Cognitive Assessment in Emotional Disturbance Evaluation: School Psychologists’ Practices and Perspectives

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ABSTRACT

According to the U.S. Department of Education (2015), roughly 354,000 students receive special education services based on a disability classification of Emotional Disturbance (ED). However, the current federal definition of ED leaves much room for subjectivity and confusion. The vague and ambiguous federal definition has caused decades of inconsistent assessment practices and decision-making for school psychologists (Sullivan & Sadeh, 2014). Previous research has indicated that nearly 40% of school psychologists do not conduct cognitive testing as a regular part of initial ED evaluations, even though federal law states that intellectual factors must be ruled out before making an eligibility determination (Hanchon & Allen, 2013). This mixed-methods study used an exploratory survey design to assess Ohio school psychologists’ practices and perceptions of the ED assessment and identification process, with an emphasis on cognitive assessment practices. The sample was gathered via the Ohio School Psychologist Association (OSPA) listserv, and resulted in 69 participants. Commensurate with previous research, results indicated that approximately 23% of participants reported they do not include cognitive testing as part of every initial ED evaluation, and 85% reported they do not include cognitive testing as part of every ED reevaluation. Also consistent with previous research, participants noted a desire for objectivity in the federal ED identification and evaluation process. Emergent themes in this study indicated that school psychologists continue to request a clarification of terms in the federal definition of ED, in order to follow best practices. Results of this study showed that Ohio school psychologists use a multi-factored approach to ED evaluation. Opportunities for future research include examining the impact of the social maladjustment clause on ED identification and exploring the shift towards RTI in identifying ED.

Keywords: emotional disturbance, school psychology, cognitive assessment, evaluation
This dissertation is dedicated to my parents. Your endless love, support, and encouragement emboldened my tenacity to pursue my dreams. I am forever grateful.
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CHAPTER I. INTRODUCTION

Children with emotional and behavioral disorders are considered to be the most under-identified and underserved of all the disability groups in education today (Barnett, 2012). School psychologists play a pivotal role in identifying and supporting these youth in our schools. Without proper identification and treatment, students with behavioral needs pose considerable challenges to educators, including classroom disruptions and school safety concerns (Barnett, 2012). Furthermore, longitudinal studies indicate that students with emotional and behavioral disabilities experience higher rates of delinquency, juvenile incarcerations, school dropout, teen pregnancy, suicide, and substance abuse than their non-disabled peers (Wagner & Cameto, 2004; Wagner, Kutash, Duchnowski, & Epstein, 2005; Barnett, 2012).

Decades of research have demonstrated links between behavioral disorders and cognitive ability. Since the creation of the first standardized instrument to assess individual intelligence, the relationship between intelligence and behavior has been examined and debated by clinical psychologists and school psychologists alike. Researchers have repeatedly attempted to explain why a proliferation of research has indicated an association between low intelligence and increased behavioral and emotional problems (January, Bartoi, Kuentzel, Somers, & Barnett, 2015). Due to years of research indicating this increasingly important link between intelligence and behavior, it is imperative for school psychologists to consider this relationship and the impact of these factors on educational evaluation and assessment practices.

Research has confirmed that cognitive abilities directly influence student academic achievement, and students with cognitive deficits often have more difficulty than typical students in succeeding academically (Heward, 2005). Educational teams regularly use cognitive assessment data as a part of multi-factored evaluations in order to determine high prevalence
disabilities, such as specific learning disabilities and intellectual disabilities. However, cognitive functioning can impact a student’s educational performance, regardless of the student’s disability category. According to Kauffman (2009), students identified as emotionally disturbed (ED) tend to exhibit lower than average IQ and academic achievement than most students. Such cognitive and academic deficits can impact classroom behavior and often require specialized educational supports. However, school psychologists are not required to use any specific sociometric assessment methods to identify ED.

Although most educational professionals strive for objectivity in practice, they often differ in their perceptions of the seriousness and appropriateness of various behaviors (Algozzene & Yssldyke, 2006). Educators are each unique in their ability to understand cognitive functioning, emotional and behavioral disorders, and how deficits should be assessed and treated. The Individuals with Disabilities Education Act (IDEA) provides a definition of ED and the qualifying areas that must be considered in evaluations. However, specifics on how school psychologists and educational teams should assess these areas are not provided, which causes inconsistent and, often times, unreliable use of assessments. The definition of ED according to the Individuals with Disabilities Education Act (IDEA, 2004) is:

Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
(C) Inappropriate types of behavior or feelings under normal circumstances.

(D) A general pervasive mood of unhappiness or depression.

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section.

As Algozzine and Ysseldyke (2006) emphasized, federal special education law indicates no formulas or simple tests for deciding when problem behaviors constitute ED. The lack of such concrete identification methods indicates a need for standardization and objectivity in ED identification.

In contrast to the current subjective qualification criteria of ED provided through IDEA, intelligence testing is a norm-referenced, reliable way to measure and identify broad and narrow cognitive processing abilities, strengths, and deficits. The federal definition of ED requires that students may not be identified as ED if there are intellectual factors that may explain a student’s inability to learn (IDEA, 2004). Lynam and Henry (2001) noted that children with cognitive deficits may be prone to more behavioral problems due to misunderstanding rules, difficulty with negotiating conflicts with words, and becoming frustrated with academics. This begs the question of reliability in how students with ED are being identified and supported, as well as the consistency of school psychologists using cognitive testing to identify potential needs of ED students. Understanding cognitive profiles of students identified as ED, as well as current assessment practices in ED determination, are worthy of investigation to ensure educational teams are identifying and educating ED students properly in the educational setting.
Background of the Problem

The federal definition of ED provides limited guidance to educational professionals charged with making IDEA eligibility determinations for children with potential disabilities in our schools. It is thoroughly reviewed in IDEA (2004) that students who have one of 13 types of disabilities may qualify for special education supports. To be eligible, the disability must adversely affect student educational performance. States must follow IDEA, however, each state may also have individual guidelines on who qualifies for each disability type. The state of Ohio is one of many states that follows the IDEA federal definition of ED.

Despite professional requests to revise the definition, the category of ED remains largely unchanged for over four decades after being codified into federal law (Hanchon & Allen, 2013). To navigate the ambiguous and outdated eligibility criteria provided by IDEA, school psychologists must practice comprehensive, multi-factored assessment strategies when assessing for potential ED in students.

Students with emotional and behavioral disorders are encountered on a daily basis in school settings. According to Miller (2013), “there are approximately 6 to 9 million U.S. children and adolescents with serious emotional disturbances, which accounts for 9% to 13% of all children” (p. 7). Miller (2013) reported that approximately 70% of children and adolescents in need of support for these behavioral disorders do not receive treatment. These staggering percentages indicate that many students with ED are expected to be educationally successful with little to no support for their emotional, behavioral, and academic needs.

Assessing a student for ED is a complex task, due to the vague identification criteria provided by IDEA coupled with the seriousness of assigning the classification of ED to a student. Because school psychologists are not provided with specified assessment methods in
determining ED, the use of standardized assessments with multiple other forms of data collection is equally important in making a definitive eligibility determination of ED, as it allows for the cross-validation of information from various sources (Fischer, Doyon, Saldana, Allen, 2007). One of the important assessment methods used in the best practice of ED assessment is the measure of intellectual abilities. Not only is it best practice for school psychologists to include this area of assessment, but federal law requires intellectual factors be addressed before a student may be identified as ED.

As noted in the federal IDEA definition, in order to be identified as ED, a student’s inability to learn must not be due to intellectual factors (IDEA, 2004). Miller (2010) reported that there are more children now than in the 1990’s who are exhibiting significant behavioral and social/emotional concerns in the school setting. However, these numbers do not take into account the intellectual deficits that may be contributing to the behavioral difficulties presented by students. A number of studies dating back to the early 1970’s have found that cognitive abilities and rates of delinquency, Conduct Disorder, and aggression in individuals are inversely related (McHale, Obrzut, & Sabers, 2003). This indicates a further need for school psychologists to assess and seriously consider the educational impact of intellectual ability on behavior.

Several studies have found relative cognitive deficits in ED students. For example, Dean (1977), Curley and Pabis (1978), and Finch, Spirito, and Brophy (1982) all found that children labeled as ED exhibit some area of cognitive deficit when compared to typical children. This indicates that similar cognitive deficit patterns may exist in ED students. McHale, Obrzut, and Sabers (2003) used IQ and academic achievement scores to address patterns in aggressive behavior. The study found that ED students initially exhibited significantly lower verbal cognitive skills, relative to perceptual reasoning skills. In a study conducted by Lewis et al.
(1988), 14 juveniles incarcerated in four U.S. states were evaluated using neuropsychological, psychiatric, and educational assessments. The study found that nine out of 14 juveniles had symptoms consistent with neurological impairment. The results also indicated that only two of the subjects had Full Scale IQ scores above 90 (Lewis et al., 1988). Such discrepancies between cognitive functioning and academic success in the ED student populations, paired with inconsistent assessment practices to determine eligibility, indicate the need for further exploration. In order to gain a clearer perspective on the relationship between cognitive assessment and ED, further investigation and research are warranted.

**Rationale & Significance of the Study**

Forness and Kavale (2000) stated, “Of several challenges that continue to face special education regarding children with emotional or behavioral disorders, the problem of eligibility is among the most pressing” (p. 267). Statistics on educational disabilities indicate that approximately one in five school age children exhibits a mental health condition causing at least mild functional impairment. In contrast, the percentage of students identified for special education services under the classification of ED has remained constant at approximately 1% of the school-aged population (Barnett, 2012).

These staggering statistics indicate a need for further research into the disability category of ED, in order to improve on identification methods, determine appropriate assessment practices, and provide interventions linked to needs identified in the evaluation process. Many of the problems associated with this under-identification of students with behavioral and emotional problems are attributed to the federal definition of ED found in IDEA (Barnett, 2012). However, the definition does provide clear guidance on what factors must be ruled out before ED eligibility may be determined.
Although the federal definition of ED is arguably subjective, IDEA (2004) clearly states that intellectual factors must be ruled out before identifying a student as ED. As research has shown, cognitive deficit patterns have been found, relative to the ED student population. These cognitive deficits may also be impacting student learning and behavior, potentially causing improper disability identifications. However, little research has been conducted on how often school psychologists are assessing cognitive abilities in ED students, what cognitive assessments they are using, and how they are using the results to guide eligibility determination and student support.

A recent study conducted on ED assessment indicates significant gaps in school psychologists’ cognitive assessment practices used in ED evaluations. Hanchon and Allen (2013) surveyed 214 school psychologists across the United States on assessment and eligibility practices used when conducting ED evaluations. Results indicated that 34% of the school psychologists surveyed did not use cognitive testing as part of every initial ED evaluation.

A similar study conducted by Shapiro and Heick (2004) sent surveys to 1000 members of the National Association of School Psychologists. Of the 648 surveys completed and returned, almost 40% of school psychologists in the study reported that they did not conduct intelligence testing as part of most ED assessments.

The results of these studies not only indicate that the federal special education law is not being followed consistently in eligibility determinations, but there may be student cognitive needs that are being significantly overlooked in a population of students that already exhibits relative cognitive deficits. By mandating that school psychologists are assessing cognitive ability as part of all ED evaluations, we may ensure that we are not incorrectly identifying students as ED and we may improve understating and adherence to the current federal definition of ED.
These results further support the need for school psychologists to adhere to federal eligibility requirements and provide best assessment practices in ED evaluations.

The collective research shows that ED students may exhibit relative cognitive deficit patterns that impact academic achievement success and school psychologists are not consistently using cognitive assessments as part of every ED evaluation. This study contributes to the current research base concerning cognitive assessment of ED students, as well as school psychologists’ practices and perspectives of ED evaluation. In addition, federal law states that we must rule out intellectual factors before identifying a student as ED, which cannot be done without testing students’ cognitive abilities. Unfortunately, little research has been conducted on this topic and a better understanding of current practices is needed. By identifying current school psychologists’ cognitive assessment practices, educational professionals may develop a more consistent system of ED evaluation and ensure that inconsistent assessment practices do not contribute to improper ED identification and intervention. At a state and federal level, this study may assist in clarifying ED assessment procedures provided by IDEA.

Purpose of Study

The purpose of this study was to examine school psychologists’ cognitive assessment practices and perspectives, regarding ED evaluation and eligibility determination. School psychologists and educators alike continue to struggle with objectively identifying ED student eligibility and need. As stated by Hanchon and Allen (2013), “perhaps none has created more of a sense of confusion and uncertainty within the field than determining eligibility for the special education category Emotional Disturbance (ED)” (p. 193). Through this study, a clearer understanding of ED evaluation expectations and practices in school psychology may be on the educational horizon.
The federal definition of ED enacted by Congress in 1975 was based on educational researcher Bower’s work in the late 1950’s and 1960’s. Even today, Bower’s guidelines for identifying ED students continue to serve as the foundational basis for the federal definition in IDEA used to identify students as ED (Hanchon & Allen, 2013). With the progression of research and education, the assessment and identification process of ED students must move forward, as well. Solely addressing behavioral patterns is not enough when considering an emotional disability. The roles of cognitive functioning and behavior must be addressed to completely understand student need and drive best practices in school psychology.

As assessment in education becomes more intervention-based, addressing specific cognitive areas and patterns becomes crucial in determining educational needs of students. As mentioned by Hale & Fiorello (2004), a considerable amount of research has demonstrated relationships among cognitive processes, behavior, and specific academic skills. This indicates that multiple areas of cognitive processing impact educational performance and must be addressed by school psychologists through appropriate assessment procedures. In order to ensure that cognitive needs of ED students are being met, and to meet compliance with federal guidelines for disability identification, researchers in education must further uncover the current ED practices and perspectives of school psychologists.

At the most primary level, cognitive assessment allows school psychologists to determine the extent to which students may be experiencing intellectual or emotional difficulties that impact their ability to learn. In districts that routinely use cognitive assessments as part of traditional evaluation methods, school psychologists may help rule out learning disabilities and intellectual disabilities in ED evaluations. Today, many districts employ a Response-to-Intervention (RTI) model, in which cognitive assessment is not a regular part of the ED
evaluation. Instead, intervention data, observations, and work samples may provide most of the information to the educational team (Fischer, Doyon, Saldana, Allen, 2007). However, when cognitive assessments are used in the RTI process, school psychologists can examine data on cognitive strengths and weaknesses to better understand the relationship between student intellectual functioning, behavior, and classroom environment. For example, if a student has below average processing speed, this may manifest in inappropriate behaviors in the classroom due to frustration with timed tasks, or embarrassment about being called on before having time to process the question (Fischer, Doyon, Saldana, Allen, 2007). Therefore, assessment of intellectual ability and behavioral observations must both be employed in order to truly consider a student for ED eligibility.

By surveying school psychologists and obtaining information on differences in cognitive assessment practices in Ohio, compliance with IDEA ED eligibility guidelines can be determined and perspectives on the current federal definition of ED may be acquired. Results from this study may be used to assist in both state and federal compliance in special education evaluation and may promote best practices in school psychology and ED assessment.

**Theoretical Framework**

Over the last century, the field of psychology has made great strides in achieving an understanding of human cognitive abilities. Although many theorists have developed ways to evaluate and understand cognitive functioning, most psychological practitioners believe that the Cattell-Horn-Carroll (CHC) theory offers the best current description of the structure of human intelligence (Keith & Reynolds, 2010). Although a grounded theory approach was used in collecting, coding, and interpreting qualitative data and Likert-type questions were used for quantifiable measures, the theoretical framework of CHC theory was used to shape the research
questions and drive the survey questions used to collect data. Most cognitive assessments used by school psychologists to determine cognitive ability levels of students are based on the CHC Theory of cognitive abilities. The cognitive ability areas defined by the CHC theory have been shown to predict school achievement and success. CHC theory is based on psychometric models of cognitive functioning, which outline a three-level hierarchy of cognitive abilities: a general intelligence factor, nine broad abilities, and over 70 narrow abilities (Keith & Reynolds, 2010).

Due to its validity and comprehensive approach, the CHC model of abilities is widely adopted by school psychologists in order to determine educational disabilities in students. According to Fiorello, Thurman, Zavertnik, Sher & Coleman (2009), “As a result, school psychologists are more likely to define the various CHC abilities in a manner consistent with the hypothetical constructs upon which they are based” (p. 490). Because of assessments aligned with CHC Theory, school psychologists now have an objective, comprehensive way to determine cognitive deficits and strengths in children. This broad approach to understanding cognitive abilities allows educational professionals to determine specific student needs, provide recommendations for teaching and academic interventions, and affect disability identification more directly and clearly, regardless of disability category.

**Research Questions**

Three central research questions were of interest in this study. The first question focused on identifying cognitive assessment practices used by school psychologists in ED evaluations. The second research question looked to identify how often school psychologists provide cognitive testing as part of ED evaluations. The third question looked to determine school psychologists’ perspectives on the current federal definition of ED found in IDEA.

1. What assessment methods do school psychologists use as part of ED evaluations?
2. How often do school psychologists conduct cognitive testing in ED evaluations?

3. What are school psychologists’ perspectives on the current federal definition of ED found in IDEA?

Definition of Terms

Several relevant terms are frequently used in this study. The following definitions provide clarity and insight into these terms.

**Cognitive functioning.** Cognitive functioning includes the cerebral activities that involve reasoning, memory, attention, language, and knowledge. Cognitive functioning also involves inductive and deductive reasoning abilities, as well as acquired knowledge, which are all influenced by biological, neurological, and environmental factors (Miller, 2010). Cognitive functioning is often synonymous with intellectual functioning or ability.

**Academic achievement.** Academic achievement refers to reading, writing, and mathematical skills acquired from exposure to academic material in and out of a school setting. School psychologists regularly assess academic achievement through norm-referenced assessments and classroom-based evaluations. The areas that are typically assessed include reading, math, and written expression. Scores are typically rendered based on age or grade level of the student.

**Emotional disturbance (ED).** According to the Individuals with Disabilities Education Act (IDEA) (2004), Emotional Disturbance (ED) is defined as:

Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:
(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

(C) Inappropriate types of behavior or feelings under normal circumstances.

(D) A general pervasive mood of unhappiness or depression.

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section.

**Delimitations**

In defining the boundaries and scope of this study, several delimitations are present. The first delimitation that applies to this research study is participant exclusion criteria. By restricting the study’s population of interest to only school psychologists belonging to the Ohio School Psychologist Association, the limited boundaries of this population are considered a delimitation. This delimitation was established, due to the research questions focusing on school psychology practices in Ohio.

Another delimitation in this study is the theoretical framework used to define cognitive assessment and intellectual functioning, regarding this study. The CHC Theory is used by most school psychologists in cognitive assessment, due to its reliability, popularity among school psychologists, and comprehensiveness of cognitive data in comparison to the other theories of
cognition. Therefore, this theoretical approach was used as the basis for understanding intelligence, although other cognitive theoretical frameworks exist.

The specific focus of the research problem is the final source of delimitation in this study. By choosing to focus this research on the particular topics of ED and intellectual functioning, the researcher chose not to examine other areas of disability and assessment relevant to the field of school psychology and education.

**Limitations**

This study was limited in several ways. The results of this study were based on estimates and opinions made by school psychologists regarding their ED assessment practices. An examination of actual assessment practices may result in a more accurate account of current practice.

Since purposeful and criterion sampling was used in this study, this may not allow for generalizability or transferability outside of the sample under study. By using a purposeful sample, the participants in this study may not represent the national population of school psychologists. Since the sample did not intend to represent the national population, findings should not be transferred to other populations.

A limitation to this study includes research that was conducted within the limitation of the data available, which was dependent on information provided by the Ohio School Psychologist Association listserv community.

The final limitation of this study is that factors such as socio-economic status, cultural considerations, race, gender, years of experience, and age were not considered when choosing the study population or analyzing results. It was assumed that all participants would hold at least a Master’s degree, however, it was not required to participate in the study. Therefore, any
perceptions or opinions related to these subject traits were not accounted for or considered. Consequently, participants’ responses may not reflect all school psychologists’ perceptions across all demographics.

**Researcher Bias**

In using a mixed-methods research design, the role of bias and interpretation can be a significant factor that impacts the qualitative data interpretation in this research. In addition, previous experience and preconceptions of the author played a role in research bias in this study. As a school psychologist that regularly uses cognitive assessments, I assume that other school psychologists also use and value cognitive assessments as tools in determining student deficit and strength. According to Sattler (2008), school psychologists rely heavily on cognitive measures because they are some of the most successful applications of psychological theory and measurement. Although school psychologists are expected to use a multi-factored evaluation process, cognitive data alone is crucial in determining the existence of an educational disability. My extensive experience of gathering and interpreting cognitive data may have been an asset to this study; however, it may have also contributed to bias and reactivity in assuming school psychologists’ best practices, regarding cognitive assessment.

My experience of working in an ED school program may have caused researcher bias. In my previous work experience, many ED students exhibited specific cognitive deficits that were often overshadowed by the significant behaviors associated with their educational disability. Thus, the cognitive concerns were dismissed or deemphasized. My desire to put aside behavior and focus on cognitive functioning in ED students may have caused researcher bias in this study. In order to mitigate this bias, maintained that survey responses were coded according to the patterns and themes found directly in the survey data.
CHAPTER II. LITERATURE REVIEW

The Individuals with Disabilities Education Act (IDEA, 2004) is a United States federal law ensuring educational services and support to children with disabilities. The Individuals with Disabilities Education Act provides specifics on how states and public agencies must provide early intervention, special education, and related services to all eligible infants, toddlers, children and youth with disabilities. Within IDEA are the current definitions and criteria for students with disabilities in the educational setting. This study focused on the current disability category of Emotional Disturbance (ED). The definition of ED according to IDEA (2004) is:

Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

(C) Inappropriate types of behavior or feelings under normal circumstances.

(D) A general pervasive mood of unhappiness or depression.

(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i) of this section.
Approximately 354,000 students attending public schools receive special education services based on a disability classification of ED (U.S. Department of Education, 2015). Unfortunately, 70% of children and adolescents in need of support for emotional and behavioral disorders do not receive treatment (Miller, 2010). In addition to a lack of treatment supports, these statistics indicate that students are being under-identified in our educational system. This chapter examines the literature and current research concerning ED identification, school psychology assessment practices, and subjectivity of the federal definition of ED.

**Factors in Determining ED**

The Education for All Handicapped Children Act of 1975 guaranteed access to public education for children with a range of disabilities, including those with emotional and behavioral disorders. In order to include children diagnosed with various forms of psychopathology, the U.S. Congress adopted a modified version of the ED definition originally developed by Eli Bower in the mid 1900’s (Merrell & Walker, 2004).

Bower originally identified ED based on his late 1950’s study of children diagnosed with emotional/behavioral disorders. Bower coined the term *Emotionally Disturbed* after analyzing teacher-reported data on these students. In his work, Bower summarized the major differences between the children identified as having ED and their typically developing classmates (Merrell & Walker, 2004). The recommendations from Bower’s research eventually emerged as the foundational aspects in the ED definition found in IDEA, where they remain relatively unchanged decades later (Allen & Hanchon, 2013).

Elements of the current federal definition that are rooted in the original Bower conceptualization of ED include the requirements that the symptoms of student behavior be exhibited to a *marked degree* and *over a long period of time* (Allen & Hanchon, 2013). In
addition, the federal ED definition stipulates that evidence must exist confirming that the student’s disability adversely affects educational performance (IDEA, 2004). As if these mandates are not subjective enough, factors that must be ruled out prior to ED eligibility are equally vague and confusing.

Bower’s work remains as the blueprint for the current criteria in determining ED, however, there are several additions that deviate from his original work. With little explanation for guidance, IDEA (2004) requires that school districts must deny special education eligibility to children who are deemed socially maladjusted. Yet, the term socially maladjusted is presented with no definition or eligibility criteria and has never been defined by federal law. Additionally, there are several other factors that IDEA requires must be ruled out, prior to identifying a student as ED. According to IDEA (2004), it must be determined prior to ED eligibility determination that a student’s inability to learn cannot be explained by intellectual, sensory, or health factors. Once again, these expectations are addressed with no federally defined guidance or procedures for school psychologists in evaluating each area. The subjective nature of this ED eligibility criteria makes the task of evaluating and determining student need an arduous one for school psychologists directly involved in ED assessment and eligibility determination.

Subjectivity in ED

Prior to the 1997 and 2004 re-authorizations of IDEA, educational professionals found that ED eligibility criteria and assessment practices presented numerous challenges and obstacles. In 1982, Noel and Haring compiled research for the United States government on educational program planning for students identified as ED. Noel and Haring (1982) noted, “Despite the amount of work that has been done, special education for the emotionally disturbed has consistently been plagued with certain problems. Chief among these is the very definition of
emotional disturbance” (p. 7). They went on to state that the research available at that time communicated the “uncertainty” and “outright confusion” of what constitutes an emotional disturbance (Noel & Haring, 1982, p. 7). Moving forward and addressing current research, it is clear that subjectivity remains a defining issue in assessing for and determining ED.

Recent studies on ED assessment practices indicate a further concern for the ambiguity in the ED identification process. A study by Becker et al. (2011) examined variability across state definitions and qualification criteria of ED in the educational setting. Literature provided on ED at both the federal and state level was reviewed. Results indicated that implementing a more objective evaluation process for identifying ED may exclude students who are in need of special education services but do not meet the specific criteria provided. Similarly, a broadened, subjective definition of ED may create over identification of educational ED. Both potential concerns demonstrate a need for consistency and restructuring of the identification process in determining ED.

Researchers continue to argue for a more conceptualized formula for determining ED. According to Sullivan and Sadeh (2014), “The federal definition of ED is vague and provides little guidance” (p. 454). A study analyzing case law by Sullivan and Sadeh (2014) discussed the obscurity of the criteria provided by IDEA for identifying ED. Within this criteria are requirements for educational teams to rule out environmental and inherently cognitive factors prior to identifying ED. Results indicated that not only do practitioners struggle with numerous interpretations of ED, but judicial reasoning on the matter was similarly diverse (Sullivan & Sadeh, 2014). Several court rulings exhibited discrepancies in identifying ED eligibility and following loose legal guidelines. Numerous researchers have expressed similar challenges attributed to the federal obscurity provided by IDEA (Barnett, 2012).
Further concerns with the current ED definition were provided in a qualitative study by Janz and Banbury (2009), which examined the perspectives of educational professionals responsible for the evaluation of students with behavioral concerns related to ED. Evaluation professionals from two school districts participated in the study and were interviewed regarding their institutional issues of classifying ED. Results indicated that most educational professionals claimed that the language found in the current ED definition left substantial room for professional judgment and interpretation.

These results further support that all criteria, including intellectual factors, are inconsistently addressed by practitioners and federal mandates alike. This literature not only indicates subjectivity and ambiguity in ED identification, but it encourages the need for further compliance with IDEA disability identification expectations and processes. In order to achieve consistent assessment approaches in ED evaluation, practitioners must understand federal expectations and follow similar guidelines in current practice.

**Assessment Practices in School Psychology**

Partnered with the obscurity in IDEA’s definition of ED, is the subjectivity in choosing appropriate evaluation methods in identifying ED. From its beginning as a disability category in the Education for All Handicapped Children Act, serving students under the special education category of ED has been a challenging task for school psychologists. In particular, the vague and ambiguous federal definition has caused inconsistent assessment practices and decision-making for many school psychologists (Hanchon & Allen, 2013). Consistent with determining eligibility for other disability categories, ED assessments should be tailored to meet the specific needs of the child. However, little is known about the current ED assessment methods used by school psychologists in determining student need. According to Hanchon & Allen (2013), “A scarcity of
research exists with respect to the methods and approaches used by school psychologists when ED is a diagnostic consideration. At a minimum, an examination of their current practices and perceptions regarding the nature of the federal ED definition is long overdue” (p. 197).

Before referring for an initial special education evaluation, most educators have identified a student’s social, emotional, or behavior concerns. These concerns then prompt educational teams, including school psychologists, to act by conducting assessments to determine disability eligibility and student need. In a study by Fischer, Doyon, Saldana, and Allen (2007), ED evaluation methods of school psychologists were considered. The study indicated that review of records, interviewing, observations, self-report measures, behavior rating scales, projective tests, and cognitive assessment were all considered important parts of the ED evaluation procedure. The researchers concluded that while ED assessment methods may be layered and complex, these methods used to gather data have significant limitations and inconsistencies among practitioners (Fischer, Doyon, Saldana, & Allen, 2007). This may be due to the federal vagueness of what expected practices are in ED evaluation. With clear concern for the integrity of ED evaluation in the United States, this study indicates that many areas of student functioning may be significantly under-assessed or overlooked in ED evaluation procedures.

As IDEA stipulates that several factors must be ruled out prior to ED eligibility determination, it may be assumed that all practitioners provide thorough assessment methods as part of every ED evaluation. However, research indicates that this is not the case. A pivotal study completed by Hanchon & Allen (2013) surveyed a sample of school psychologists across the United States asking about ED evaluation practices and perspectives. A total of 214 participants completed the survey. The study found that the majority of school psychologists (>50%) met the expectation of conducting comprehensive ED evaluations, as indicated by the inclusion of
common assessment techniques. However, 1 of 5 respondents failed to include several important components of a multidimensional evaluation in more than 10% of their initial ED evaluations. Most concerning, nearly 34% of school psychologists did not conduct cognitive testing as a regular part of initial ED assessments, even though federal law states that intellectual factors must be ruled out before making an eligibility determination (IDEA, 2004). Such limited, yet, significant findings warrant further investigation to determine how these assessment practices may be impacting the ED student population.

In a similar study conducted by Shapiro and Heick (2004), 648 members of the National Association of School Psychologists were surveyed on assessment methods used in ED evaluations. Nearly 40% of school psychologists surveyed reported that they did not conduct intelligence testing as part of every ED evaluation. In order to obtain uniformity in ED evaluation and eligibility processes, school psychologists must begin to identify and accept the importance of consistency in assessment practices in determining ED student need, including cognitive assessment.

**Cognitive Functioning and ED**

A major concern in current educational practice is inaccurate diagnoses and placement of children and adolescents with known or suspected cognitive impairments. Lynam and Henry (2001) noted that children with cognitive deficits may be prone to more behavioral problems, due to misunderstanding rules, difficulty with negotiating conflicts with words, and becoming frustrated with academics. This begs the question of reliability and how students with ED are being identified and supported. Understanding school psychologists’ ED assessment methods is worthy of investigation, in order to ensure educational teams are identifying and educating ED students properly in the school setting and addressing all areas of educational need.
Since the 1970’s, researchers have been investigating the neurobiological bases of learning and behavioral disorders, and substantial evidence has indicated neurobiological bases of behavior (Miller, 2013). Historically, educators identified and treated only the symptoms and not the underlying problems. However, in the 1980’s and 1990’s, technology improved and researchers were able to study and collect more detailed brain processing information. Studies began to focus on the classroom behavioral implications of such disabilities as dyslexia, attention deficit-hyperactivity disorder, autism, and emotional/behavioral disorders. Even further research was being conducted on neurobiological functioning through concrete imaging neuroscience. Science and educational practice were able to merge and improve educational supports for students with disabilities in the classrooms (Miller, 2013). With further, recent advances in the understanding of cognitive functioning, educational professionals may more accurately identify student needs – particularly those of ED students.

**Cognitive patterns in ED.** Previous research has found cognitive patterns present in the ED student population. In a quantitative study by Curley and Pabis (1978), the authors investigated the development of cognitive abilities in typical students compared to students identified as ED. The sample for the study consisted of 240 school-aged children aged 6-12 with an equal number of males and females in each group. Half of the students were identified as typical, with the other half identified as ED. All children had an overall IQ standard score falling at 90 or higher. The Southern Illinois University Test (SIUT) was used as the measurement instrument, which consists of three subtests. Results indicated that the mean scores of ED participants were consistently lower than the mean scores of the typical students. Since the SIUT focused on logical inferences and abstract mental comparison skills, it may be determined that many ED students have lower cognitive skills in these areas in comparison to typical peers.
These results suggest potential cognitive patterns distinctive to the ED student population that may not be addressed by typical educational evaluation methods for ED.

Other studies not only found overall lower IQ scores, but lower scores in specific cognitive domains. In a study by Finch, Spirito, and Brophy (1982), the authors examined the relationship between reflection-impulsivity and intelligence as measured by the Wechsler Intelligence Scale for Children – Revised (WISC-R) in children with reported behavioral concerns. The sample consisted of 59 children aged 8 to 15 hospitalized at the Virginia Treatment Center for Children for severe emotional/behavioral disorders. Each child was individually administered the WISC-R, as well as the Matching Familiar Figures Test (MFF) to determine cognitive style. Based on MFF score, the children were divided into two groups; reflective or impulsive. Results showed that children identified as reflective scored significantly higher on Verbal, Performance IQ, and Full Scale IQ than the impulsive children. However, the groups did not significantly differ in overall Verbal Comprehension or Freedom from Distractibility. These results indicate that children with impulsive behavior traits displayed patterns of lower cognitive ability in several cognitive domains. These results suggest that further exploration may be warranted in order to determine how school psychologists are using cognitive data in ED evaluations to meet potential academic and behavioral needs of students.

In a study by Dean (1977), 41 adolescent males aged 13 to 15 years were referred as a result of conduct disorders and were administered the WISC-R. Children represented an IQ range from 80 to 105 on the WISC-R Full Scale, with a mean chronological age of 14.39 years. All participants were individually administered 11 subtests of the WISC-R during a 6-month period. The subtest scale scores, as well as the WISC-R Verbal (VSIQ), Performance (PSIQ), and Full Scale IQ (FSIQ) scores were calculated for each child. The results of the study suggested that, as
a group, ED adolescents exhibited lower verbal abilities, as measured by the WISC-R. However, there was not a direct connection between any subtest pattern evaluated and a distinct category. This study indicates that below average verbal skills may be distinctive in many ED students, compared to typical student populations. This trend may suggest that school psychologists need to implement regular cognitive testing in ED evaluations to determine areas of cognitive deficit that may be impacting behavior and may require specialized support.

In addition to exhibiting relative cognitive deficits, research has found correlations between aggressive behavior and lower intelligence. A study conducted by McHale, Obrzut, and Sabers (2003) addressed IQ and academic achievement scores with patterns of aggressive behavior in students identified as Specific Learning Disabled (SLD) and students identified as ED. Data were analyzed using the most recent Wechsler Intelligence Scale for Children, Third Edition (WISC-III) scores and Woodcock Johnson—Revised (WJ-R) scores obtained from students’ special education folders. District discipline records and local juvenile court records were searched for documentation of aggressive behavior. The sample consisted of 322 special education students from an urban school district in the American Southwest. Results indicated that ED and SLD students identified as aggressive demonstrated significantly lower Verbal IQ scores in comparison to their initial Performance IQ scores. Students identified as ED demonstrated a significant decrease in Full Scale IQ scores when initial and most recent scores were compared. Aggressive ED students demonstrated a significant decrease in WISC-III Verbal IQ scores. Also, both aggressive ED and aggressive SLD students demonstrated a significant decrease in WJ-R Broad Math scores and nonaggressive students’ scores showed no significant change.
Decades of research indicate the presence of lower cognitive abilities in ED students correlated with more significant behavioral problems. However, little research has been conducted on how school psychologists are using cognitive assessments in ED evaluations to determine areas of academic and behavioral impact. In a study by Ferguson and Horwood (1995), researchers developed a series of structural equation models in order to examine the relationship between externalizing behavioral problems (conduct problems and inattentiveness) and intelligence. The sample was comprised of students with documented behavioral concerns in New Zealand aged 8 to 15 years. Intelligence was measured in the sample at age 8, academic achievement between 10 and 13 years of age, and delinquent behavior monitored to the age of 15. The results indicated that externalizing behavior and IQ were related to academic achievement and delinquent behavior by two highly correlated developmental sequences. Inattentiveness and IQ were also predictive of later school academic achievement. These results remained unchanged when the sample was stratified by gender and cultural factors. These results indicate a further need for exploring the effects of cognitive deficit on behavior, as well as the use of cognitive assessments in determining areas of need. Such studies could provide valuable information used in behavioral assessment, management, and prevention.

One landmark study conducted by Lewis et al. (1988) is regarded as the most critical in providing research on the link between cognitive deficits and problematic behavior in youth. As part of this study, 14 juveniles incarcerated in four U.S. states were evaluated using neuropsychological, psychiatric, and educational assessments. The study found that nine out of 14 juveniles had symptoms consistent with neurological impairment. The results also concluded that seven of the juveniles had psychiatric disorders, seven showed signs of organic brain dysfunction, and only two had Full Scale IQ scores above 90. This study not only demonstrates
that cognitive skills should be assessed in determining ED and related factors, but also warrants further investigation into what school psychologists are currently using to determine cognitive needs in the ED student population.

**Summary**

Due to the subjective nature of ED eligibility criteria and evaluation practices, coupled with evident patterns of cognitive deficits in ED students, this study chose to focus on how school psychologists are addressing and ruling out intellectual factors throughout the ED evaluation process. Pivotal research studies have indicated the presence of cognitive deficits in ED students, and federal law provides that educational teams must consider intellectual deficits in students before identifying them as ED. With little research being conducted on how school psychologists are assessing cognitive functioning in ED students and how cognitive data is being used in ED eligibility determinations, this study is clearly warranted. Further research is needed to draw reliable and valid conclusions about such practices.

Cognitive assessment practices in ED evaluation are rarely discussed and have not yet been widely studied among school psychologists. However, the field of education has much to gain from such research. By understanding current school psychologists’ practices and perspectives of cognitive assessment in ED evaluations, more concrete assessment practices in ED evaluation may be developed. We may also ensure that the loose federal law guiding ED assessment may be more consistently followed and understood by school psychologists and educational practitioners.

As assessment in education becomes more intervention-based, addressing cognitive skills becomes crucial in determining educational needs of students. A considerable amount of research has demonstrated relationships among cognitive processes, behavior, and specific
academic skills. However, the assessment practices used to identify these relationships have not yet been thoroughly explored. By examining school psychologists’ practices and perspectives of ED and ED assessment, researchers in education may further the realm of understanding the ED student population and appropriately identifying and supporting student disabilities and needs.
CHAPTER III. METHODOLOGY

This mixed-methods study used an exploratory survey design to assess Ohio school psychologists’ perceptions of the Emotional Disturbance (ED) evaluation and identification process in the school setting, with an emphasis on cognitive assessment practices used in ED evaluations. The dependent variables in this study included ED eligibility determination criteria and school psychologists’ feelings about the current federal ED definition. The respective independent variables included the federal ED definition, assessment tools used by school psychologists, and cognitive assessment practices used by school psychologists. This chapter will present the methodology used in the study of ED evaluation and identification procedures used by school psychologists in the state of Ohio. The chapter provides a description of mixed-methods research used in relation to the proposed research questions, which was shaped by the base theoretical framework of CHC Theory of cognitive abilities (Keith & Reynolds, 2010; Fiorello, Thurman, Zavertnik, Sher & Coleman, 2009). An outline of the data analysis and coding methods used to process the research data has also been included. Participants and instrumentation are discussed, along with assumptions proposed by the researcher.

Research Design

This mixed-methods study used an exploratory survey design to assess Ohio school psychologists’ perceptions of the ED evaluation and identification process in the school setting, with an emphasis on cognitive assessment practices used in ED evaluations. There are currently no specified, required evaluation tools for deciding when problem behaviors constitute ED. The lack of such concrete identification methods indicates a need for standardization and objectivity in ED identification. As expressed by Algozzine and Ysseldyke (2006), for more than any other category in special education, ED leaves much room for subjectivity and confusion. However,
IDEA criteria for determining ED clearly states that an inability to learn due to intellectual factors must be ruled out before identifying ED. Although federal law states that intellectual factors must be ruled out before making an eligibility determination, studies have found that nearly 35% of school psychologists do not conduct cognitive testing as a regular part of initial ED evaluations (Allen & Hanchon, 2013). Because of these concerns, this study chose to utilize a flexible, mixed-methods research design to address multiple layers of ED identification practice and protocol.

A mixed-methods approach was chosen for this research so that knowledge is increased in a more meaningful manner than either qualitative or quantitative methods could achieve alone. This method of inquiry was best suited for addressing the research aims of this proposal. There is limited research on cognitive assessment practices of school psychologists in ED evaluation, which supports the need for explorative, qualitative work aimed at describing unknown phenomena. However, in order to obtain specific quantifiable data on assessment practices and opinions, statistical analysis is required. Therefore, answering all research questions required a mixed-methods research design to complete statistical analysis of the data, as well as qualitative analysis of the open-ended survey questions to formulate further theories on ED assessment practices.

To address closed-ended survey questions, Likert-type questions were used to collect quantitative data. Quantitative data was analyzed by comparing frequency of response on each survey item individually and determining percentages by response. To address qualitative survey questions, a grounded theory approach was used to identify emergent themes, as little research on the topic currently exists.

Grounded theory has been described as "the most influential paradigm for qualitative
research in the social sciences today" (Fassinger, 2005, p. 156). Grounded theory provides a way to systematically develop themes that are grounded in data collected directly from participants on the basis of their professional experiences and current, real-world practice. By using grounded theory to collect information, researchers have the opportunity to create new theory “from the data that accounts for data” (Charmaz, 2008, p. 157). Grounded theory allows researchers to achieve saturation, by collecting data on all potential themes and allowing emerging concepts to present until no new themes or relationships may be discovered. The somewhat flexible structure of grounded theory research encourages the researcher to collect data, explore the data through initial open coding, and establish tentative relationships between categories. Using the versatile research design of mixed-methods allowed exploration into the implications and subjective nature of this research, while also calculating quantitative, statistical data that may be objectively viewed.

Participants

Participants in this study were selected based on a purposive sampling technique. The participant sample was gathered via the Ohio School Psychologist Association (OSPA) member listserv, in order to gather a state-wide sample of school psychology practices. The survey was emailed to 565 OSPA listserv members. The survey was completed and digitally returned by 69 members.

All 69 respondents reported practicing school psychology in the state of Ohio. Sixty-one participants were state certified school psychologists practicing in the state of Ohio, with 25 participants also holding a national certification in school psychology. Two participants were not currently licensed to practice in Ohio. Four participants were certified Ohio intern school psychologists and two participants were licensed private school psychology practitioners. Of the
69 participants, 66 responded to the question of highest educational degree earned. Nine participants indicated they held doctorate level degrees, 36 held educational specialist degrees, and 21 held master’s degrees. Sixty-eight of the 69 respondents indicated experience conducting ED evaluations. Once data analysis was complete, each respondent received a summary of the research results for their participation.

Table 1

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<tr>
<th>Characteristics of Participants (N=69)</th>
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<td>Licensure</td>
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<td>State practicing</td>
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<td>Ohio</td>
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<td>Master’s</td>
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<td>Education Specialist</td>
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<td>Doctorate</td>
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<tr>
<td>Experience in ED evaluation</td>
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<tr>
<td>Have conducted ED evaluations</td>
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<td>Have not conducted ED evaluations</td>
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Instrumentation & Data Sources

Instrumentation and data sources for this study included an electronic survey consisting of 15 questions, both closed-ended and open-ended, based on practitioner experience and opinion. Survey questions were developed by the researcher, based on practitioner concerns noted in multiple research studies on school psychologists’ ED identification and evaluation practices. The survey was first piloted with five school psychologists in Northwest Ohio. A focus group consisting of the five psychologists was held after completing the survey to obtain feedback on the survey questions. Survey questions on cognitive assessment were shaped by the CHC Theory of cognitive abilities. Open-ended questions were based in grounded theory to
promote a flexible research design. Once coding was completed on the initial survey and themes were determined, coding continued until themes and data analysis were exhausted. Closed-ended questions were developed to be analyzed on a Likert-type scale to calculate percentages by comparing frequency of response on each survey item individually.

**Data Collection Procedures**

A brief, 15-question survey was emailed to 565 members of the Ohio School Psychologist Association via the listserv email list. The survey consisted of both closed-ended and open-ended questions. This format was used to ensure data analysis at a much faster rate to determine emergent themes and draw statistical conclusions. The questions were formulated based on the objectives and research questions of this research. The questions followed a simple logical progression with only 15 questions, in order to stimulate question answering and survey completion.

A cover letter prior to entering the online survey explained the purpose and relevance of this research. This cover letter also served to seek participant agreement to participate in this research. Contact information of the researcher was provided in case a respondent had any questions. The survey questions were designed to evaluate Ohio school psychologists’ assessment and identification practices in evaluating students for ED. The questions also sought professional opinions of Ohio school psychologists, in regard to current federal evaluation requirements and processes in identifying ED.

Responses to the survey were collected from the period between 24 January, 2017 and 8 February, 2017. The data was recorded and updated simultaneously as responses were received. The results of open-ended questions were organized in code sheets developed for each open coding, focused coding, and theoretical coding level. The responses of each question were
assigned word themed values for the data analysis at each coding level. Once theoretical codes were derived, data was analyzed based on emergent themes. The results of the Likert-type scaled questions were analyzed by comparing frequency of response on each survey item individually and determining percentages by response.

A mixed-methods approach served to contextualize, statistically define, and ground the data in a contemporary school psychology practice setting. For qualitative data, a three-tiered coding system was used to determine themes in the survey answers. For quantitative data, descriptive statistics were yielded. Advantages of using electronic survey methods in this mixed-methods study included low cost and efficiency in obtaining data. Disadvantages included spontaneous responses and informal data collection for open-ended questions, potentially leading to misinterpretation of data.

**Research Questions**

Specifically, three central research questions were of interest. The first question focused on identifying cognitive assessment practices used by school psychologists in ED evaluations. The second research question looked to identify how often school psychologists provide cognitive testing as part of ED evaluations. The third question looked to determine school psychologists’ perspectives on the current federal definition of ED found in IDEA.

1. What assessment methods do school psychologists use as part of ED evaluations?
2. How often do school psychologists conduct cognitive testing in ED evaluations?
3. What are school psychologists’ perspectives on the current federal definition of ED found in IDEA?

Survey questions 10 through 13 were formulated to answer research question one. These questions asked participants to describe how they determine when to conduct cognitive
assessments in ED evaluations, what other evaluation methods they use in ED evaluations, how comfortable they are with their current evaluation methods, and who is included in the ED evaluation process at their school district. Survey questions eight and nine were formulated to answer research question two. These survey questions asked participants how often they conduct cognitive testing as part of ED initial evaluations and ED reevaluations. Survey questions five, six, seven, and 15 were formulated to answer research question three. Participants were asked to describe their familiarity with and opinion of the current federal definition of ED, whether or not they follow the federal definition of ED in determining special education eligibility, and how they would change the current federal definition of ED.

**Data Analysis**

This mixed-methods study required both quantitative and qualitative analysis methods to answer all research questions. Closed-ended questions were created as Likert-type on an ordinal scale. Using an ordinal scale, responses can be rated or ranked, but the distance between responses is not measurable. Therefore, the differences between responses are not necessarily equal. Thus, this quantitative data was analyzed by comparing frequency of response on each survey item individually and determining percentages by response.

Qualitative data was analyzed using a grounded theoretical approach. Grounded theory research typically processes data by using a tiered approach of open coding, focused coding, and theoretical coding. In 2006, Charmaz published literature on constructing grounded theory, as well as its implications in data analysis and research. This model of grounded theory data analysis was followed in this study.

According to Charmaz (2006), open coding refers to the first level of coding in grounded theory analysis, in which data is broken down into units of meaning. In this study, survey
answers to each question were initially coded by most frequently addressed theme words and actions. After open coding derived the most specific units of representation, focused coding occurred.

During focused coding, the researcher begins identifying preliminary themes and concepts emerging from the data. In this study, the codes that occur most frequently were selected and again coded, this time, line by line. Once further specified themes were identified, theoretical coding began.

Theoretical coding is the final stage in which the researcher begins merging concepts into groups or thematic categories (Charmas, 2006). Once consistencies and patterns were identified through focused coding, thematic categories were developed based on survey data. These codes were then used to determine further themes and theories exhibiting pertinence and direct relation to the research questions.

This grounded theory technique of coding data emerges from an analysis of interrelationships among research themes. As recommended in grounded theory methodology, qualitative data analysis in this study incorporated signature grounded theory processes of constant comparison, theoretical sampling, and theoretical sensitivity.

Assumptions

When choosing methodology and developing research processes, several assumptions were made by the researcher. In using survey and interview data collection methods, it was assumed that participants were honest in their answers and narratives. This was assumed because anonymity and confidentiality were maintained throughout the research process, and the participants were volunteers who could withdraw from the study at any time with no ramifications.
It was also assumed that participants in the study could read at an appropriate level aligned with the survey questions. All participants had, at minimum, an earned master’s degree, which would require professional levels of reading and written work. All survey questions were written at an appropriate comprehension level associated with the typical education of the participants.

It was assumed that participants were familiar with the federal definition of ED provided by IDEA. As part of earning a state and/or national certification in school psychology, one must pass a Praxis exam, indicating knowledge of the federal disability definition of ED.

It was assumed that ED assessment was a concern for school psychology practitioners in Ohio. According to Miller (2013), “there are approximately 6 to 9 million U.S. children and adolescents with serious emotional disturbances, which accounts for 9% to 13% of all children” (p. 7). According to the Ohio Department of Education (2016), approximately 1% of students are identified as having ED. Literature provided on ED at both the federal and state levels indicate that students with ED are encountered daily in school settings. This indicates that ED assessment practices are a shared responsibility and concern among school psychologists, due to student need and the incidence of ED.

It was assumed that a mixed-methods approach would be most successful in gathering data on the proposed research questions. Including survey questions that yielded both quantitative and qualitative data allowed for the researcher to reach a depth of understanding that may offset any weaknesses found in using only one research approach. Qualitative research is often inductive in nature, which lends itself to determine that a final conclusion is only probable based on the data and evidence obtained through the study. By using a grounded theory approach in gathering qualitative data, the layers of data gathered throughout the process provide the base
for any hypothesis or conclusion drawn by the researcher. By using Likert-type questions to yield quantitative data, the researcher was able to statistically analyze Ohio school psychologist perspectives in order to objectively answer the research questions.

A key assumption in this study was that reality is constructed by individuals interacting with their social worlds. In this study, it was assumed that participants’ responses to survey and interview questions are reality based on experience. According to Fischer et al. (2008), it is assumed that meaning is embedded in people's experiences, which then forms worldviews. These views are then mediated through both the researcher’s and participants’ own perceptions, however, the data should imply the participants' perspectives, not the researcher’s.
CHAPTER IV. RESULTS

This chapter presents the findings of survey research, in relation to three central research questions posed in this study. A mixed-method approach was used to address the research questions meaningfully and thoroughly. Closed-ended survey responses were analyzed by gathering descriptive statistics through determining percentages by frequency of response. Qualitative data was analyzed following a constructivist grounded theory approach outlined by Charmaz (2000, 2006, 2008, 2009). Constructivist grounded theory encourages researchers to use a flexible, reflective stance toward the research, as opposed to an objectivist and positivistic approach (Charmaz, 2008). Such a theoretical process provides that coding processes and qualitative results "are interpretive renderings of reality" (Charmaz, 2008, p.206). This approach to data implies that exact duplication of analysis processes may not be a possibility, due to the subjective nature of such qualitative coding methods.

Closed-ended survey responses were analyzed by determining percentages by frequency of response. The descriptive statistics of means and standard deviations have unclear meanings when applied to Likert-type scale responses (Sullivan & Artino, 2013). For example, the average of never or sometimes is not relevant to such data analysis. Additionally, if responses are clustered at the high or low extremes, the mean may appear to be the neutral but may not fairly characterize the data. Because of this, statistical experts over the years have contended that frequencies (percentages of responses in each category) should be used for analysis instead of parametric tests (Sullivan & Artino, 2013).

Grounded theory methodology was best suited for analyzing qualitative data in this study. The research questions require the development of a solid theoretical foundation for identifying school psychologists’ practices and perspectives of ED evaluation. According to Barnett (2012),
a sound theoretical foundation does not currently exist for guiding research on ED. In addition, the existing ED identification criteria lacks clear guidelines for defining many terms found in the federal definition of ED. Therefore, grounded theory was considered to be the most appropriate choice for identifying emerging themes in the qualitative data. As stated by Skeat and Perry (2008), grounded theory is most appropriately used “when a phenomenon has not been adequately described, or when there are few theories that explain it” (p. 97).

A three-tiered coding process consistent with grounded theory was utilized in open-ended question analysis. This included processes of open coding, focused coding, and theoretical coding. According to Charmaz (2006), open coding refers to the first level of coding in grounded theory analysis, in which data is broken down into units of meaning. To follow open coding protocol in this study, themes within open-ended survey responses were derived through identifying key words or phrases in the narratives and identifying units or meaning.

According to Charmaz (2006), focused coding is the interim stage of data analysis, which involves re-conceptualizing the initial open codes into conceptual categories or phrases. This often occurs through line-by-line review and selection of recurrent, key words. To follow focused coding in this study, the responses to the corresponding initial emergent themes were coded line-by-line to identify several focused codes per theme.

The final stage of coding in grounded theory research is theoretical coding. In the theoretical coding phase, focused coding categories are integrated into theoretical concepts, which may then be used to formulate further questions, theories, and research proposals (Charmaz, 2006). Theoretical coding in this study was conducted by reviewing the conceptual categories found in focused coding and compiling the information to form directed theoretical ideas linked to the research questions.
As recommended in grounded theory methodology, all stages of coding incorporated signature grounded theory processes outlined by Charmaz (2000, 2006, 2008, 2009). This included constant comparison, intensive narrative review, and theoretical sensitivity. This coding process applied to all open-ended survey responses in this study.

**Characteristics of the Sample**

Participants in this study were selected based on a purposive sampling technique. The participant sample was gathered via the Ohio School Psychologist Association (OSPA) members listserv, in order to gather a state-wide sample of school psychology practices. The survey was emailed to 565 OSPA listserv members. The survey was completed and digitally returned by 69 members.

| Table 2 |
|---|---|---|
| Participants (N=69) | n | % |
| OSPA Member | 69 | 100 |
| Ohio Licensed School Psychologist | 61 | 88 |
| Nationally Certified School Psychologist | 25 | 36 |
| Completed Master’s Degree | 21 | 30 |
| Completed Ed.S. Degree | 36 | 52 |
| Completed Doctorate Degree | 9 | 13 |
| Have Conducted ED Evaluations | 68 | 99 |

All 69 respondents reported practicing school psychology in the state of Ohio. Sixty-one participants were state certified school psychologists practicing in the state of Ohio, with 25 participants also holding a national certification in school psychology. Two participants were not currently licensed to practice in Ohio. Four participants were certified Ohio intern school psychologists and two participants were licensed private school psychology practitioners. Of the 69 participants, 66 responded to the question of highest educational degree earned. Nine participants indicated they held doctorate level degrees, 36 held educational specialist degrees,
and 21 held master’s degrees. Sixty-eight of the 69 respondents indicated experience conducting ED evaluations.

Rights of the participants were protected with reference to conventions of research ethics and the IRB process at the University of Findlay. Participation in this study was optional and participants were provided with the purpose and relevance of this study, prior to accepting and agreeing to participation.

**Instrument Validity and Reliability**

Validity and reliability were accounted for in developing the research survey. The survey included Likert-type questions to collect quantitative data. Validity of Likert-type scales may be compromised, due to social desirability, if the researcher does not address this concern appropriately. Social desirability maintains that individuals may lie to put themselves in a positive light (McLeod, 2008). When completing Likert-type scale surveys, respondents may not want to admit personal biases. However, by providing survey respondents confidentiality and anonymity on self-administered surveys, researchers may reduce social pressure, which would reduce social desirability bias. This study ensured both confidentiality and anonymity to participants by assigning numbers to respondents, which promoted validity of the survey instrument through reduction of social desirability. Participants were also provided with notice of confidentiality protection prior to completing the survey to rule out any social validity concerns.

Validity also refers to a study's ability to provide credibility or truth to its findings. This study used a mixed-methods approach, which yielded quantitative and qualitative data. The essence of qualitative data is subjective, and therefore, validity in such research is a controversial issue (Maxwell, 2004). However, research using grounded theory maintains validity in several ways. Methods used to establish validity in grounded theory data include (a) the use of multiple
data sources, e.g., quantitative and qualitative measures, (b) thorough coding, which utilizes themes to contextualize the study, and (c) the use of reflection and data review as methods of validation (Ponelis, 2015). All of these approaches to maintain validity in research were implemented in this study.

Reliability was also carefully accounted for in this study. According to Zohrabi (2013), it is better for surveys to include both closed-ended and open-ended questions to complement each other and provide reliability. When we say that information is reliable, we mean that we can expect to obtain the same information time after time. One way to do this is by selecting a population that will yield consistent results representative across the group. In order to obtain more reliable information, researchers should carefully select participants that fit within the constructs of the study (Zohrabi, 2013). This study used purposeful sampling to ensure experienced participants would answer survey questions with respect for their profession. The participants were all school psychologists with experience practicing in Ohio.

**Research Question 1**

The first research question asked: What assessment methods do school psychologists use as part of ED evaluations? This research question focused on the assessment methods used by Ohio school psychologists during initial ED evaluations and ED reevaluations. Currently, no studies have been conducted on the specific ED assessment practices of Ohio school psychologists. This research question was answered through the use of one open-ended survey question and three closed-ended survey questions. Survey questions 10, 11, 12, and 13 yielded respondent data to answer this research question (See Appendix A). The closed-ended questions yielded the following quantitative statistical results:
Participants were asked to select which evaluation methods they use when evaluating a student for ED. All 69 respondents reported using rating scales and school record review in ED evaluations. All but one respondent reported using interviews, observations, and medical record reviews. All but two respondents reported using academic achievement testing. Seven respondents noted that in addition to the previously mentioned evaluation methods, they also use information from Functional Behavior Assessments. Other notable evaluation methods used by six respondents were private evaluations, sensory assessment, review of the ED definition, related service assessments, informal checklists, and self-report measures.

Table 3

<table>
<thead>
<tr>
<th>Assessment Used</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating Scales</td>
<td>69</td>
<td>100</td>
</tr>
<tr>
<td>School Record Review</td>
<td>69</td>
<td>100</td>
</tr>
<tr>
<td>Interviews</td>
<td>68</td>
<td>99</td>
</tr>
<tr>
<td>Observations</td>
<td>68</td>
<td>99</td>
</tr>
<tr>
<td>Medical Record Review</td>
<td>68</td>
<td>99</td>
</tr>
<tr>
<td>Academic Achievement Testing</td>
<td>67</td>
<td>97</td>
</tr>
<tr>
<td>Functional Behavior Assessments</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Response to Intervention</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Self-Report Measures</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Private Evaluations</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sensory Assessments</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Definition Review</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Informal Checklists</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Participants were asked to select their comfort level in using their current methods to identify ED. Twenty five respondents reported feeling very comfortable, 36 were moderately comfortable, seven were somewhat comfortable, one was not very comfortable, and no respondents were unsure.
Participants were asked to identify who is included in the ED determination process at their current district of employment. Responses included parents, teachers, intervention specialists, principals, social workers, mental health counselors, school psychologists, behavior specialists, special education directors, school counselors, resource officers, speech and language pathologists, occupational therapists, nurses, parole officers and the student being evaluated.

Participants were asked to describe their eligibility determination process used in ED evaluations. Three respondents reported their process to be very subjective, 33 reported as somewhat subjective, 26 reported as somewhat objective, six reported as very objective, and one respondent was unsure.

Table 5

<table>
<thead>
<tr>
<th>ED Eligibility Process Description (N=69)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Description</td>
</tr>
<tr>
<td>Very Subjective</td>
</tr>
<tr>
<td>Somewhat Subjective</td>
</tr>
<tr>
<td>Somewhat Objective</td>
</tr>
<tr>
<td>Very Objective</td>
</tr>
<tr>
<td>Unsure</td>
</tr>
</tbody>
</table>

Coding associated with grounded theory was used to analyze qualitative respondent information. Five emergent themes discovered through initial opening coding constituted the theoretical findings corresponding to this research question. Subsequent focused codes were identified for each emergent theme, with theoretical codes then derived from the key, conceptual
categories found in focused coding. The following themes were coded from responses to the survey question, “How do you determine when to conduct a cognitive assessment as part of an ED evaluation?”

**Emergent theme 1: Cognitive testing for every ED evaluation.** Emergent theme one identified respondents that conduct a cognitive assessment as part of every ED evaluation. According to the participant response data, some focused coding key terms identified in warranting this included (a) Best practice, (b) Ensure stability, (c) Ensure consistency, and (d) Identify deficits. For instance, one respondent noted:

> I always conduct cognitive assessment as part of ED evaluation. At times, students who are referred for ED often have a comorbid SLD, which either mimics ED because of frustration or exacerbates existing emotional dysregulation.

Another respondent shared a similar view:

> I obtain intelligence assessment results for every student identified with ED. There is more variance in the expansiveness of the assessment depending on whether the student is being initially or reevaluated. I obtain a FSIQ for almost all initial evaluations and typically obtain an abbreviated measure for reevaluations for ED.

Theoretical coding of the key terms found in focused coding identified that some respondents believe providing cognitive testing as part of every ED evaluation is best practice in school psychology and promotes proper identification of ED students.

**Emergent theme 2: Cognitive testing for every initial evaluation.** Emergent theme 2 identified respondents that conduct cognitive assessment as part of every initial evaluation. Focused coding identified key terms, such as (a) Rule out ID, and (b) Identify strengths and weaknesses. For example, a respondent stated:
My current school district requires an IQ measure for any initial evaluation. I do agree that having at least one IQ helps with determining strengths/weaknesses and rules out IQ as a factor.

Another respondent noted:

If there is any question that the student may have an intellectual disability, an IQ test is administered in order to “rule out” intellectual disability per the definition of ED. I also will conduct a cognitive assessment as part of any initial ED evaluation, for “rule out” purposes as well as quantitative information.

The focused coding conceptual categories led to theoretical code of following IDEA in ruling out intellectual factors is a practice among respondents to promote proper disability identification.

**Emergent theme 3: Using record review to determine evaluation needs.** Emergent theme 3 identified that some respondents review student records to determine if a cognitive assessment is necessary in an ED evaluation. Focused coding categories yielded from the data included (a) Review previous cognitive assessments, (b) Review consistency of previous assessments, (c) Age of student, (d) Previous trauma, and (e) Number of cognitive assessments.

In relation to these categories, one respondent noted:

I generally look at past testing and determine if there is a need for additional testing. If there are two full IQ tests that show similar results I don’t always feel the need to complete new testing.

Theoretical coding determined that some respondents feel that conducting a record review looks at the whole child and allows strengths and weaknesses to be determined. Multiple, consistent IQ measures may indicate no further testing is needed.
Emergent theme 4: Cognitive evaluation practices are a team decision. Emergent theme 4 identified that some respondents identify the decision to conduct cognitive assessment in ED evaluations as a team decision. Focused coding categories identified included (a) Planning meetings, (b) RTI, (c) Professional opinion, and (e) Educational team. One respondent noted:

Unless the category we’re suspecting is ID, I tend to not give a cognitive assessment unless parents or the team want it.

Another respondent similarly stated:

Team decides: if there is question about previous scores.

Theoretical coding conducted after conceptual terms were noted identified that some respondents feel that better-informed decisions involve an educational team, as it is also required by IDEA law.

Emergent theme 5: Conducting cognitive testing after team member request.

Emergent theme 5 identifies that some respondents conduct cognitive assessment after a team member request. Open coding data revealed that school psychologists make evaluation decisions after specific referrals on student weakness. Focused coding identified the following key terms: (a) Teacher reports, (b) Adaptive behavior concerns, (c) Academic Performance, (d) Student focused, and (e) Suspected deficits. For example, one respondent stated:

If parents request or if there is reason to believe that something has drastically impacted cognitive ability of the student or if it will help student placement in programs at school.

Totally student focused reasons.

Another respondent noted:

Depends on student needs/what teachers or parents see in the classroom and level of academic impact.
Theoretical coding determined that some respondents feel that team member concerns may prompt them to complete associated cognitive testing to rule out deficits or other disabilities.

Table 6

<table>
<thead>
<tr>
<th>Levels of Coding</th>
<th>Open Coding</th>
<th>Focused Coding</th>
<th>Theoretical Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Every Evaluation</strong></td>
<td>Best practice in school psychology</td>
<td>Identify deficits</td>
<td>Conducting cognitive assessment as part of every ED evaluation promotes best practice in school psychology through proper identification of ED students</td>
</tr>
<tr>
<td></td>
<td>Ensure stability</td>
<td>Rule out other disabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ensure consistency</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Initial Evaluations</strong></td>
<td>Rule out intellectual disability</td>
<td>Follows IDEA in ruling out intellectual factors</td>
<td>Promotes proper disability identification</td>
</tr>
<tr>
<td></td>
<td>Identify factors that impact learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide at least one intellectual measure after initial evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identify strengths and weaknesses in learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Record Review</strong></td>
<td>Review previous cognitive assessments</td>
<td>Addressing the whole child allows the educational team to determine assessment needs and strengths and weaknesses</td>
<td>With multiple, consistent IQ score measures are available, no new testing is needed</td>
</tr>
<tr>
<td></td>
<td>Look at all areas previously assessed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review consistency of previous assessments</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age of student</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Previous trauma</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of cognitive assessments</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Team Decision</strong></td>
<td>Planning meetings</td>
<td>The more professionals involved in an evaluation, the better informed the evaluation decisions</td>
<td>When to conduct an evaluation is legally a team decision and should be left to the entire educational team</td>
</tr>
<tr>
<td></td>
<td>Response to Intervention data</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional opinion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational team</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Team Member Request</strong></td>
<td>Teacher reports</td>
<td>Teacher and parent concerns prompt cognitive evaluations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adaptive behavior concerns</td>
<td>Students show deficits in other areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student focused</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suspected deficits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In response to the first research question, the data indicates that participants use a variety of assessment methods in ED evaluations. Thirteen assessment methods were noted by participants as being used in ED evaluations, with 52% of respondents feeling moderately comfortable using these methods as part of their current ED evaluation process. Forty-eight percent of participants indicated that their current evaluation process in identifying ED is somewhat subjective. Coding used to determine how school psychologists decide when to conduct a cognitive assessment as part of an ED evaluation indicated five main emergent themes. The themes indicated that some school psychologists complete cognitive testing for every ED evaluation, while some conduct cognitive testing for only initial ED evaluations. Some school psychologists use a comprehensive record review to decide if a cognitive assessment is warranted, whereas some school psychologists feel it is a team decision. Some school psychologists indicated that they complete a cognitive assessment as part of ED evaluations when there is a team member request.

**Research Question 2**

The second research question asked: How often do school psychologists conduct cognitive testing in ED evaluations? The second research question focused on how often school psychologists in Ohio conduct cognitive testing in ED evaluations. According to the federal definitions of ED (IDEA, 2004), intellectual factors must be ruled out prior to identifying a student as ED. Survey questions eight and nine sought to answer this research question (See Appendix A). Survey question eight asked participants, “How often do you conduct cognitive/intelligence testing as part of initial evaluations to determine Emotional Disturbance?” The question was based on a Likert-type scale. Sixty-nine participants responded to the question. Fifty-three respondents reported conducting cognitive testing in every initial ED evaluation,
eight respondents reported conducting cognitive testing for most initial evaluations, seven respondents reported conducting cognitive testing for few initial evaluations, and one respondent reported never conducting cognitive testing for initial evaluations.

Table 7

<table>
<thead>
<tr>
<th>Initial Evaluations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Evaluation</td>
<td>53</td>
<td>77</td>
</tr>
<tr>
<td>Most Evaluations</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Few Evaluations</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Survey question nine asked participants, “How often do you conduct cognitive/intelligence testing as part of reevaluations to determine Emotional Disturbance?”

Sixty-six participants responded to the question. The question was based on a Likert-type scale. Ten respondents reported conducting cognitive testing in every ED reevaluation, twenty-seven respondents reported conducting cognitive testing for most reevaluations, twenty-five respondents reported conducting cognitive testing for few reevaluations, and four respondents reported never conducting cognitive testing for reevaluations.

Table 8

<table>
<thead>
<tr>
<th>Reevaluations</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Evaluation</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Most Evaluations</td>
<td>27</td>
<td>41</td>
</tr>
<tr>
<td>Few Evaluations</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>Never</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

In response to the second research question, the data indicates that 77% of participants conduct cognitive testing as part of every initial ED evaluation, and 15% of participants conduct cognitive testing as part of every ED reevaluation. Only one respondent indicated never
conducting cognitive testing in initial ED evaluations, and 6% of participants indicated they never conduct cognitive testing in ED reevaluations.

**Research Questions 3**

Research questions three asked: What are school psychologists’ perspectives on the current federal definition of ED found in IDEA? The third research question focused on Ohio school psychologists’ perspectives on the IDEA definition and criteria for ED. There is no previous research indicating Ohio school psychologist perspectives of the federal definition of ED. Survey questions 5, 6, 7, and 15 provided responses that address this research question (See Appendix A). Closed-ended survey responses were analyzed by gathering descriptive statistics of percentages. The following survey responses provide statistical information related to the research question:

Sixty-eight survey respondents reported that they follow the federal definition of ED when determining eligibility for ED, with one respondent not following the federal definition.

Participants were asked about their familiarity with the federal ED definition. Of the 69 respondents, 53 reported being very familiar with the definition, 15 being moderately familiar, one being somewhat familiar, and no respondents being unfamiliar or unsure.

<table>
<thead>
<tr>
<th>Familiarity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Familiar</td>
<td>53</td>
<td>77</td>
</tr>
<tr>
<td>Moderately Familiar</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>Somewhat Familiar</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Unfamiliar</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unsure</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants were asked how they would describe the current federal definition of ED. Ten respondents reported the definition to be very subjective, 43 reported somewhat subjective,
ten reported somewhat objective, three reported very objective, and one respondent reported as unsure.

Table 10

<table>
<thead>
<tr>
<th>Description of ED Definition (N=67)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Subjective</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Somewhat Subjective</td>
<td>43</td>
<td>64</td>
</tr>
<tr>
<td>Somewhat Objective</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Very Objective</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Unsure</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

The open-ended survey question used to answer this research question was analyzed through a grounded theory approach. Five emergent themes were discovered through initial opening coding, which constituted the focused and theoretical findings corresponding to the research question. Subsequent focused codes were identified for each emergent theme, with theoretical codes then derived from the key, conceptual categories found in focused coding. The following themes were coded from responses to the survey question, “How would you change the current federal (IDEA) definition of ED to assist school psychologists in conducting ED evaluations?”

**Emergent theme 1: A desire for clarifying terms.** Emergent theme one was derived from respondents requiring clarification of the terminology used in the federal definition criteria of ED. According to the participants, terms identified as needing clarification were (a) Long period of time, (b) Marked degree, and (c) Socially maladjusted. Practitioners emphasized the interrelatedness and vagueness of the three terminologies, and requested clarification. These terms then became the key concepts in focused coding. For instance, one respondent noted,

Define “long period of time” (we typically go by 6 months). Define “marked degree.”

Clarify cases where a student can be ED AND socially maladjusted.
Another respondent shared the desire for clarification of similar terms:

Clarify what is meant by “over a long period of time” and “to a marked degree.” While some flexibility is necessary without any clarification, my fear is that this is interpreted very differently and may lead to over (or under) identification.

Through recognizing the need for clarification in open coding and identifying the key terms in focused coding, theoretical coding identified that respondents felt that defining the terms used in ED through the use of quantitative, objective measures may provide school psychologists with an objective understanding of the federal ED definition.

**Emergent theme 2: Including diagnostic information in ED definition.** Emergent theme 2 identified the need for diagnostic requirements in ED eligibility determination. Focused coding identified key terms, such as (a) DSM-V, (b) Clinical diagnoses, and (c) Emotional concerns. For example, a respondent stated:

I would ask that there be a DSM-V evaluation with target diagnoses included to guide the determination of ED criteria.

Another respondent explained:

I would like to see a prerequisite be a clinical diagnosis and treatment plan.

The focused coding conceptual categories led to theoretical coding being based on objectivity in ED. Some respondents believe that by requiring clinical diagnoses, practitioners may more objectively identify ED and focus on emotional needs of students.

**Emergent theme 3: Unsure if change is needed.** Emergent theme 3 identified that some respondents were not sure how to change the federal definition of ED to assist school psychology practitioners. Focused coding categories yielded from the data included (a) New to the profession, and (b) Never considered changing it. For example, one respondent reported:
I really haven’t thought much about it, being new to the profession. It seems like such a muddled definition and some might use the definition to label a child unnecessarily.

Theoretical coding derived that when ED is not encountered frequently in practice and eligibility criteria are not thoroughly utilized or examined, ED eligibility criteria do not present as a problem for some practitioners.

**Emergent theme 4: No change is needed.** Emergent theme 4 identified that some respondents do not want the federal definition of ED to be altered. Focused coding categories identified included (a) Setting-based appropriateness, and (b) Provide guidance. For example, a respondent noted:

> I think it is appropriate for my setting as it is.

Another respondent noted:

> I would not change it. However, I would like to see training on how to distinguish between ED and social maladjustment.

Theoretical coding conducted after conceptual terms were noted identified that some respondents feel the federal definition of ED is appropriate for their current practices, but guidance may help improve the process.

**Emergent theme 5: Objectivity in ED definition.** Emergent theme 5 identifies the desire for objectivity in the current federal ED definition. Open coding data revealed that school psychologists lack objective guidance in determining ED eligibility. Focused coding identified the following key terms: (a) Vague wording, (b) Provide guidance, (c) Identify steps, (d) ED worksheet, and (e) Clarify terms. One respondent noted several concerns:

> Might be nice to have more objective criteria, but I’m not sure what that might look like.

Specific criteria about frequency and duration maybe? Amount of progress (or lack thereof)
in response to targeted behavioral interventions?

Theoretical coding determined that some respondents feel that clarifying ED criteria and requiring specific practices may create objectivity in the federal definition of ED.

Table 11

<table>
<thead>
<tr>
<th>Levels of Coding</th>
<th>Open Coding</th>
<th>Focused Coding</th>
<th>Theoretical Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarify Terms</td>
<td></td>
<td>Clarify Terms</td>
<td>Define the terms and provide measurable, quantitative, objective, specific measures that can be used to identify when these terms are present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long period of time</td>
<td>Define the terms and provide measureable, quantitative, objective, specific measures that can be used to identify when these terms are present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To a marked degree</td>
<td>Define the terms and provide measureable, quantitative, objective, specific measures that can be used to identify when these terms are present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Socially maladjusted</td>
<td>Define the terms and provide measureable, quantitative, objective, specific measures that can be used to identify when these terms are present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic Information</td>
<td></td>
<td>DSM-V</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical diagnoses</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional concerns</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anxiety</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depression</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oppositional Defiant Disorder</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conduct Disorder</td>
<td>Objectively identify ED by requiring a diagnosis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td></td>
<td>New to profession</td>
<td>If ED is not encountered frequently in practice, the eligibility criteria are not thoroughly examined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Never considered</td>
<td>If ED is not encountered frequently in practice, the eligibility criteria are not thoroughly examined</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Experience using eligibility criteria in evaluations may provide practical knowledge on what eligibility concerns may be</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Change</td>
<td></td>
<td>Setting-based</td>
<td>Definition does not need altering</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide guidance</td>
<td>Definition does not need altering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Provide practitioners with further guidance on following current federal definition of ED</td>
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<td>Objectivity</td>
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<td>Vague wording</td>
<td>By clarifying terms in the current IDEA ED criteria and providing required assessment data/protocol, objectivity may be achieved</td>
</tr>
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<td>Provide guidance</td>
<td>By clarifying terms in the current IDEA ED criteria and providing required assessment data/protocol, objectivity may be achieved</td>
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<td>Identify steps</td>
<td>By clarifying terms in the current IDEA ED criteria and providing required assessment data/protocol, objectivity may be achieved</td>
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<td>ED worksheet</td>
<td>By clarifying terms in the current IDEA ED criteria and providing required assessment data/protocol, objectivity may be achieved</td>
</tr>
<tr>
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<td></td>
<td>Clarify terms</td>
<td>By clarifying terms in the current IDEA ED criteria and providing required assessment data/protocol, objectivity may be achieved</td>
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</table>
In response to the third research question, the data indicate that all but one participant follow the federal definition of ED in identifying students as ED. Seventy-seven percent of participants indicated being very familiar with the federal definition of ED, with no respondents being unfamiliar. Seventy-nine percent of participants defined the federal definition of ED as either very or somewhat subjective, with only 19% of participants defining the definition as either very or somewhat objective. Coding used to determine school psychologists’ perspectives on the current federal definition of ED indicated five main emergent themes. The themes indicated that a significant number of participants would like a clarification of the terms used in the federal definition of ED. Some participants indicated that requiring diagnostic information as part of the ED definition may provide more objectivity in eligibility determination. Some school psychologists indicated that the definition does not need to be changed in the context of their current jobs, while some participants indicated that they are unsure if the definition needs to be changed. Some school psychologists indicated that more objective guidelines and wording needs to be provided in the federal definition of ED.

Summary

Emergent theories generated by this study are grounded in the complexities of real world school psychology practice and experience. School psychologists are tasked with navigating federal disability definitions and terms with little guidance in daily practice. Through evaluating school psychologists’ practices and perspectives related to ED, emerging theories and statistical data may deconstruct and reconstruct the ED evaluation and identification process from a practitioner and student-based perspective. In turn, we may address the needs of ED students and promote best practices in school psychology.
Results indicate that the percentage of Ohio school psychologists using cognitive assessments in initial ED evaluations and reevaluations is commensurate with previous national studies (Hanchon & Allen, 2013; Shapiro & Heick, 2004). Approximately 30%-40% of school psychologists do not include cognitive testing as part of every ED evaluation. Also consistent with previous research is the desire for objectivity in the federal ED identification and evaluation process (Sullivan & Sadeh, 2014; Hanchon & Allen, 2013; Becker et al., 2011; Janz & Banbury, 2009; Noel & Haring, 1982). Emergent themes in this study indicated that school psychologists continue to request a clarification of terms in the federal definition of ED in order to follow best practices. Results of this study also indicate that school psychologists use a multi-factored approach to ED evaluation with at least 13 assessment methods noted. Chapter 5 will further explore the implications drawn from the statistical data, emergent themes, and theoretical codes identified in this chapter.
CHAPTER V. CONCLUSIONS AND RECOMMENDATIONS

Improving outcomes for children with ED depends not only on increasing school and learning opportunities, but also on promoting effective evaluation practices and collaborating across other critical areas of support, including families, social services, health, mental health, and juvenile justice (Heath, 2008). Bringing about such practice poses a major challenge, due to different system priorities, agendas, structures, ways of operating, and interpretations of the federal definition of ED (Dukes, Lowery, Franczkowski, & O’Malley, 2013). Improved evaluation methods of educational, emotional, and behavioral development have been identified as a need through years of research conducted on the implications of school psychology practices. This study evaluated the current practices and perceptions of Ohio school psychologists in the ED evaluation process and further denotes the need for objectivity in ED evaluation.

Review of the Study

The purpose of this study was to determine the core processes used by Ohio school psychologists in evaluating students for ED, as well as identifying Ohio school psychologists’ perspectives on the federal ED criteria provided in IDEA. A mixed-methods research design was implemented to examine the three research questions posed by this study:

1. What assessment methods do school psychologists use as part of ED evaluations?
2. How often do school psychologists conduct cognitive testing in ED evaluations?
3. What are school psychologists’ perspectives on the current federal definition of ED found in IDEA?

A survey was sent via the OSPA listserv to 565 Ohio school psychologists with a 12% response rate of 69 respondents. Once surveys were returned, analysis was completed through
grounded theory coding of open-ended responses, and frequency of response was determined for each closed-ended, Likert-type question to determine percentages. The outcomes of this study produced ten emergent themes related to the first and third research questions, in addition to statistical data related to all three research questions representing Ohio school psychologists’ practices in determining eligibility for special education services and opinions on the current federal definition of ED. A three-tiered coding process consistent with grounded theory was utilized in open-ended question analysis. Closed-ended survey responses were analyzed by gathering descriptive statistics through determining percentages by frequency of response. This chapter presents an interpretation of the research findings presented in the previous chapter for the ten emergent themes and statistical data, a discussion of the implications of these findings for practice, and recommendations for future research.

Discussion

The outcome of this study resulted in a grounded theory that integrated ten emergent themes with statistical data rendered from the survey. The grounded theory developed from respondent information constitutes a reconceptualization of the ED identification process used by Ohio school psychologists. In this chapter, comparisons were constructed between the emergent themes and the themes represented in the extant literature available on ED evaluation and school psychology evaluation practices. Each of the ten emergent themes is interpreted in relation to the first and third research questions posed by this study. Emergent themes 1 through 5 evolved from participants' responses to the first research question. Themes 6 through 10, also grounded in participants' experiences, constitute information related to the third research question. Likert-type scales were used to yield percentage data applying to all three research questions.
Unanticipated findings from this research led the researcher into new lines of inquiry about future practice and unanticipated challenges in identifying students with ED.

**Research Question 1.** The first research question asked what assessment methods Ohio school psychologists use as part of ED evaluations. Survey questions 10, 11, 12, and 13 yielded respondent data to answer this question (See Appendix A). Survey question 10 was coded according to the grounded theory approach and five emergent themes were discovered. Through these themes, implications for school psychology practices in ED evaluation were identified. Questions 11 through 13 gathered percentages through frequency of response for each survey question.

Survey question 10 asked the participants how they determine when to conduct cognitive assessment as part of an ED evaluation. Five emergent themes were determined and, consequently, implications for practice were developed from the data.

**Emergent theme 1: Cognitive testing for every ED evaluation.** Emergent theme one identified respondents that conduct a cognitive assessment as part of every ED evaluation. According to respondents, it is regarded as best practice to always conduct a cognitive assessment as part of every ED evaluation to ensure stability and consistency, and to identify deficits that may impact learning. Theoretical coding identified that most respondents believe providing cognitive testing as part of every ED evaluation promotes proper identification of ED students.

The findings related to emergent theme one indicate that most school psychologists are aware that completing cognitive assessment as part of every ED evaluations is best practice. However, this study, along with other relevant studies previously discussed (Hanchon & Allen, 2013; Shapiro & Heick, 2004) found that up to 40% of school
psychologists do not conduct cognitive assessment as part of every evaluation. This leads to the line of inquiry: If school psychologists know that it is best practice to conduct cognitive assessment in ED evaluations, why are they not conducting such assessments for every evaluation?

In 2008, the Public Advocate’s Office in New York state surveyed veteran school psychologists to identify problems related to their job responsibilities. In reviewing 100 surveys completed, 97% of those surveyed reported that their workload had significantly increased since 2003 and nearly 94% reported that they spend more time on paperwork and compliance issues than they did on issues that directly benefit children and families. Even more concerning, nearly 84% of respondents reported that their ability to evaluate students initially referred for special education services in a professional manner had suffered and 87% no longer had the time to consult with parents and staff regarding behavioral issues. Nearly 68% of respondents reported that increased job responsibility had hindered their ability to provide quality evaluations for students in need (Gotbaum, 2008).

All of these staggering statistics provide a clear picture of a compound issue: school psychologists believe they do not have the time or resources to follow best practices in evaluation of students. It may be presumed that school psychologists know that cognitive assessment is a critical component in ED evaluation, however, with limited time and resources, best practices in assessment are not being prioritized by all school psychologists.

**Emergent theme 2: Cognitive testing for every initial evaluation.** Emergent theme 2 identified respondents that conduct cognitive assessment as part of every initial
evaluation, but not necessarily every reevaluation. Respondents noted that they follow such practice in order to rule out intellectual disabilities and identify student strengths and weaknesses. The focused coding conceptual categories led to the theoretical code of following IDEA in ruling out intellectual factors as a practice among respondents to promote proper disability identification.

The Individuals with Disabilities Education Act (2004) states that intellectual ability must be ruled out as a factor in learning before a student may be identified as ED. Emergent theme two supports this notion, as well as the first emergent theme. Although most school psychologists conduct cognitive assessment as part of initial evaluations, not all follow this protocol. In line with the first emergent theme, many psychologists understand the importance of conducting such assessments, but feel unable to do so because of limited time and resources. As caseloads change, however, the ability or desire to follow best practices may also shift. Thus, the findings related to emergent theme two provide an answer to the first research question posed by this study: school psychologists use varying and inconsistent methods of assessment in ED evaluations.

**Emergent theme 3: Using record review to determine evaluation needs.** Emergent theme 3 identified that many respondents review student records to determine if a cognitive assessment is necessary in an ED evaluation. Respondents reported that they review previous cognitive assessments, the consistency of previous assessments, the age of student, previous trauma, and the number of cognitive assessments given. Respondents indicated that conducting a record review provides a look at the whole child and allows strengths and weaknesses to be determined. When records also provide multiple, consistent IQ measures, this may indicate that no further testing is needed.
This emergent theme presents several implications for school psychology practice. Not only does a record review provide a comprehensive look at students, but it also provides school psychologists with guidance on areas of strength and deficit. Emergent theme three indicates that Ohio school psychologists value a multi-faceted approach to evaluation and data collection. Thus, the findings related to emergent theme three provide an answer to the first research question posed by this study: school psychologists prefer a multi-faceted ED evaluation approach with substantial data to rule out concerns and identify needs.

**Emergent theme 4: Cognitive evaluation practices are a team decision.** Emergent theme 4 identified that some respondents feel that the decision to conduct cognitive assessment in ED evaluations is a team decision. Respondents indicated that evaluation methods used in ED evaluation are first identified in planning meetings, through RTI, and through the five essential members of the IEP team. Theoretical coding identified that respondents feel that better-informed decisions involve the educational team, and it is also required by IDEA law.

The findings related to emergent theme four indicate that school psychologists value and require other educators’ input in the evaluation process. In discussing the importance of team decisions, Lafferty (1988) noted that team collaboration is particularly effective in problem-solving, as teams are comprised of people with complementary skills. This collection of expert opinion allows team members to examine issues from various angles, as well as see the implications of their decisions from a variety of perspectives. Educational teams are no different. By including an educational practitioner team in making evaluation decisions, fewer considerations will be
overlooked. In addition to the benefits of including a team in such decisions, it is also required by law. According to federal guidelines provided through IDEA (2004), the parent, teacher, intervention specialist, and district representative are required to take part in determining evaluation planning for students being considered for special education eligibility. Thus, the findings related to emergent theme four provide an answer to the first research question posed by this study: evaluation methods used by school psychologists in ED evaluations should be determined by the educational team.

**Emergent theme 5: Conducting cognitive testing after team member request.**

Emergent theme 5 identifies that some respondents conduct cognitive assessment after a team member request. Open coding data revealed that school psychologists make evaluation decisions after specific referrals on student weakness. Respondents reported that referrals come from teacher reports, adaptive behavior concerns, poor academic performance, and suspected deficits by parents. Respondents indicated that team member concerns may prompt them to complete associated cognitive testing to rule out deficits or other disabilities.

The findings related to emergent theme five relate to findings from emergent theme four: school psychologists often rely on team members to determine when to include cognitive assessments in ED evaluations. Teachers and parents are truly the experts on the individual child. School psychologists often see children only once every three years, whereas teachers and parents see the child nearly every day. Because of this, school psychologists rely heavily on referral to consider what assessments are needed in ED evaluations.
Survey questions 11, 12, and 13 also provide valuable insight into answering what assessment methods Ohio school psychologists use as part of ED evaluations. Results of this study indicate that school psychologists often use a multi-factored evaluation approach in ED assessments. Respondents indicated that they include up to 13 different assessment tools in a single ED evaluation. Although this seems substantial for a single ED evaluation, only 36% of respondents reported feeling very comfortable in using these methods. This indicates that the subjective nature of the federal ED definition and eligibility criteria may be causing school psychologists to feel unsure about what methods best address the vague eligibility expectations. This would also explain why such a substantial number of assessment methods are being used to determine ED eligibility. The vagueness in determining ED may be causing professional insecurity in choosing appropriate evaluation methods.

**Research Question 2.** The second research question posed by this study asked how often school psychologists conduct cognitive testing in ED evaluations. According to results from this study, 77% of respondents reported conducting cognitive testing as part of every initial ED evaluation and 15% reported conducting cognitive assessment as part of every ED reevaluation. As IDEA (2004) stipulates that several factors must be ruled out prior to ED eligibility determination, it may be assumed that all practitioners provide thorough assessment methods as part of every ED evaluation. However, previous research conducted by Hanchon and Allen (2013) and Shapiro and Heick (2004) both found similar results in the frequency of school psychologists using cognitive testing during ED evaluations. The study by Hanchon and Allen (2013) found that nearly 34% of school psychologists surveyed did not conduct cognitive testing as a regular part of initial
ED assessments. The study completed by Shapiro and Heick (2004) similarly found that nearly 40% of school psychologists surveyed did not conduct intelligence testing as part of every ED evaluation.

These results provide several implications for school psychology evaluation practices. As noted in the emergent themes derived in relation to the first research question, these results may be related to school psychologists lacking time and resources for best practice evaluation. However, this does not excuse adherence to the federal expectation in IDEA (2004) that intellectual factors be ruled out before identifying ED. In order to truly follow best practice, 100% of school psychologists and educational teams should have at least one cognitive measure provided in evaluations for students being considered eligible for ED.

**Research Question 3.** The third research question in this study explored school psychologists’ perspectives on the current federal definition of ED found in IDEA. Survey questions 5, 6, 7, and 15 provided responses that address this research question (See Appendix A).

In survey questions 5, 6, and 7, participants were asked about their familiarity with the federal definition of ED, if they follow the federal definition of ED, and how they would describe the definition. All respondents reported following the federal definition to make ED eligibility decisions. However, only 76% of respondents reported being very familiar with the federal ED definition. These results lend themselves to an interesting dilemma: 24% of respondents that indicated they use the federal definition of ED to make eligibility decisions are not completely familiar with what they are following. Although 21% of respondents reported being moderately familiar with the
definition, the thought of practitioners making significant eligibility decisions based on a moderate familiarity of eligibility criteria could explain the improper identification or under-identification of ED students. In addition, nearly 15% of respondents reported that the federal definition of ED is very subjective and 64% reported that it is somewhat subjective. Only 19% of respondents identified the current federal definition of ED as objective. These results indicate that school psychologists are aware that ED evaluation and eligibility determinations are left up to interpretation by practitioners and have loose guidelines for practice. This could be another explanation for improper identification of ED students.

**Emergent theme one: A desire for clarifying terms.** Emergent theme one identified the need for clarification of the terminology used in the federal definition criteria of ED. According to respondents, the terms long period of time, marked degree, and socially maladjusted provided relative confusion and concern in making eligibility determinations. Practitioners emphasized the interrelatedness and vagueness of the three terminologies, and requested clarification. Respondents reported that defining the terms used in ED through the use of quantitative, objective measures may provide school psychologists with a clearer understanding of the federal ED definition.

The findings related to emergent theme one support previous research indicating practitioners’ desires for clearer, more objective criteria and guided practice in determining ED (Hale, 2013; Allen, 2012; Becker et al., 2011; Janz & Banbury, 2009). The definition of ED coined by Bower in 1975 included types of characteristics or conditions that would include or exclude students from receiving eligibility for special education services. One of the several conspicuous conditions among those reported in
Bower’s original definition was the phrase: “The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed” (Merrell & Walker, 2004, p. 901). This statement, coupled with marked degree and long period of time provided an avenue for excluding students from special education eligibility with no specific criteria in evaluating each area provided or expected. Kauffman (1997) emphasized the frustration felt by practitioners when he noted, “The final addendum regarding social maladjustment is incomprehensible” (p. 28). These statements have continued to create confusion among school psychologists and researchers to this day, nearly 30 years after their origin (Merrell & Walker, 2004).

This emergent theme presents several implications for school psychology practice. First, because the definition of ED remains untouched and unchanged for decades, it is unlikely that this definition will be modified without significant intervention from practitioners. Therefore, more research highlighting the vagueness of the current definition and the problems it presents for properly meeting student need may encourage federal stakeholders to consider revamping ED in IDEA. Due to the significant emphasis from respondents in this study on the need for clarification of these terms, such future research is also further warranted. Thus, the findings related to emergent theme one provide an answer to the third research question posed by this study: school psychologists require more clarification and objectivity in the terms found in the federal definition of ED.

**Emergent theme 2: Including diagnostic information in ED definition.** Emergent theme 2 identified the desire for diagnostic requirements in the federal ED definition. Respondents reported that linking the ED definition to information in the DSM-V may
improve objectivity in eligibility determination. Respondents reported that by requiring clinical diagnoses to be eligible for ED, practitioners may more objectively identify ED and, in turn, focus on the underlying emotional needs of students.

According to IDEA (2004), the only diagnostic information mentioned in the definition of ED is the inclusion of schizophrenia. Respondents in this study identified the objectivity that requiring medical diagnoses may assist practitioners in properly identifying ED and determining educational planning and objectives aligned with clearly defined emotional/behavioral needs. Providing a diagnostic requirement in the federal definition may increase consistency in school psychology practices in evaluation and eligibility determination. Thus, the findings related to emergent theme two provide an answer to the primary research question posed by this study: school psychologists consider medical diagnoses when evaluating for ED, however, because it is not required, they do not consistently use it as a method of determining eligibility for ED.

**Emergent theme 3: Unsure if change is needed.** Emergent theme 3 identified that some respondents were not sure how to change the federal definition of ED to assist school psychology practitioners. Respondents indicating that they were unsure of what to change were either new to the profession or never considered whether the definition needed to be changed. Theoretical coding derived that when ED is not encountered frequently in practice and eligibility criteria is not thoroughly utilized or examined, ED eligibility criteria do not present as a problem for some practitioners.

Students identified as ED only account for 1% of the student population in the United States (U.S. Department of Education, 2015). This indicates that most school psychologists have limited experience in evaluating and identifying students as ED. This
lack of experience may also indicate a lack of understanding what changes are needed to improve the current ED eligibility definition and process. The findings also support the conclusions drawn by the first two themes: the less guidance and criteria provided for determining ED, the less informed practitioners are on best practice.

**Emergent theme 4: No change is needed.** Emergent theme 4 identified that some respondents do not want the federal definition of ED to be altered. Respondents indicated that the definition is appropriate for some of their current work settings, and guidance, not change, may assist them in following the current definition of ED.

Essentially, guidance is change. As the definition does not currently provide much objectivity, by providing specific guidance on following the definition, objectivity may be achieved.

**Emergent theme 5: Objectivity in ED definition.** Emergent theme 5 identifies the desire for objectivity in the current federal ED definition. Respondents indicated the significant lack of objective criteria in determining ED eligibility. Respondents indicated frustration with vague wording in the definition, and the need for guidance, specific evaluation steps, an ED evaluation checklist, and the need for a clarification of terms. Theoretical coding determined that respondents feel that clarifying ED criteria and requiring specific practices may create objectivity in the federal definition of ED.

The findings related to emergent theme five support responses found in most themes and statistical data in this study: the federal definition of ED is subjective and school psychologists need guidance and clear guidelines on what constitutes true ED in students. Thus, the findings related to emergent theme five provide insight into ways the federal definition of ED may be improved to promote best practice in ED evaluation.
Conclusion

The judgment of an individual’s behavior may vary, depending on who is observing the behavior and in what context that behavior occurs. Evaluation methods used in eligibility decisions may also be determined by school psychologists’ perspectives of the time, resources, and professional support provided in the evaluation process. However, the heart of IDEA is to provide secure protection for students with disabilities by providing required practices, identification methods, and guidelines in identifying student need (IDEA, 2004). This is why objective measures of behavior are critical in determining student strength and weakness and maintaining consistency in assessment. As noted by Miller (2013), different interpretations of any disability criteria lead to subjectivity, which, in turn, leads to under-identification or misidentification of students with disabilities. In order to interpret the criteria for ED in a way that promotes consistency in identification practices, a number of questions must be answered. These include:

What is a “long period of time”?
What is “a marked degree”?
What constitutes “socially maladjusted”?
What is meant by “adversely affects a child’s educational performance”?
What is an “inability to learn”?
What are “intellectual, sensory, or health factors”?

By imploring federal educational leaders to take on the task of answering these questions, we may improve best practices in school psychology. The answers to these questions may lead to new foundations in ED evaluation processes and a more objective, consistent definition to ensure no student is misidentified, unidentified, or underserved in school. Educational performance of
any student is based on how his/her needs are being met and his/her access to the curriculum. By promoting clarity in terms and consistent practices among school psychologists, all students may benefit from a chance for academic success.

Recommendations

Based on the data yielded from this study, several recommendations are being suggested. First, a clarification of terms provided for the current federal definition of ED, specifically for social maladjustment, may assist school psychologists in properly evaluating and identifying students with ED. As noted through emergent themes related to the first and third research questions, respondents had an overwhelming desire for clarification of the terminology used in the federal definition of ED. This was especially noted for the term social maladjustment. According to Gresham (2005), the social maladjustment exclusion clause in the federal definition of ED is “convoluted”, “circular”, and “oxymoronic” (p. 330). Gresham (2005) went on to note that the social maladjustment clause in the ED definition excludes and includes a portion of students in the same sentence and directly contradicts several of the five eligibility criteria. Clarification of terms, such as social maladjustment may significantly improve the evaluation and eligibility determination process for ED students.

Secondly, schools must consider how school psychologists’ caseloads and job responsibilities may be impacting their evaluation practices. School psychologists’ job responsibilities need to be considered in making recommendations for improving ED evaluation practices. As previously noted, when the Public Advocate’s Office in New York state surveyed veteran school psychologists to identify problems related to their job responsibilities, nearly 94% reported that they spent more time on paperwork and
compliance issues than they did on issues that directly benefit children and families (Gotbaum, 2008). In addition, 87% of respondents reported they no longer have the time to consult with parents and staff regarding behavioral issues. These statistics need to be seriously considered. Educational systems need to consider how school psychologists are being utilized, how their caseload is impacting their performance, and how students may be underserved or misidentified because of a lack of best practice in evaluation.

A recommendation for improving the vague, problematic ED definition is suggested, in order to address the current definition of ED at a state-wide level. For nearly 40 years, the federal definition of ED has remained largely unchanged (Hanchon & Allen, 2013). In order to bring clarity and objectivity to ED, the change process may need to begin at the state-wide level, by involving the Ohio Department of Education. As previously stated, states are required to follow the federal disability definitions provided by IDEA (Hanchon & Allen, 2013). However, states may develop their own criteria to further filter and refine the current IDEA definitions. By beginning this development process in the state of Ohio with the definition of ED, we may improve the otherwise subjective and vague evaluation process for ED.

Another recommendation for best practice in ED evaluation involves educating school psychologists to become more familiar with the ED eligibility criteria. Results from this study found that 16 of 69 survey respondents felt only moderately or somewhat familiar with the current definition of ED. This indicates that 23% of participants were not completely familiar with the only form of guidance they have for identifying ED. It is unclear how this moderate familiarity with the definition of ED may be impacting under-identification or improper identification of ED students. To mitigate this problem,
professional development for psychologists in the area of ED may need to be a requirement, in order to increase and improve best practice.

Finally, results of this study indicate that participants are aware that completing cognitive assessment as part of every ED evaluation is best practice. However, this study, along with other relevant studies previously discussed (Hanchon & Allen, 2013; Shapiro & Heick, 2004) found that up to 40% of school psychologists do not conduct cognitive assessment as part of every evaluation. These results indicate that school psychologists are aware that it is best practice to conduct cognitive assessment in ED evaluations, yet they do not complete such assessments for every evaluation. This quandary presents several implications. School psychologists may know that cognitive assessment in ED evaluation is best practice, however, they do not have the time and resources to complete the assessments. These results may also indicate that school psychologists are using other data collection tools, not mentioned by participants in this study, to rule out intellectual factors in ED evaluation. For example, school psychologists may use class-wide, group cognitive screening data to make evaluation decisions. Regardless of reason, according to IDEA (2004), intellectual factors must be ruled out prior to identifying ED. In order to improve practice and follow federal law, it may be in the best interest of students and practitioners for schools and/or federal law to make cognitive assessment a requirement for all ED evaluations.

**Future Research Opportunities**

Based on results and implications derived from this study, future research is warranted in examining the impact of the social maladjustment clause on ED
identification, gaining an understanding of why school psychologists are utilizing current practices, and exploring the shift towards RTI in identifying ED.

The passage of the Education for All Handicapped Children Act outlined the definition of ED and intended to exclude juvenile delinquents who were not seriously emotionally disturbed (Hochbaum, 1990). In this framework, the idea of creating such an exclusionary clause is supported because exclusions are created to narrow omissions from an otherwise broad definition. In fact, according to Hochbaum (1990), Bower himself did not support the exclusionary clause and felt it was illogical to use in determining ED.

As previously noted, federal statutes and implementing regulations have never defined social maladjustment. The heart of IDEA is that all students with disabilities receive specialized educational services based on individual needs. The social maladjustment exclusionary clause serves as a barrier to access such services. Although not all special education services will be comprehensive, especially due to the subjective nature of ED standards, no student should be denied access to any specific educational or emotional need that he/she requires. Future research is warranted in exploring how this social maladjustment clause may be excluding students with significant needs from receiving special education services. It is also critical for future research to consider what criteria practitioners are using in differentiating students that are socially maladjusted from students that are ED.

Future research is also warranted in exploring why school psychologists use current evaluation practices. Although IDEA (2004) states that intellectual factors must be ruled out before identifying ED, this study found that 23% of participants did not
conduct cognitive testing for every initial ED evaluation. In addition, other studies have found that 34% to 40% of school psychologists nation-wide do not conduct cognitive testing in ED evaluations (Hanchon & Allen, 2013; Shapiro & Heick, 2004). In order to ensure that best practice and federal law are being followed, and identify how to help school psychologists comply with such expectations, future research is needed to gather the reasoning behind this trend in practice.

Using Response to Intervention (RTI) data in determining ED was noted as an interest by several respondents in this study. RTI is defined as, “an inadequate change in target behaviors as a function of intervention” (Gresham, 2005, p.331). The goal of intervention is to produce a discrepancy between baseline and post-intervention levels of performance. Traditionally, RTI has focused on academic concerns as a means to identify students with more prevalent disability categories requiring special education services. However, emerging needs of ED students are shifting RTI into the realm of behavior (Gresham, 2005).

A relatively new approach to making eligibility determinations, as well as selecting appropriate interventions, is based on the concept of RTI. Exploring RTI in ED evaluation may address the question of whether emotional and behavioral difficulties constitute a disability. The answer to this question is not straightforward and ultimately involves some degree of subjective judgment. However, an essential requirement in using the RTI approach is that there must be validated intervention protocols and evidence-based procedures to change behavior (Gresham, 2005). Future research on the use of RTI to identify ED needs may progress practitioners into focusing on student need instead of only correct disability identification.

The emergent themes and significant data yielded from this study will not only guide future research, but frame the future of special education evaluation. School psychology
practices in determining ED may improve from further research and continue to dictate the success of practitioners and students receiving special education services. By addressing the gaps in current practice and identifying strengths to build on, evaluation practices in school psychology can only improve the prospects for our students.
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Synergistics.


doi: http://dx.doi.org/10.17105/SPR-13-0038.1


doi:10.4304/tpls.3.2.254-262
APPENDIX A

Dear Participant,

You are invited to participate in a study to assess school psychologists’ perceptions of the Emotional Disturbance (ED) evaluation and identification process in the educational setting, with an emphasis on cognitive assessment practices. I hope to learn what evaluation tools school psychologists in Ohio use to determine student eligibility for special education services under the category of ED, as well as opinions on the current federal definition of ED. You were selected as a possible participant in this study because you are a licensed school psychologist practicing in Ohio.

If you decide to participate, please complete the enclosed survey. Your return of this survey is implied consent. The survey is designed to learn about the evaluation methods used by school psychologists when evaluating students for ED, as well as your opinions on the current federal definition of ED. It will take approximately 10 minutes to complete. No benefits accrue to you for answering the survey, however, your responses will be used to determine patterns and potential gaps in current ED evaluation practices and procedures, which may be used to improve future ED identification and evaluation practices. Any discomfort or inconvenience to you derives only from the amount of time taken to complete the survey.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will not be disclosed.

Your decision whether or not to participate will not jeopardize your future relationships with the University of Findlay. If you decide to participate, you are free to discontinue participation at any time without prejudice.

This survey and consent waiver have been approved by The University of Findlay Institutional Review Board, which guarantees that research involving human subjects follows federal regulations. You will be made aware of any information that varies from what has been provided to you and/or might affect your willingness to continue to participate in the project.

The link to this digital survey is found here:
https://www.surveymonkey.com/r/WRRWNLJ

If you have any questions prior to, during, or after completing the survey, please contact Kara Parker at 419-261-0991 or parkerk1@findlay.edu.

Thank you for your time.

Sincerely,

Kara Parker, Ed.S.
Survey Questions:

1. Please select all of the following licenses or certifications that you currently possess:
   - State licensure in School Psychology
   - National certification of School Psychology
   - No current license or certification
   - Other __________________________

2. Please indicate which state in the United States you currently practice school psychology:
   - _____________________________

3. Please indicate your highest educational degree earned:
   - Master’s Degree
   - Education Specialist
   - Doctorate
   - Other __________________________

4. Have you conducted evaluations to determine Emotional Disturbance (ED) eligibility for students?
   - Yes
   - No
   - Unsure

5. How familiar are you with the federal definition of ED, as defined by the current Individuals with Disabilities Education Act (IDEA) 2004?
   - Very Familiar
   - Moderately Familiar
   - Somewhat Familiar
   - Not Very Familiar
   - Unsure

6. Do you follow the federal definition of ED (defined by IDEA) when determining student eligibility for ED?
   - Yes
   - No
   - Other __________________________

7. How would you describe the current federal (IDEA) definition of ED?
   - Very subjective
   - Somewhat subjective
   - Somewhat objective
8. How often do you conduct cognitive/intelligence testing as part of initial evaluations to determine Emotional Disturbance?

- I conduct cognitive testing as part of every initial evaluation for ED
- I conduct cognitive testing as part of most initial evaluations for ED
- I conduct cognitive testing as part of few initial evaluations for ED
- I never conduct cognitive testing as part of initial evaluations for ED
- Other ____________________________________________

9. How often do you conduct cognitive/intelligence testing as part of reevaluations to determine Emotional Disturbance?

- I conduct cognitive testing as part of every reevaluation for ED
- I conduct cognitive testing as part of most reevaluations for ED
- I conduct cognitive testing as part of few reevaluations for ED
- I never conduct cognitive testing as part of reevaluations for ED
- Other ____________________________________________

10. How do you determine when to conduct a cognitive assessment as a part of an ED evaluation?

11. Which of the following other evaluation methods do you include when evaluating a student for ED (select all that apply):

- Rating Scales
- Interviews
- Observations
- Academic Achievement Testing
- Medical Record Review
- School Record Review
- Other ____________________________________________

12. How comfortable do you feel using your current methods to identify a student as ED?

- Very Comfortable
- Moderately Comfortable
- Somewhat Comfortable
- Not Very Comfortable
- Unsure

13. Who is included in the ED eligibility determination process at your school?
14. How would you describe the eligibility determination process that you use to identify Emotional Disturbance?

- Very subjective
- Somewhat subjective
- Somewhat objective
- Very objective
- Unsure

15. How would you change the current federal (IDEA) definition of ED to assist school psychologists in conducting ED evaluations?