can contact University of Missouri Research Participant Advocacy by calling 888-280-5002 (a free call), or emailing MUResearchRPA@missouri.edu. We will give you a copy of this consent form. Please keep it where you can find it easily. It will help you to remember what we discussed today.
Appendix B

Missouri Special Education Administrators and Process Coordinators Survey

1. In your district, if you could change three things about the special education evaluation process for cognitive (IQ) assessments what would they be?
   a.______________________________________________________________________
   b.______________________________________________________________________
   c.______________________________________________________________________

2. In your current role, how often do you administer and interpret cognitive (IQ) assessments for special education evaluations in your district?
   o Regularly
   o Occasionally, as Needed
   o Rarely
   o Never

3. How many staff members currently administer and interpret cognitive (IQ) assessments for special education evaluations (include yourself if applicable) in your district?
   o 0
   o 1
   o 2
   o 3
   o 4+
   o None—we contract that service out

4. [Other than yourself] Are the people administering and interpreting cognitive (IQ) assessments for special education evaluation certified as Missouri School Psychologists or Psychological Examiners?
   o Yes
   o No
   o ______________________ Please provide details if answer varies
   o Unsure
5. What is the job title of those who administer and interpret cognitive (IQ) tests in your district [If someone other than you is doing this]?
   o Process Coordinator
   o Educational Diagnostician
   o Special Education Certified Teacher
   o Regular Education Certified Teacher
   o Special Education Director
   o Speech/Language Pathologist
   o School Psychologist
   o School Psychological Examiner
   o Contracted Service (no title)
   o Other ________________
   o Unsure

6. [State the extent to which you agree with this statement] The person administering and interpreting cognitive (IQ) testing for special education evaluations in my district must be certified as a Missouri School Psychological Examiner or Missouri School Psychologist.
   o Strongly Disagree
   o Disagree
   o Slightly Disagree
   o Slightly Agree
   o Agree
   o Strongly Agree

7. If your district does not use the services of either a Missouri certified school psychologist or a Missouri certified school psychological examiner, please provide the reason(s) you feel they do not. (mark N/A if this question does not apply to your district)
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________

8. What additional information regarding the role of an assessment professional and their qualifications in the special education evaluation process, would you like to share?
   ______________________________________________________________________
   ______________________________________________________________________
   ______________________________________________________________________
   ____________________________
9. What Missouri certifications or licensures do you currently hold? (please check all that apply)
   o Teaching Certificate
   o Building Administration
   o Superintendent Administration
   o Special Education Administration
   o School Psychologist
   o School Psychological Examiner
   o Licensed Professional Counselor (LPC)
   o Speech/Language Pathologist
   o Counselor
   o Other (please specify)________________________

10. Are you currently serving as a Special Education Administrator?
    o Yes
    o No

11. Are you currently serving as a Process Coordinator?
    o Yes
    o No

12. Is your school district a member of the Missouri School Board Association (MSBA)?
    o Yes
    o No
    o I do not know

13. What gender do you identify as?
    o Male
    o Female
    o _______
    o Prefer not to answer

14. What is your age
    o 20-30
    o 31-40
    o 41-50
    o 51+
    o Prefer not to answer
15. Are you of Hispanic, Latino, or of Spanish origin?
   o  Yes
   o  No

16. Please specify your ethnicity.
   o  White
   o  Black or African American
   o  Asian
   o  American Indian or Alaska Native
   o  Native Hawaiian or Pacific Islander
   o  Two or More
   o  Other/Unknown
   o  Prefer not to answer

17. What is the highest degree or level of education you have completed?
   o  Bachelor’s Degree
   o  Master’s Degree
   o  Specialist’s Degree
   o  Doctorate or higher

18. What is your current employment status within the district you serve?
   o  Employed Full-Time
   o  Employed Part-Time
   o  Contracted Employee
   o  Other: ________________

19. How many years have you served in your current position?
   o  ____________

20. Please select the size of your district
   o  Less than 1,000
   o  1,001 to 5,000
   o  5,001 to 10,000
   o  10,001 to 15,000
   o  15,001 or greater
21. What region of the state is your district located in?
   o Cape Girardeau - Southwest RPDC Counties
   o Columbia - Heart of Missouri RPDC Counties
   o Kansas City - RPDC Counties
   o Kirksville - Northeast RPDC Counties
   o Maryville - Northwest RPDC Counties
   o Rolla - South Central RPDC Counties
   o Springfield - Southwest RPDC Counties
   o St. Louis - RPDC Counties
   o Warrensburg - West Central RPDC Counties
   o St. Joseph - West RPDC Counties
Appendix C
Introductory Email to Special Education Directors and Process Coordinators

Dear Special Education Director/Administrator or Process Coordinator,

I am a doctoral candidate under the supervision of Dr. Cynthia MacGregor (cmacgregor@missouristate.edu) at the University of Missouri and am seeking participants to fulfill degree requirements for my study titled: Diagnostic Competencies of Those Administering and Interpreting Cognitive (IQ) Assessments for Special Education Placement within Missouri: Perceptions of Special Education Directors and Process Coordinators. You are invited to participate in this research project because you are a current Special Education Director or Process Coordinator in Missouri. The purpose of this research is to explore the perceptions of Missouri public school Special Education Administrators and Process Coordinators regarding the competencies of staff utilized to administer and interpret cognitive assessments. This study also seeks to contribute to the existing body of knowledge by answering questions not yet addressed through research regarding the difference between policy and practice.

Your participation in this research study is voluntary and the online survey will take approximately 10 minutes or less. Your responses will be confidential, and I will not collect identifying information such as your name, email address, or IP address. The University of Missouri Institutional Review Board have approved this study. All data will be stored in a password protected electronic format. To help protect your confidentiality, the survey will not contain information that will personally identify you. The results of this survey will be used for scholarly purposes only.

If you have any questions or concerns about the research study, please contact Jewel L. Holloway at hollowayjewel@gmail.com.

Prior to beginning the survey, you will be asked to review an informed consent and will be given the option to continue if you provide consent and wish to continue.

Thank you for your time and consideration.
Jewel L. Holloway EdS

LINK INSERTED HERE:
<table>
<thead>
<tr>
<th>Name of Artifact/Description</th>
<th>Intellectual/Cognitive Evaluator Qualifications Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGBA-AP2 Missouri School Board Association--Recommended Policy for Missouri School Districts</td>
<td>Licensed Psychologist Certified School Psychological Examiner School Psychologist</td>
</tr>
</tbody>
</table>
Vita

Jewel Lea Holloway is a doctoral candidate in the Doctor of Educational Leadership and Policy Analysis program at the University of Missouri. This statewide doctoral program is in partnership with Missouri State University. Jewel also has a Bachelor of Science in Elementary Education and a Master of Science in Education from Southwest Baptist University, as well as an Educational Specialist in Educational Leadership and Policy Analysis from the University of Missouri. Jewel is currently employed by the Willow Springs R-IV school district as an instructor, and also serves as a per-course instructor for Missouri State University Department of Education. She lives in Willow Springs, Missouri, with her husband.