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School-based evaluations for students with intellectual disabilities: is "sufficiently comprehensive" good enough?

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SCHOOL-BASED EVALUATIONS FOR STUDENTS WITH INTELLECTUAL
DISABILITIES: IS “SUFFICIENTLY COMPREHENSIVE” GOOD ENOUGH?

A thesis submitted to
the Graduate College of
Marshall University
In partial fulfillment of
the requirements for the degree of
Education Specialist
In
School Psychology

by
Elizabeth E. Robinson, M.A.

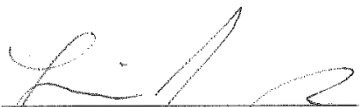

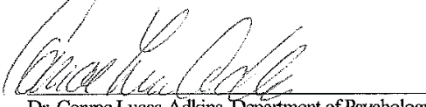

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May 2017

APPROVAL OF THESIS

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We, the faculty supervising the work of Elizabeth Robinson, M.A., affirm that the thesis, *School Based- Evaluations for Students with Intellectual Disabilities: Is "Sufficiently Comprehensive" Good Enough?*, meets the high academic standards for original scholarship and creative work established by the School Psychology Program and the College of Education. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.

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ABSTRACT

Federal special education law affords a child suspected of having a disability a comprehensive evaluation when referred for services under IDEA 2004. The purpose of this study was to examine school psychologists' procedures, practices, and beliefs in implementing a multi-faceted evaluation for children suspected of having intellectual disability (ID). Record reviews and practitioner interviews were used to assess 135 student records in three West Virginia Local Education Agencies (LEAs) to determine the extent to which sufficiently comprehensive evaluations existed; the percentages of comorbid or secondary disabilities identified; and best practices for comprehensive evaluations of intellectual disability, according to practitioners. The results indicate that students who qualified with intellectual disability were observed with the highest percentage of sufficiently comprehensive evaluations (85.3%) when compared to other major disability categories. Moreover, students who qualified with intellectual disability were found eligible for a secondary exceptionality in 32.3% of the sample. Finally, school psychologists in the LEAs of interest commonly reported state policy, eligibility criteria, and teacher and parent concerns as the primary practices that guide comprehensive evaluations. Future research should strive to increase sample size and include additional LEAs, allowing for other trends in intellectual disability and major disability categories to be discovered. Additionally, further exploration in adaptive behavior ratings, different ranges of ID, and triennial evaluations will ideally lead to better understanding of ID prevalence rates.

CHAPTER 1

LITERATURE REVIEW

Overview

School psychologists and other multidisciplinary team members, including parents, play a pivotal role in planning and implementing comprehensive evaluations for children suspected of having disabilities. The provision of a comprehensive evaluation by team members, as mandated by the Individuals with Disabilities Education Act (IDEA 2004), is paramount because a multi-faceted assessment inherently provides safeguards to a child referred for special education. Consistent with the regulations, a comprehensive evaluation affords each child an evaluation designed on a case-by-case basis, accounting for not only the child's individual needs but also assessment linked to all areas of suspected disability (IDEA, 2006). Consequently, "sufficiently comprehensive" evaluations should lead to more accurate differential diagnoses and the rendering of co-morbid educational classifications by school psychologists (IDEA, 2006; p. 46785). Other advantages of comprehensive evaluations ideally include reductions in 1) inaccurate labeling and over-identification and 2) the adverse effects associated with such labels.

In the current study, the concept of comprehensive evaluations for school-age children and the protections and benefits they provide will be more fully defined with respect to federal and state policy, psychological best practice, and the extant literature. Comprehensive evaluations for children suspected of having intellectual disabilities (ID) were specifically emphasized. To better understand potential influences on ID prevalence rate, the current study proposed to systematically examine the comprehensive nature of a sample of archival evaluations through a file review procedure and an interview process for school psychologists in

order to better understand how comprehensive evaluations are operationalized in practice. The study was conducted in three local education agencies (LEAs) in a state with disproportionately high rates of ID, as compared to the national average (Jennings, Norvell, Stephens, & Wenzel, 2016; USDOE, 2015).

Comprehensive Evaluations

A comprehensive evaluation is notably the most fundamental component in the assessment process for a student suspected of disability. IDEA 2006 Rules and Regulations sections 34 CFR § 300.301 through 300.311 specify that each public agency is required to conduct a full and individual evaluation prior to special education determination (p. 46784). Federal special education law goes on to outline several criteria directly and indirectly linked to comprehensiveness.

Criteria of a Comprehensive Evaluation. At a basic level, IDEA directly maintains a comprehensive evaluation must address two domains: 1) all areas of suspected disability and 2) all areas of suspected need (IDEA, 2004).

In evaluating each child with a disability under 34 CFR §§ 300.304 through 300.306, the evaluation is sufficiently comprehensive to identify all of the child's special education and related service needs, whether or not commonly linked to the disability category in which the child has been classified. (IDEA, 2006; p. 46785)

Therefore, comprehensive evaluations are crucial not only for proper diagnosis of disabilities, but also for identifying all needed services of a particular student.

According to Hass and Carriere (2014), the most functional ways to identify suspected disabilities are through communication with the referring party and a sufficient review of all existing information (i.e. the student's records) prior to beginning the evaluation process.

Furthermore, by developing a list of the student's perceived challenges and needs, the multi-disciplinary evaluation team can better describe the referral concern and select assessment instruments matched to the areas of need in the beginning stages of the evaluation process (Hass & Carriere, 2014). Ultimately, school psychologists and other team members will be better equipped to consider relevant suspected disability categories and recommend sound intervention strategies while reporting results to parents during the eligibility determination process.

Consistent with 34 CFR § 300.304, teams must employ different assessment types, instruments, and extant data to produce a comprehensive evaluation. No single measurement or assessment may act as the sole criterion in eligibility determination, but rather a variety of assessments and strategies should be used to gather all pertinent information, including information provided by parents (IDEA, 2006). In practice, school psychologists use two types of data in the evaluation process. First, *hard* data refers to a set of scores derived from multiple assessment types, such as academic benchmarks, screenings, rating scales, and test scores (Hass & Carriere, 2014). Most *hard* data are derived from norm-referenced or standardized assessments. A second set of data, often referred to as *soft* data, are gathered from parents, teachers, or any other referral party (Hass & Carriere, 2014). In addition to standardized assessments, eligibility committee (EC) members should consider interviews, observations, the child's case history, medical reports, teacher reports, school grades, and any other information perceived as relevant to eligibility determination (Hass & Carriere, 2014; IDEA, 2004; Sattler, 2014; WVBE Policy 2419, 2014). An evaluation, as per federal mandate, must include both types of data in order to be "sufficiently comprehensive" (IDEA, 2004).

A multidisciplinary team, including parents, is a fourth and necessary requirement of a comprehensive evaluation and the subsequent eligibility determination process. The

multidisciplinary team membership was set forth in Public Law 94-142 (Kabler & Carlton, 1982) and remains in IDEA today (i.e., 34 CFR § 300.305 and § 300.308). By involving professionals from multiple disciplines in the assessment, eligibility determination, and intervention planning of a child with a suspected disability, all areas of need can be sufficiently considered. According to Kabler and Carlton (1982), the most common school professionals to make up a multidisciplinary team include: general education teachers, special education teachers, principals, school psychologists, and school counselors. Depending upon the suspected disability, however, the team should vary to best address the areas of need (e.g., including a speech pathologist for a suspected language deficit or intellectual disability) (Kabler & Carlton, 1982).

Moreover, 34 CFR § 300.304 delineates additional areas required of comprehensive evaluations. All assessment instruments must be “technically sound” so as to assess the relative contribution of factors in cognitive, behavioral, physical, and developmental domains (IDEA, 2006; p. 46785). When assessing a student for special education services, evaluations should be reliable, valid, and culturally appropriate (IDEA, 2004; Sattler, 2014; WVBE Policy 2419, 2014). To ensure assessments and evaluation materials are appropriate for the child, IDEA requires measures be taken to assure the most appropriate form of communication for that child is used (2006; p. 46785). In addition, evaluation materials, including assessments, should be selected based on their ability to assess specific areas of need, rather than merely provide a general intelligence quotient (IDEA, 2006; p. 46785).

A comprehensive evaluation, finally, must incorporate reasonable data to rule out each general exclusionary factor under 34 CFR § 300.306 and any specific exclusionary factors to a particular area of suspected disability. For example, in accordance with IDEA, West Virginia Board of Education (WVBE) Policy 2419: *Regulations for the Education of Students with*

Exceptionalities (2014) specifies:

A student cannot be identified as a student in need of special education services if the primary reason for such a decision is: a) due to a lack of appropriate instruction in reading, including the essential components of reading instruction as defined by the Elementary and Secondary Education Act (ESEA) – phonemic awareness, phonics, vocabulary development, reading fluency, including oral reading skills, and reading comprehension strategies; b) a lack of appropriate instruction in math; or c) limited English proficiency. (2014; p. 20)

These exclusions should be carefully considered within the scope of a comprehensive evaluation for intellectual disability and all other disorders so as to ensure all diagnoses are legitimate. For school psychologists specifically, Harrison and Raineri (2008) state the importance of gathering data from a wide range of sources and conducting multiple assessments for reliably obtaining sufficient data to aid in the decision-making process.

Response to Intervention. Since the introduction of Response to Intervention (RTI) in the 2004 reauthorization of IDEA, the literature and policy discussions regarding comprehensive evaluations have almost exclusively surrounded specific learning disabilities (SLDs). RTI models have heavily influenced the processes by which students with disabilities are identified. RTI is recognized widely for its effectiveness in reducing the number of students referred for special education by implementing preventative strategies and progress monitoring for all students, not only those suspected of disability. However, as the shift from the discrepancy model to RTI emerged, questions arose in regards to the standards of comprehensive evaluation (NJCLD, 2011). As such, some districts began to reduce and/or eliminate standardized intelligence assessments as a part of the evaluation process.

As concerns involving the evaluation process through RTI mounted, the Office of Special Programs (OSEP) responded by reiterating that a “sufficiently comprehensive evaluation” cannot rely on any single criterion assessment or evaluation, be it RTI data or a single intelligence quotient (IDEA, 2006; NJCLD, 2011; Letter to Hugo, 2013; Letter to Zirkel, 2007). OSEP further responded by asserting progress monitoring data yielded through RTI constitute only “one component of a full and individual evaluation” (Letter to Zirkel, 2008 p.3). For this reason, while such RTI data are important, they cannot replace the need for a comprehensive evaluation for a child suspected of having a SLD (Decker, Hale, & Flanagan, 2013; NJCLD, 2011). In addition to a variety of assessment tools and strategies, data collected through RTI can provide important information relevant to the identification and eligibility process (NJCLD, 2011).

Specific Learning Disability. Within the field of school psychology, several camps exist with regard to what assessments are needed to fulfill the requirements of a comprehensive evaluation of SLD. Some like Fletcher, Lyon, Fuchs, and Barnes (2007) and Barnes (2017) contend RTI and achievement data can comprise the bulk of the evaluation. Norm-referenced achievement assessments are based on previously developed hypotheses regarding a child’s suspected disability (Fletcher, et al., 2007). These measures are often paired with instructional response data and are recognized for their effectiveness in identifying additional information about SLD identification. Many researchers of this camp contend that brief, norm-referenced assessments of achievement are an important addition to the RTI framework, because factors such as low reliability and specific progress monitoring measures may over-identify students as poor responders (Barth et al., 2008; Fuchs & Deshler, 2007).

Others like Decker, Hale and Flanagan (2013) and Ofiesh (2006) purport the use of RTI data (i.e., progress monitoring data) without measures of cognitive processing cannot

appropriately identify underlying problems because the model exclusively accounts for low achievement. Simply stated, those from the second camp believe multi-tiered systems of support are successful in identifying students who do not respond to intervention, but they infrequently account for the root causes of why those students did not respond, which could be the result of a variety of factors or disabilities (Hale, Kaufman, Naglieri & Kavale, 2006; Ofiesh, 2006). In essence, a comprehensive evaluation consisting of cognitive assessment tools remains the best measure for determining the underlying, psychological processes that hinder a student's progress in academics.

Many researchers and practitioners with this theoretical view instead prefer to adopt an “alternative research-based approach” or a cross-battery method of identifying a pattern of strengths and weaknesses, which is a third approach to identification distinct from the discrepancy formula and an RTI approach (Decker et al., 2013). This shift in theory is significant to the practice of school psychology, as it requires changes in methodology and training. It is critical that school psychologists are well trained in contemporary cognitive methods so as to ensure all conducted evaluations are comprehensive in nature. The alternative research-based approach is praised for its collaboration of assessments in specific cognitive abilities and academic achievement. This approach challenges the ability-achievement discrepancy method (a model that relies primarily on IQ scores and therefore erroneously increases the percentages of students identified with learning disabilities) by incorporating cognitive assessments developed to determine strengths and weaknesses as part of the comprehensive evaluation process (Decker et al., 2013). Because the full-scale intelligence quotient (FSIQ) does not provide detailed information in terms of specific deficits, utilizing specific cognitive assessments in the area of suspected disability can offer critical information about underlying problems, as well as help to

identify additional areas of need (Decker et al., 2013).

A more recent approach developed by Hale and Fiorello, the Concordance-Discordance Model (C-DM), consists of components from both RTI and alternative research-based models. Hale et al. (2006) points out the failure of both RTI and the ability-achievement discrepancy model to address the definition of SLD set forth by IDEA 2004, which requires “a deficit in basic psychological processes.” Hale et al. (2006) contend that the best method for ensuring students with SLD are identified and found eligible, both in correspondence with the definition and eligibility requirements of IDEA, is through a three-tier model that utilizes both RTI data and cognitive assessment scores . The C-DM suggests that students who meet the criteria for the model, and do not respond to intensive intervention, should be given a comprehensive evaluation in all areas of suspected disability in accordance with federal policy (Decker et al., 2013). Specifically, the comprehensive evaluation should seek to identify strengths and weaknesses, as well as an achievement deficit, through specific cognitive processing tasks (Decker et al., 2013). This process is intended to ensure an individualized, intensive intervention is developed for each student.

In summary, SLD identification has generally dominated the school psychology literature and national dialogue regarding comprehensive evaluations since the inclusion of RTI in IDEA 2004. OSEP provided frequent guidance in the form of OSEP Letters over the last decade to clarify evaluation components, noting RTI data and intelligence composites each comprise only one component of a comprehensive evaluation (Letter to Hugo, 2013; Letter to Zirkel, 2007; Letter to Zirkel, 2008). Especially relevant to the construct of ID and the movement away from over-reliance on a single cognitive score, a pattern of strengths and weaknesses approach to SLD identification gained prominence during the last decade.

Intellectual Disabilities. Unlike SLD, little attention has been directed toward explicitly outlining what a comprehensive evaluation for ID should entail for school-age children and adolescents over the last decade. Rather, the bulk of the research and consensus building around best practices in ID evaluation over the last decade has occurred in the context of adults with ID in response to the landmark case of *Atkins v. Virginia* in 2002. The Supreme Court determined in *Atkins v. Virginia* that persons with intellectual disability are ineligible for the death penalty. As such, the use of comprehensive evaluations to accurately identify individuals with ID is fiercely debated and contested, given the resulting life and death consequences. Although it is not the intent of the current investigation to review the adult ID literature, the connection to the literature on adults with ID is important to understand because “onset during the developmental period” (before age 18) is a criterion of ID (American Psychiatric Association, 2013; p. 33); thus, the majority of individuals with ID will be assessed and identified through the public education system (Woods, Freedman, & Dering, 2015).

By detailing all criteria for ID, including discussions of intelligence testing, variability of test scores, concepts of measurement, adaptive behavior, age of onset, and cultural factors, researchers of the death penalty sufficiently identify important principles for school practitioners (see Woods et al., 2015). These factors align with the standard reference on diagnosing neurodevelopmental disorders, the DSM-5, which advises a comprehensive evaluation for intellectual disability consists of an assessment of intellectual competence, adaptive functioning, identification of genetic and non-genetic disorders, consideration of associated medical conditions, and consideration of additional mental, emotional, and behavioral disorders (American Psychiatric Association, 2013; p. 39). Referring to children specifically, the American Academy of Pediatrics (AAP) emphasizes genetics testing as an important component for a

comprehensive medical evaluation (Moeschler, Shevell, & Committee on Genetics, 2014), a criterion of the DSM-5 that is often overlooked in the field of education. This diagnostic approach consists of several tests, including chromosome microarray and Fragile X, which provide important information when the etiology of the disorder is unknown (Moeschler et al., 2014).

Intellectual Disability

A review of the relevant literature and policies regarding comprehensive evaluations leads to a more in depth examination of intellectual disability. ID is a disorder recognized throughout the world, though there is considerable variation among prevalence rates, terminology, and diagnostic criteria and methods (Polloway, Lubin, Smith, & Patton, 2010; Shalock & Luckasson, 2004). With a rate that nearly triples the national average, West Virginia holds the highest percentage of intellectual disability in the United States. Polloway et al. (2010) reported the prevalence rate at 2.47% in 2007, making West Virginia one of only two states in the nation with a rate in excess of two percent. More recently, West Virginia maintained the highest percentage of school-age children and adolescents with ID in the nation with rates that nearly tripled the national average during 2011, 2012, and 2013 at 2.79%, 2.8%, and 2.75%, translating to approximately 6,750 students receiving special education services under ID in West Virginia (Jennings et al., 2016; USDOE, 2015).

Definition. The American Association on Intellectual and Developmental Disabilities (AAIDD, 2010) defines intellectual disability as a disability “characterized by significant limitations both in intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before age 18” (para. 1). Federal special education law, WVBE Policy 2419, and the DSM-5 provide definitions with considerable

overlap to the AAIDD. However, in addition to deficits in intellectual functioning, adaptive functioning and early onset, IDEA and WVBE Policy 2419 require that an intellectual disability must cause an adverse effect on a child's educational performance in order for that student to be eligible for special education or needed services (IDEA, 2006; p. 46756).

Diagnostic Criteria. The DSM-5 (American Psychiatric Association, 2013) highlights three criteria that must be met for a diagnosis of intellectual disability:

Criterion A: Deficits in intellectual functions, such as reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience, confirmed by both clinical assessment and individualized, standardized intelligence testing;

Criterion B: Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work and community; and Criterion C: Onset of intellectual and adaptive deficits during the developmental period. (p. 33)

Criterion A of the DSM-5 specifies that individuals with ID generally have scores two deviations or more below the population mean with a margin for measurement error (generally +5 points) (American Psychiatric Association, 2013; p. 37). Criterion B, adaptive functioning, is categorized into three core domains – conceptual, practical, and social – and encompasses the activities of daily living referenced above, among others (American Psychiatric Association, 2013). Criterion C indicates that deficits in intellectual and adaptive skills are present during childhood or early adolescence (American Psychiatric Association, 2013; p. 38).

ID diagnostic criteria established by the DSM-5 guide eligibility determination for ID in

both federal regulation and state policy (IDEA, 2004; WVBE Policy 2419, 2014). The WVBE Policy 2419: *Regulations for the Education of Exceptional Students (WVBE Policy 2419)* outlines the state's policies and procedures to ensure a free appropriate public education for children with disabilities in accordance with IDEA 2004. WVBE Policy 2419, consequently, delineates the evaluation and eligibility processes for special education in West Virginia and requires a three-prong test of eligibility in all cases of special education determination. In order to receive special education services, the eligibility committee must find that the student: a) meets the eligibility criteria in one of the designated exceptionalities; b) experiences an adverse effect on educational performance; and c) needs special education (WVBE Policy 2419, 2014; p. 19).

The eligibility criterion for ID under WVBE Policy 2419 consists of five components. First, intellectual functioning must be at least two standard deviations below the mean with a standard error of measurement of 1.0 on an individually administered intelligence test. Second, the student must exhibit deficits in adaptive functioning in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, or safety. Third, the age of onset must be below age eighteen. Fourth, the student's condition must adversely affect his or her educational performance. Fifth, the student must need special education (WVBE Policy 2419, 2014; p. 28).

To summarize, the DSM-5 diagnostic criteria for ID is evident in much of WVBE Policy 2419; however, discrepancies do exist. Specifically, the DSM-5 requires impairment in one of three adaptive behavior (AB) domains while WVBE Policy 2419 refers to an eleven-item list of AB skills. In addition, the error of measurement differs between criteria, with the DSM-5

allowing for a margin of +5 points, while WVBE Policy 2419 has a standard error of measurement of 1.0 (American Psychiatric Association, 2013; WVBE Policy 2419, 2014).

Considerations for ID Assessment

Prong 1: Cognitive Assessment. The first prong of ID diagnosis, standardized intelligence testing, is often given precedence, with some experts even failing to consider AB when criteria for standardized assessment is not met (Greenspan, 2015). The DSM-5 suggests that most individuals with intellectual disability receive standardized intelligence test scores approximately two standard deviations below the mean (American Psychiatric Association, 2013). However, caution should be given when considering test scores, as severe deficits in adaptive functioning may qualify an individual for intellectual disability even when scores are above the two standard deviation mark, and therefore clinical judgment must be used (American Psychiatric Association, 2013). As an example, a student with slightly elevated test scores, particularly part scores rather than FSIQ, may present with significant deficits in adaptive behavior that overall align with intellectual disability. This reiterates again the importance of the EC team to consider, in totality, the findings of a comprehensive evaluation in order to determine the most appropriate placement for a student.

As identified by Sattler (2014), the AAIDD and DSM-5 imply, through their definitions of ID, that instruments used to measure intellectual functioning and adaptive behavior must be standardized on the general population. According to Sattler (2014), individuals with mild intellectual disability are more likely to have fluctuating scores, signifying the importance of a comprehensive evaluation whereby no single measure acts as a sole criterion. Simply stated, standardized assessments can produce unreliable results despite proper procedures being followed (Sattler, 2014; Stephens, 2015).

In an evaluation of the WISC-IV, Koriakin et al. (2013) identified the Full Scale Intelligence Quotient (FSIQ) to be more reliable in identifying students with intellectual disability, as compared to the General Ability Index (GAI), which does not account for processing speed and working memory. Likewise, Decker et al. (2013) report low scores to be the result of numerous factors, and as such the administration of specific cognitive tasks or subtests is necessary for identifying potential, underlying problems. These findings imply practitioners should rely on FSIQ scores or a separate, composite measure when determining eligibility for ID on a case-by-case basis. However, with further regard to test score criteria, Bergeron and Floyd (2013) contend that elevated part scores (i.e. composite, index, or cluster scores) should not be grounds for disqualifying a diagnosis of ID when the FSIQ is two standard deviations below the mean. The basis for this opinion is threefold: 1) part scores possess lower reliabilities; 2) a pattern of strengths and weaknesses is influenced by regression toward the mean; and 3) interpreting both part scores and FSIQs often leads to confusing results without added benefit (Bergeron & Floyd, 2013).

Prong 2: Adaptive Behavior Functioning. The second prong of ID diagnosis, AB, has seen multiple shifts between models, initially beginning with a tripartite approach, transitioning to a list of ten specific skills areas, and ultimately returning to a tripartite model (although with different terminology) (Greenspan, 2015). The ten-item list of skills originated in the Luckasson et al., 1992 *Mental Retardation: Definition, classification, and systems of support* publication, but was replaced in the 2002 edition with a tripartite model. However, the multi-item list was re-introduced (as eleven instead of ten items) in the 2000 DSMIV-TR (Greenspan, 2015). Currently, the DSM-5 has returned to the tripartite model, although WVBE Policy 2419 still aligns with that of the DSMIV-TR.

Differences in criterion of adaptive functioning between the DSM-5 and educational policies, such as WVBE Policy 2419, may be problematic for proper identification (Papazoglou, Jacobson, McCabe, Kaufman, & Zabel, 2014). As mentioned previously, the DSM-5 requires impairment in one of three domains – conceptual, practical, or social. However, WVBE Policy 2419 states that two out of eleven deficits must be met. It is therefore more likely for a student to be identified as intellectually disabled based on WVBE Policy 2419’s criteria, which may factor into a higher prevalence rate (Papazoglou et al., 2014; Stephens, 2015). For example, using criteria from WVBE Policy 2419, an adaptive behavior rater might only indicate significant deficits in functional academics (suggesting the child struggles with general tasks required to be a successful student) and self-direction (skills involving independence, responsibility, and self-control), which would fulfill the AB criteria for ID. However, impairments in functional academics and self-direction are present in a wide range of disorders, such as SLD and ADHD. By using the tripartite model (i.e. social, practical, and conceptual), a rater would have to indicate deficits in multiple areas that make up a domain, indicating consistency across said domain. Regardless of criteria for AB, Obi et al. (2011) report that exclusion of adaptive data all together leads to higher ID prevalence rates.

When prominence is given to intelligence scale ratings and consideration of adaptive functioning is neglected, both legal and professional problems arise (Harrison & Raineri, 2008). While there are several reliable and valid intelligence tests available, the same does not hold true for adaptive functioning measures. Specific to AB, Harrison and Raineri (2008) recommend multiple types of measures and data collection be obtained from multiple sources due to the limitations in adaptive rating scales. There are a very select number of nationally standardized adaptive assessments available, with the Adaptive Behavior Assessment System—Second and

Third Editions (ABAS-II/III) being commonly used in schools. The biggest concern regarding adaptive measures lies with the informant – while the measure itself is useful in assessing adaptive behavior, accurate results are contingent upon accurate reporting from the informant (Floyd et al., 2015; Sattler, 2014). Therefore, it is suggested that multiple persons (mother, father, teacher) complete the assessment (Sattler, 2014). Even when multiple informants are recruited, however, correlations between parent and teacher ratings are moderate, at best (Harrison & Raineri, 2008). Notably, correlations between informants tend to be higher when the disability is more severe (Harrison & Raineri, 2008). This indication may cause complications in proper diagnosis if adaptive ratings among multiple informants are not cohesive and are not verified by the examiner through classroom and clinical observations.

Comorbidity and ID

Another discussion inherent to comprehensive evaluations is comorbidity. Because IDEA (2004) requires all areas of suspected disability be considered within the evaluation process, consideration of how comorbid disabilities impact ID is essential. In reference to the DSM-5 and AAIDD, Sattler (2014) suggests a diagnosis of ID should never rule out specific comorbid disorders. According to Woods et al. (2015), more than 40% of individuals diagnosed with ID are also diagnosed with an additional mental disorder. Similarly, a meta-analysis of nine studies revealed that between 30%-50% of individuals with ID might also be at risk of additional mental disorders, although the etiology of this rate is unknown (Einfeld, Ellis, & Emerson, 2011). Although many disorders can co-occur with ID, the following commonly co-exist: Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder, Depressive and Bipolar Disorders, Stereotypic Movement Disorder, Impulse Control Disorders, Major Neurocognitive Disorder, and Anxiety (American Psychiatric Association, 2013; Larson et al., 2001; Sattler, 2014). While

many disorders may co-occur with intellectual disability, there are a select few that specifically cannot. Specific learning disability (SLD) and emotional/behavioral disturbance (EBD) are ruled out as comorbid disorders for intellectual disability (IDEA, 2004; WVBE Policy 2419, 2014).

Reportedly, there is often great difficulty in identifying comorbid mental disorders (Sattler, 2014). It is often difficult to conclude whether symptoms are a manifestation of intellectual disability or an additional, co-occurring disorder (Bakken et al., 2010; Sattler, 2014), which may contribute to the disproportionately high rate of ID in West Virginia. Moreover, internalizing disorders, such as depression and anxiety, which commonly co-occur with ID, can prove difficult to diagnose in children with intellectual disability (Ajaz & Eyeoyibo, 2011; Woods et al., 2015). For individuals with comorbid intellectual disability and mood disorders, accurate diagnosis can be difficult due to limitations in language (Antonacci & Attiah, 2008; Woods et al., 2015). Additionally, individuals with comorbid mental disorders require greater support (Tasse & Wehmeyer, 2010). This assumption reiterates again the critical importance of proper diagnosis through a comprehensive evaluation, as well as consideration for all areas of need. By ensuring all policies, practices, and procedures have been followed in accordance with WVBE Policy 2419 and IDEA, EC teams can ensure each student is provided support in all areas of need and suspected disability.

Under WVBE Policy 2419, when two or more disorders are identified, the EC must determine the student's primary exceptionality. In addition, the EC is responsible for discussing how each exceptionality affects the student's educational performance and for determining which exceptionality has the most adverse impact (WVBE Policy 2419, 2014; p. 20). In § 300.4, IDEA requires, "That the child is assessed in all areas related to the suspected disability, including, if appropriate, health, vision, hearing, social and emotional status, general intelligence,

academic performance, communicative status, and motor abilities” (IDEA, 2006; p. 46785). Finally, IDEA specifies, in regards to § 300.8, “A child should be identified as a child with a disability using the category that is most appropriate for the child” (IDEA, 2006; p. 46654). Ensuring students in West Virginia have been considered under all related areas of suspected disability is essential to proper identification and diagnosis of intellectual disability and possible comorbid disorders.

Diagnostic Substitution. When considering the effects of comorbidity on the prevalence rate of ID, it is important to also consider the significance of diagnostic substitution. Diagnostic substitution is the concept that the same child who would be found eligible for one disability label many years ago is now being identified with a differential diagnosis based on evolving trends and criteria (Shattuck, 2006). Specific to ID, Shattuck (2006) found that from 1976 to 1992 the number of students labeled with MR (mental retardation) decreased by 41%, whereas the number of students labeled with LD (learning disability) increased 198%. Shattuck (2006) indicates that there is considerable evidence to suggest schools opted for a label of LD rather than mild MR because it is less stigmatizing. Even more recently, researchers have discovered the negative correlation between LD and ID with Autism, with considerable decreases in LD and ID diagnoses as the prevalence rate of Autism increased (Shattuck, 2006).

In states with disproportionately high rates of ID, such as West Virginia, it is crucial to consider the effects diagnostic substitution may play on prevalence rates. It is possible, for example, that when a student presents with more than one disability, the EC team would opt to label a student ID rather than with the comorbid disorder based on a number of practical conflicts. As an example, perhaps a student meets eligibility criteria for both ID and Autism, but Autism support, including perhaps a qualified teacher, is limited or nonexistent in the district, so

by default the EC team provides special education services through ID. Separately but perhaps not unrelated, many states with exceptionally low rates of ID, such as Montana, often serve students with ID through a “multi-category” classification, which may contribute to major inconsistencies from state to state (Jennings et al., 2016).

Need for Study

There are many concerns that may arise when students are inappropriately diagnosed with disabilities. Stigmatization and labeling by teachers and peers, inhibited post-school outcomes, physical and social distance from others (Gabel, Cohen, Kotel, & Pearson, 2013; Lockwood & Coulter, 2017), and alternative educational expectations and requirements, are some of the consequences that may result from ill-conceived diagnoses.

Consequences of Ill-Conceived Diagnoses. Stigmatization and labeling of students with disabilities has been researched widely in the field. Comprehensive evaluations relate directly to these concerns because erroneous identification can have life-long implications; and the policies, procedures, and practices that go into a “sufficiently comprehensive” evaluation should act as a safeguard to these issues. Specific to intellectual disability, Gordon, Tantillo, Feldman & Perrone (2004) contend that individuals with ID are reported as being considered among the least preferred groups of disability categories. Research conveys knowledge of a student’s learning disability label as possibly generating negative expectancies and consequently may lead to teachers evaluating students with labels unjustifiably (Foster & Salvia, 1977; Foster, Schmidt, & Sabatino, 1976). Moreover, when provided identical descriptions of children with emotional, intellectual, and specific learning disabilities, teachers associate increased difficulties and greater service needs to children with labels versus those without (Gillung & Rucker, 1977). Additionally, the degree of severity of a disability correlates with the level of stigmatizing

impact, whereby more significantly disabled individuals are viewed more negatively (Antonak, Mulick, Kobe, & Fielder, 1995; Weller & Aminidav, 1992).

In more recent studies, there is continued evidence that both parents and teachers alike report lowered academic expectations for adolescents labeled with learning disabilities, as compared to adolescents without identified exceptionalities (Shifrer, 2013). Beyond the scope of parents and teachers, Shifrer (2013) also discovered adolescents with learning disabilities were more likely to have lower outcome expectancies for themselves as compared to their non-disabled peers.

When students with ID are solely instructed on alternative achievement standards (AAS), there are often lifelong implications. Labeling is known to facilitate greater physical and social distance from nondisabled peers and separation from the general curriculum, standard diplomas, and certain post-school outcomes for which a standard diploma is required. Thereby, when a student is instructed through AAS, his or her chances of earning a standard diploma are significantly lowered, simultaneously inhibiting post-school outcomes that require such a diploma.

In summary, because of the lifelong negative consequences of inappropriate diagnoses, studies are needed which examine the practice of ID identification. A review of the literature did not yield any studies examining the diagnostic practices of school districts' ID identification. This examination is needed nationwide but is even more critical in states with high ID rates. The current study will examine archival data to examine the comprehensiveness of ID identification in selected WV LEAs.

Research Questions and Hypotheses

To better understand initial referral, evaluation and educational classification practices in

areas with disproportionately high ID rates and how such practices may contribute to increased rates of ID among school age students, the investigation team developed three question sets for the current study.

The first set of questions is purely exploratory and examines the characteristics of school age children and adolescents who are identified with ID, as compared to other major disability categories:

1. What are the primary characteristics of students who qualify with intellectual disability?
2. How do students with intellectual disability compare to other, major disability categories and to students who are not eligible for special education in terms of age, grade, ability level (i.e. FSIQ), and core academic domains?

The second set of exploratory research questions pertain to the policies, practices, and procedures previously discussed in regards to federal and state regulations:

3. Of all students receiving initial evaluations in LEAs with high ID rates, what percentage of evaluations were sufficiently comprehensive? Were ID evaluations less likely to be comprehensive given the disproportionate identification rates? The investigators hypothesize that insufficient evaluations for ID do exist and may exist in high enough percentages to adversely impact the overall prevalence rate of ID.
4. Of those evaluations failing to meet the sufficient comprehensive criteria, why were they found to be insufficient? The investigators hypothesize that the majority of the ID evaluations that do not meet criteria for sufficient comprehensiveness will be missing adaptive behavior rating scales. This hypothesis is based on the knowledge that AB rating scales rely on outside raters and high return rate may be difficult to achieve. Moreover, the current study hypothesizes that more teacher rating scales will be present because

school psychologists have easier access to teachers rather than parents.

5. Of the students who qualified for special education services, what percentage had documentation supporting consideration of comorbidity; and which exceptionalities were most likely to co-occur with ID? Investigators hypothesize that Other Health Impairment (OHI) will be the most frequently co-occur exceptionality. Disorders under this category commonly include attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), anxiety, depression, and even autism spectrum disorder (ASD).

Third, the following research question was used to further guide this examination:

6. What best practices do school psychologists report for Intellectual Disability comprehensive evaluations? This question allows investigators to better understand how school psychologists in the LEAs of interest operationalize comprehensive evaluations in practice with particular emphasis on ID identification, and if their perceptions of sufficient comprehensiveness align with federal and state mandates.

CHAPTER 2

METHOD

Participants

For the archival record review, participants ($N = 135$) were enrolled in three West Virginia LEAs. Students' ages ranged from 5 to 16 years. Males comprised 62.9% ($n = 85$) of the participants, 36.2% ($n = 49$) were female, and gender data was not available for one participant ($n = 1$). The majority of participants were identified as White/non-Hispanic (91.8%). The remaining participants were Black (1.4%), Hispanic (0.7%), Native American (0.7%), and Multi-Racial (3.7%). Race/ethnicity was not available for 0.7% of participants ($n = 1$). Students' grade levels ranged from Preschool to 10th grade and occurred with the following frequencies: Preschool, 1.5% ($n = 2$); Kindergarten, 7.4% ($n = 10$); first grade, 19.3% ($n = 26$); second grade, 11.9% ($n = 16$); third grade, 17.0% ($n = 23$); fourth grade, 14.8% ($n = 20$); fifth grade, 12.6% ($n = 17$); sixth grade, 1.5% ($n = 2$); seventh grade, 2.2% ($n = 3$); eighth grade, 3.0% ($n = 4$); ninth grade, 6.7% ($n = 9$); tenth grade, 1.5% ($n = 2$). Grade was not available for 0.7% of the sample ($n = 1$). Exclusionary criteria for participants included: a) gifted eligibility and b) articulation only impairments.

For the qualitative practitioner interview, participants ($N = 7$) were employed as school psychologists in three West Virginia LEAs. Education Specialist (Ed.S.) was the highest degree level for 85.7% of participants ($n = 6$) and 14.2% had a doctoral degree ($n = 1$). All participants were female ($N = 7$).

Procedure

One small district, one moderately sized district, and one large district participated in the study. A random, representative sample of students who qualified with initial evaluations during

the 2014-2015, 2015-2016, or 2016-2017 school years was generated. The “Initial Evaluation Timeline,” which under WVBE Policy 2419 requires an individual and comprehensive evaluation to be completed within eighty days of the documented date, was used to select the sample. Participants were recruited through special education directors and school psychologists currently employed in the districts evaluated.

For the record review, students who qualified with the following disability categories were included: Intellectual Disability, Specific Learning Disability, Other Health Impairment, Emotional Behavioral Disturbance, Speech/Language Impairment, Autism Spectrum Disorder, and Blindness. An additional category of “Ineligible” was included for the purpose of determining how often evaluations were comprehensive when a student was found ineligible for special education services. In order to be considered “sufficiently comprehensive,” each evaluation must have included evidence of: a) all areas of need addressed; b) soft data; c) multi-disciplinary data; and d) consideration of comorbidity (i.e. *Eligibility Determination Checklist*). In addition to all of the criteria detailed above, those that qualified with ID as the primary exceptionality must have included adaptive behavior ratings from at least one source to be considered sufficiently comprehensive.

For the qualitative interview, participants were comprised exclusively of school psychologists currently practicing in the three LEAs included in the study. Practitioners were asked the following two questions regarding comprehensive evaluations for Intellectual Disability: 1) What practices do you implement to ensure you are conducting comprehensive evaluations; and 2) How do you consider other suspected areas of exceptionality through the EC process? Open-ended questions were used so as not to influence practitioner responses and thereby ensure legitimacy. Compensation will be provided to practitioners who participated by

sharing the findings of the study and providing recommendations and training, as needed.

School psychology students from the Marshall University College of Education and Professional Development were recruited to analyze, review, and collect archival data using a data recording sheet developed by investigators (see Appendix C). Recruiters referred to WVBE Policy 2419 as a reference measurement for determining appropriate evaluation and eligibility processes. Specifically, areas of interest included diagnostic criteria for ID and procedures for initial evaluations and instrumentation across all disability categories considered. Microsoft Excel was used for record-keeping purposes and data analysis was completed using the Statistical Package of Social Sciences (SPSS) software through the *Descriptive Statistics* and *Frequency* tabs.

Data Analysis

After reviewing all archival record data, investigators utilized SPSS to examine frequencies, cross tabulations, and descriptive statistics, including *N*-size for each disability category as well as mean scores for ability, achievement, and adaptive behavior. One-Factor Analysis of Variance (ANOVA) tests were generated to compare mean scores between the ID sample and comparison disability groups. Bonferroni Correction test was applied as a post hoc multiple comparison procedure to determine where significant mean differences existed. Specific to comprehensive evaluation data analysis, frequency distributions for Intellectual Disability, Specific Learning Disability, Other Health Impairment, Ineligible, and Other categories were generated. In SPSS, investigators used the cross tabs function to generate a contingency table showing the observed counts and expected counts of comprehensive and non-comprehensive evaluations by disability category and the ineligible comparison group. Investigators additionally selected the Cramer's V statistic under the cross tabs options, as well as the adjusted standardized

residuals. Cramer's V, a categorical test that is Chi-square-like in nature, demonstrates whether there is a relationship between two nominal variables by examining observed and expected values. The standardized adjusted residuals (or standardized z scores) directly correspond to the Cramer's V statistic. They are considered significant if the value is beyond the +/- 1.96 range (Fields, 2013).

CHAPTER 3

RESULTS

Findings

Primary disability categories obtained from the sample occurred with the following frequencies: Intellectual Disability, 25.18% ($n = 34$); Specific Learning Disability, 45.92% ($n = 62$); Ineligible, 12.59% ($n = 17$); Other Health Impairment, 9.62% ($n = 13$); and Other, 6.66% ($n = 9$). The Other category was generated to represent primary exceptionalities that yielded small N-sizes, and is comprised of the following disability categories: Emotional Behavioral Disturbance ($n = 2$); Autism Spectrum Disorder ($n = 3$); Speech/Language Impairment ($n = 3$); and Blindness ($n = 1$).

Research Question 1: *What are the primary characteristics of students who qualify with intellectual disability?*

Table 1 presents descriptive statistics for students who qualified with ID in the current sample. Because many of the students in the sample were missing one or more variables, the n size fluctuates with each variable. Participants who qualified with intellectual disability comprised 25.18% of the sample ($n = 34$). The mean age for participants who qualified with ID was 8.26 with a corresponding mean grade of 3.36. The ability score was used to represent the Full-Scale IQ or an equivalent global ability score. The mean ability score of 68.30 indicates that the average student who qualified with ID in the current study was found within the mild range. More specifically, 88.2% of the ID sample was within the mild range ($n = 30$) with global intellectual functioning standard scores ranging from 57-74; 2.9% of the sample was found within the moderate range of ID ($n = 1$; SS=52); 5.8% did not report a global intellectual functioning score ($n = 2$); and 2.9% had a score outside of the ID range ($n = 1$; SS=78). Of the

5.8% ($n = 2$) that did not report a global intellectual functioning score, both records included or referred some form of outside medical report or diagnosis that supported eligibility for ID.

Consistent with WVBE Policy 2419, all participants with ID except three in the sample met the criterion of general intellectual functioning at or below two standard deviations below the mean in consideration of a 1.0 standard error of measurement. Two of the three students whose general intellectual functioning exceeded a standard score of 73 received Full Scale Intellectual Quotients of 74. A standard score of 74, however, falls within the margin of error (+5) as outlined by the DSM-5. The final participant ($n = 1$, 2.9% of all students with ID) who was in kindergarten exhibited general intellectual functioning in the borderline range (SS=78), clearly outside the margin of error specified by either the WVBE Policy 2419 and the DSM-5.

Considering part scores (i.e. cluster or composite scores), 55.8% of the ID sample ($n = 19$) had a standard score above the two standard deviation mark (i.e. a standard score >70) in at least one domain. Specifically, 55.8% of students had Gf (fluid reasoning) and Gs (processing speed) scores exceeding a standard score of 70 ($n = 19$); and 47.0% of students had Gc (crystallized intelligence), Gv (visual processing), and Gsm (short term memory) scores exceeding a standard score of 70. Part scores for the ID sample yielded the following standard score ranges: Gf (SS=45-85); Gs (SS=53-108); Gc (SS=57-92); Gv (SS=46-100); and Gsm (SS=54-88).

Regarding adaptive behavior, only four parent ratings were discovered in the current sample and yielded a mean Global Adaptive Composite (GAC) of 70.50. Parent GAC ranged from 40 to 96. Teacher GAC was obtained in 91.2% of the ID sample ($n = 31$) and produced a mean of 75.83. Teacher GAC ranged from 40 to 103. In LEA 1 and 2, all AB ratings included deficits in at least two skill areas, in compliance with WVBE Policy 2419 (2014). In LEA 3, 66.6% of the sample included deficits in two AB skill areas; 22.2% did not have deficits in at

least two skill areas; and 11.1% did not include AB ratings.

Available academic achievement scores for students who qualified for ID were observed with the following frequencies: Broad Reading, 73.52% (n = 25); Broad Math, 76.47% (n = 26); and Broad Writing, 35.29% (n = 12). Mean scores for each academic core domain are as follows: Broad Reading ($M = 69.36$); Broad Math ($M = 66.50$); and Broad Writing ($M = 72.17$). In the ID sample, Broad Reading standard scores ranged from 48 to 88; Broad Math ranged from 45 to 81; and Broad Writing ranged from 51 to 94. Overall, academic mean scores in all core domains appear commensurate with the overall mean ability score ($M = 68.30$).

Table 1
Intellectual Disability Characteristics

	Age		Grade		Ability		Parent GAC		Teacher GAC		Broad Reading		Broad Math		Broad Writing	
	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>
ID	34	8.26	28	3.36	30	68.30	4	70.50	31	75.83	25	69.36	26	66.50	12	72.17

Research Question 2: *How do students with intellectual disability compare to other major disability categories and to students who are not eligible for special education in terms of age, grade, ability level (i.e. FSIQ), and core academic domains?*

Table 2 represents characteristics for each of the primary disability categories considered. Similar to the ID sample, students from differential categories presented similar mean age and grade, yielding an overall mean age of 9.06 and mean grade of 3.75. However, when looking at specific comparison groups, students who qualified for SLD were, on average, identified approximately one year later ($M = 9.38$); and the Other category, which includes ASD, was identified as the youngest group with a mean age of 7.00. Regarding overall Ability level, the largest discrepancy among disabilities was observed between ID ($M = 68.30$) and SLD ($M = 85.78$). In addition, all other mean scores are generally considered to fall within a low average range of intellectual ability. In reading, students who qualified with SLD ($M = 74.82$) were most

similar to those who qualified with ID ($M = 69.36$). For math, SLD students yielded a mean score of 76.04, the most similar mean score to the ID sample, which yielded a mean score of 66.50. In writing, students who made up the Other category ($M = 74.50$) were most similar to the ID sample ($M = 72.17$). Additionally, it is important to specify that the overall sample did not yield a high frequency of broad writing scores ($n = 58$).

Table 2
Primary Disabilities Characteristics

Primary Disability	<i>n</i>	<i>M</i> Age	<i>M</i> Grade	<i>M</i> Ability	<i>M</i> Reading	<i>M</i> Math	<i>M</i> Writing
ID	34	8.26	3.36	68.30	69.36	66.50	72.17
SLD	62	9.38	3.57	85.78	74.82	76.04	82.28
Ineligible	17	9.29	4.25	85.18	87.93	88.47	90.88
OHI	13	10.76	4.92	81.75	82.83	78.69	83.71
Other	9	7.00	3.60	82.80	81.50	80.00	74.50
Total	135	9.06	3.75	80.71	76.47	75.97	81.28

Post-Hoc analyses using the Bonferroni Correction test were conducted to identify which comparison groups had significant mean differences, shown in Table 8 (see Appendix A). For FSIQ comparisons, the analysis yielded a significant difference between ID and all comparison groups. Regarding Broad Reading comparisons, the analysis yielded significant differences between ID and OHI and ID and Ineligible pairings. For Broad Math, significant differences between ID and all comparisons except Other were observed. Finally, Broad Writing yielded significant differences between mean scores of ID and Ineligible.

Question 3: *Of all students receiving initial evaluations in LEAs with high ID rates, what percentage of evaluations were sufficiently comprehensive? Were ID evaluations less likely to be comprehensive given the disproportionate identification rates?*

Question 4: *Of those evaluations failing to meet the sufficient comprehensive criteria, why*

were they found to be insufficient?

Table 3 represents criteria for sufficiently comprehensive evaluations for each primary exceptionality category and Table 4 provides descriptive statistics of major disabilities considering adaptive behavior. Overall, of the student files evaluated ($N = 135$), 75.6% were considered “sufficiently comprehensive” with consideration to federal and state regulations ($n = 102$). In addition, although adaptive behavior is not a required component of evaluations for each disability category considered outside of ID, the current study discovered that AB was considered in 13.86% of cases ($n = 14$).

Of the 34 student records yielding a primary exceptionality of ID, 85.3% were considered “sufficiently comprehensive” ($n = 29$). Of these, all were considered to have sufficient soft data, be multi-disciplinary in nature, and appropriately consider comorbidity ($n = 34$). In the ID sample, 85.3% considered all areas of need ($n = 29$), meaning 14.7% of the ID sample did not have all referral concerns addressed. Considering the second prong of ID diagnosis, 8.8% failed to consider adaptive behavior in the evaluation process. The remaining 5.9% of non-comprehensive ID evaluations were missing “other” data (such as academic achievement scores and necessary *Eligibility Determination Checklist* pages). Finally, 91.2% of the evaluations for ID included adaptive behavior scores ($n = 31$) – 79.4% of the evaluations had one rater and 11.8% included information from two raters (most commonly one teacher and one parent).

SLD as the primary exceptionality made up 45.9% of the original sample, with 72.6% of student files considered sufficiently comprehensive ($n = 45$). Of the SLD files, 74.2% considered all areas of need ($n = 46$), 98.4% contained soft data ($n = 61$), 100.0% were multi-disciplinary ($n = 62$), and 93.5% considered comorbidity ($n = 58$). The SLD sample considered adaptive behavior in 12.9% of the sample ($n = 8$), all of which consisted of one rater and an average GAC

of 86.37.

An Ineligible category was included for the purpose of determining how often evaluations were comprehensive when a student was not found eligible for special education services. Seventeen student files were found in the Ineligible category, with 76.5% being considered sufficiently comprehensive ($n = 13$). Variables that determined comprehensiveness yielded the following results: 76.5% considered all areas of need ($n = 13$); and 100.0% included soft data, were multi-disciplinary in nature, and considered comorbidity ($n = 17$). One out of the 17 Ineligible considered adaptive behavior for a percentage of 5.9%.

The Other Health Impairment primary exceptionality category was found sufficiently comprehensive 76.9% of the time ($n = 10$). Variables that determined comprehensiveness produced the following results: 84.6% addressed all areas of need and considered comorbidity ($n = 11$); and 92.3% included soft data and were multi-disciplinarian ($n = 12$). One out of 13 assessed adaptive behavior for a percentage of 7.7%.

The Other category was generated to represent primary exceptionalities that yielded small n-sizes, comprising 6.6% of the original sample ($n = 9$). In this sample, 55.6% of Other category are considered sufficiently comprehensive ($n = 5$). All areas of need were addressed in 66.7% of the sample ($n = 6$); soft data was sufficient in 88.9% of findings ($n = 8$); the evaluation was multi-disciplinary in 100.0% of the sample ($n = 9$); and comorbidity was considered in 77.8% of the sample ($n = 7$). Adaptive behavior was considered in 44.4% of the sample ($n = 4$), all of which were sourced from one rater.

Regarding Question 3, the investigators hypothesized that insufficient evaluations for ID do exist and may exist in high enough percentages to adversely impact the overall prevalence rate of ID. The contingency table in Appendix A, however, shows that ID evaluations had

slightly higher odds of being comprehensive when compared to all other groups, a finding that directly conflicts with the hypothesis. The Cramer's V statistic illustrated in Table 6 shows that there are slightly higher odds of ID evaluations being comprehensive, as demonstrated by a standardized adjusted residual of 1.5. In contrast, there were slightly lower odds for the SLD and Other categories to be comprehensive (see Table 6); however, these frequencies were not beyond that which was expected due to chance. In summary, no significant differences were observed between groups, as no standardized adjusted residuals fell at or beyond +/- 1.96. However, students who qualified with ID were observed with the highest percentage of sufficiently comprehensive evaluations, while the SLD and Other categories had the lowest number of sufficiently comprehensive evaluations. It is important to reiterate, though, the small *n*-size of the Other category. Additionally, the Cramer's V statistic was not significant at the .05 level, as demonstrated in Table 7 (See Appendix A).

Table 6
Contingencies

Comprehensive?	Counts	ID	SLD	OHI	Other	Ineligible
No	Count	5	17	3	4	4
	Expected	8.3	15.2	3.2	2.2	4.2
	Adjusted R	-1.5	.7	-.1	1.4	-.1
Yes	Count	29	45	10	5	13
	Expected	25.7	46.8	9.8	6.8	12.8
	Adjusted R	1.5	-.7	.1	-1.4	.1

Regarding Question 4, the investigators hypothesized that the majority of the ID evaluations that do not meet criteria for sufficient comprehensiveness will be missing adaptive behavior rating scales and that more teacher rating scales would be present because school psychologists have easier access to teachers rather than parents. Results suggest that most of the ID sample did include AB ratings ($n = 31$); however the second part of the hypothesis is accepted, as only 11.8% of the ID sample included parent ratings ($n = 4$), compared to 91.2% of the sample including teacher ratings ($n = 31$).

Table 3
Sufficiently Comprehensive Evaluation Components

Primary Disability	Sufficiently Comprehensive		All Areas of Need Addressed		Soft Data		Multi-disciplinary		Considering Comordity	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
ID	29	85.3	29	85.3	34	100.0	34	100.0	34	100.0
SLD	45	72.6	46	74.2	61	98.4	62	100.0	58	93.5
Ineligible	13	76.5	13	76.5	17	100.0	17	100.0	17	100.0
OHI	10	76.9	11	84.6	12	92.3	12	92.3	11	84.6
Other	5	55.6	6	66.7	8	88.9	9	100.0	7	77.8
Total	102	75.6	105	77.8	132	97.8	134	99.3	127	94.1

Table 4
Consideration of Adaptive Behavior

Primary Disability	0 AB Raters		1 AB Rater		2 AB Raters	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
ID	3	8.8	27	79.4	4	11.8
SLD	54	87.1	8	12.9	0	0.0
Ineligible	16	94.1	1	5.9	0	0.0
OHI	12	92.3	0	0.0	1	7.7
Other	5	55.6	4	44.4	0	0.0
Total	90	66	40	29.6	5	3.7

Question 5: *Of the students who qualified for special education services, what percentage had documentation supporting consideration of comorbidity; and which exceptionalities were most likely to co-occur with ID?*

Of the 135 reviewed files, 94.1% considered comorbidity as demonstrated by the presence of the *Eligibility Determination Checklist* ($n = 127$). Specific to ID, 100.0% of files contained evidence of comorbidity consideration ($n = 34$). In the current sample, 15.5% of participants who qualified with ID or SLD as the primary disability also qualified for a secondary disability in the area of Other Health Impairment, Speech/Language Impairment, or both ($n = 21$). Table 5 demonstrates N-size and percentages of secondary disabilities for ID and SLD. For the ID sample that qualified for a secondary disability, 2.9% qualified for OHI ($n = 1$); 26.4% qualified for Speech/Language Impairment ($n = 9$); and 2.9% qualified for both OHI and Speech/Language Impairment ($n = 1$). In the SLD sample, 16.1% were found eligible for secondary exceptionalities ($n = 10$). Of those that qualified, 0.7% were found eligible under OHI ($n = 1$) and 14.51% qualified for Speech/Language Impairment ($n = 9$).

Table 5
Comorbid Disabilities

	Comorbid Disability					
	OHI		Speech/Language		OHI & Speech/Language	
Primary Disability	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
ID	1	2.9	9	26.4	1	2.9
SLD	1	0.7	9	14.5	0	0.0

Investigators hypothesized that Other Health Impairment (OHI) would be the most frequently co-occurring exceptionality. Contradictory to the hypothesis, the most commonly co-occurring exceptionality was Speech/Language Impairment, which occurred in 26.4% of the ID

sample.

Question 6: *What best practices do school psychologists report for Intellectual Disability comprehensive evaluations?*

Regarding what practices are taken to ensure evaluations are sufficiently comprehensive, school psychologists in the LEAs of interest reported: reference to WVBE Policy 2419; “best practices”; eligibility criteria for the suspected disability; teacher and parent concerns; and SAT concerns, as the practices that guide comprehensive evaluations. Specifically, LEA 1 reported following best practices and WVBE Policy 2419 as well as the eligibility criteria. Similarly, LEA 2 reported consideration of the referral concerns, following eligibility criteria, and WVBE Policy 2419. LEA 3 reported consideration of SAT concerns, including specific parent and teacher concerns. Additionally, LEA 3 mentioned seeking permission for additional assessment types as new concerns arise during the evaluation process.

Regarding comorbidity, school psychologists in the LEAs of interest report a wide range of considerations. LEA 1 reported consideration of the “whole evaluation,” suggesting that if a new concern emerges throughout the evaluation process, it is always considered. Specifically, the phrase “always comprehensive” was reported in regard to considering other areas of exceptionalities. In addition, the school psychologist(s) from LEA 1 reported always following policy guidelines and expressed the difficulty in determining whether “low” scores are the result of ID or a comorbid diagnosis. LEA 2 reported considered “all of the steps” that go into a comprehensive evaluation for ID and using that information to determine if additional areas of need exist. LEA 3 reported beginning with the cognitive assessment and following up with adaptive rating scales (from both teachers and parents). Additionally, LEA 3 reported assessing

paperwork prior to beginning an evaluation, as a way to determine possible “hints” of additional disorders.

CHAPTER 4

DISCUSSION

Comprehensive evaluations completed in compliance with federal regulation and state policy afford each student suspected of disability an evaluation designed on a case-by-case basis, accounting for individual needs and addressing all areas of suspected disability (IDEA, 2006). Although state and federal policy and best practices guidelines, such as those outlined by Sattler (2014), will frequently outline what comprehensive evaluations should entail, there was deficit of research-oriented studies examining intellectual disability in the field. In a state with disproportionately high rates of ID, the current study sought to examine initial evaluation and classification variables that potentially relate to over-identification, as well as introduce a potential model for ID-comprehensive evaluations in the schools.

A record review and qualitative interview was conducted in three WV LEAs to determine: a) the primary characteristics of students who qualified with ID; b) how students with ID compare to other major disability categories and to students who are not eligible for special education; c) the extent to which initial evaluations were sufficiently comprehensive; d) the percentage of students who had documentation considering comorbidity, and which exceptionalities were most likely to co-occur with ID; and e) best practices for comprehensive evaluations in ID reported by school psychologists in the LEAs of interest.

Characteristics

Results of the study suggest that students who qualify with ID in the LEAs of interest, on average, were identified at approximately eight years old and in the middle of their third grade school year. The mean ability score of 68.30 suggests that, on average, these students are within the mild range of intellectual disability, with scores slightly below two standard deviations below

the mean on standardized tests with a mean of 100 and a standard deviation of 15. For AB, 79.4% of the sample qualified for ID based on a single AB teacher rating ($n = 31$), and only 11.7% included parent ratings ($n = 4$). Academically, students from the ID sample had mean academic achievement scores that were commensurate with their assessed cognitive ability. Overall, findings for the ID sample generally support federal and state mandates that require an adverse impact on educational performance in order for a student to be eligible for special education services (IDEA, 2004; WVBE Policy 2419, 2014). Although deficits in academic achievement may be considered the most apparent adverse impact on educational performance, the concept of adverse impact as defined in WVBE Policy 2419 (2014) is “broad in scope” and is not limited to academic domains (p. 21). Rather, the definition additionally includes non-academic areas (such as self-help skills and daily life activities) (WVBE Policy 2419, 2014; p. 21).

Although the overall mean age and grade was comparable to the ID sample, it is worthwhile to highlight that students who qualified with SLD were, in general, approximately one year older (M age = 9.38) and students who made up the Other category (which included AU), were likely to qualify earlier yet (M age = 7.0). Regarding overall ability level for differential categories, mean scores were generally considered to fall within a low average range of intellectual ability. As would be expected, the SLD group was most similar to the ID sample in terms of Broad Reading and Broad Math scores. However, the Other sample was most similar to ID in terms of broad writing, although it is worth specifying that the overall sample did not yield a high frequency of broad writing scores.

Comprehensive Evaluations

The current study referred to the DSM-5, IDEA, and WVBE Policy 2419 in determining

the rates at which evaluations in specific West Virginia LEAs were sufficiently comprehensive. According to WVBE Policy 2419 (2014), in order to be eligible for special education services under ID, students must meet the following eligibility criteria: a) intellectual functioning at least two standard deviations below the mean with a standard error of measurement of 1.0; b) deficits in adaptive functioning in at least two areas of daily living; c) age of onset must be below age eighteen; d) adverse impact on educational performance; and e) the student must need special education (p. 28). Processes for sufficient comprehensiveness outlined by federal and state policies include: a) all areas of need addressed; b) consideration of hard and soft data; c) data collected from multiple sources; d) use of technically sound instruments; and e) data collected to rule out exclusionary factors (IDEA, 2004; WVBE Policy 2419, 2014).

Results suggest that evaluations of students who qualified for ID were sufficiently comprehensive in 85.3% of the sample, a rate higher than anticipated. However, “sufficiently comprehensive” was defined in terms of federal and state regulation minimums, and not necessarily what is considered “best practice.” With regard to West Virginia’s high prevalence rate, the finding that ID evaluations are generally sufficient per federal and state mandate introduces many new considerations. Namely, is “sufficiently comprehensive” good enough?

Perhaps the most significant finding regarding the ID sample of the current study lies with adaptive behavior ratings. Of the ID sample, 91.2% of the evaluations included adaptive behavior scores ($n = 31$). Of these, 79.4% of the evaluations had one rater and 11.8% included information from two raters (in all cases one teacher and one parent). Because accurate AB results rely on accurate reporting from the rater, input from multiple sources is always recommended (Sattler, 2014). Contrary to this recommendation, 79.4% of the ID sample was found eligible based on an adaptive behavior rating from a single teacher. Of additional concern,

significant discrepancies in GAC were observed in 2 out of the 4 evaluations that did have multiple raters. Of the 4 evaluations in the sample, one file yielded a difference of zero between parent and teacher raters; one file yielded a difference of five; one file a difference of 24; and another file a difference of 34. When adaptive ratings among multiple raters are significantly different, administering a rating scale to a third rater or collecting additional information through classroom and clinical observations may be considered best practice. These concerns can in part be addressed by completing more direct assessment methods, such as requesting that parents come in for an interview to address adaptive behavior functioning. This practice could eliminate the number of AB protocols that are not returned to practitioners and for parents who do not fully understand the protocol instructions or who lack the skills to complete the forms.

Finally, with further consideration to the potential impact of AB ratings on ID diagnosis in West Virginia, discrepancies between the DSM-5 and WVBE Policy 2419 cannot be forgotten. That is, it is theoretically easier to qualify a student in the area of AB when using criteria specified in WVBE Policy 2419 compared to the DSM-5, because any two out of eleven skills can be identified as deficits rather than one out of three core domains (WVBE Policy 2419, 2014). Separately, should the AB criteria be modified to require ratings from more than one source?

Regarding additional disability categories considered, SLD was identified with the lowest frequency of sufficiently comprehensive evaluations at 72.6%. This finding, although not statistically significant when compared to the rate of sufficiently comprehensive ID files, raises more concerns as to evaluation procedures for SLD. When assessing the SLD files in totality, many were classified with general referral concerns, such as, “placements needs,” “to determine special education eligibility,” or “academics.” For students who were referred under the global

term “academics,” an assessment of written expression was required to be considered sufficiently comprehensive. However, 8.1% of the evaluations were considered insufficient for failure to address written expression when “academics” was the reason for referral. Among other comparison groups, common reasons for being insufficient included blank or incomplete *Eligibility Determination Checklist* and failure to address all referral concerns (commonly specific academic concerns and behavioral/attention concerns).

When asked about practices that guide comprehensive evaluations, practitioners from LEAs 2 and 3 specifically cited WVBE Policy 2419 and “eligibility criteria” as sources that guide their evaluation process. Additionally, LEAs 2 and 3 reported consideration of SAT concerns (such as parent and teacher concerns), which eludes to a multi-disciplinary approach. Overall, the open-ended structure of the question may have inadvertently impacted the generic nature of many responses. That is, no practitioner specifically listed common components of a sufficiently comprehensive evaluation, such as a combination of hard and soft data, multi-disciplinary approach, consideration of additional disabilities, etc.

Comorbidity

In the ID sample of the current study, 32.3% qualified for a secondary exceptionality for either Other Health Impairment ($n = 1$; 2.9%), Speech/Language Impairment ($n = 9$; 26.4%), or both ($n = 1$; 2.9%). Investigators hypothesized that ID would most commonly co-occur with Other Health Impairment, as OHI encompasses a wide range of disorders that commonly co-occur with ID (American Psychiatric Association, 2013; Larson et al., 2001; Sattler, 2014). However, findings indicate that ID most commonly occurred with a secondary exceptionality of Speech/Language Impairment. Although not explicitly hypothesized, this finding is not surprising considering the impacts ID can have on language development.

When asked how additional areas of need are addressed in the evaluation process in the qualitative interview, practitioners generally provided feedback that was generic. For example, considering the “whole evaluation” and ensuring the evaluation is “always comprehensive” were among common answers. No practitioners specifically mentioned the *Eligibility Determination Checklist* as a measure used to ensure all areas of need were addressed; however, the record review confirmed that this checklist is frequently included (in 100.0% of the ID sample and 94.1% of the overall sample). Practitioners from LEA 1 expressed the difficulty of determining whether “low” scores are the result of ID or a comorbid diagnosis, an observation which is supported by findings from Bakken et al. and Sattler (2010; 2014).

Overall, the percentage of students who qualified with a comorbid disorder (32.3%) in the ID sample aligns with previous research in the field (Einfeld, et al., 2011; Woods et al., 2015), although the majority of comorbid disorders were for language impairments. However, it is possible that limited or nonexistent mental health resources in the LEAs of interest impacted the overall prevalence rate of comorbid disorders more commonly associated with mental health (i.e. depression). That is, some small and rural areas may be limited in the ability to identify and treat disorders due to limited resources, such as mental health care providers, or even limited knowledge in recognizing disorders.

Limitations and Future Research

Several limitations of the current study must be considered to guide future research. First, the limited size of the current study has several implications. For the archival record review, small sample sizes in only three out of West Virginia’s 55 LEAs made it impossible to determine potential statewide trends regarding comprehensive evaluation practices. For the qualitative interview component, small sample size of school psychologists currently practicing in the LEAs

of interest made it difficult to determine trends in the perceptions of best practice regarding ID assessment. Ideally, future research will include at least one LEA from each of West Virginia's eight Regional Education Service Agencies (RESAs). Second, the current study utilized a convenience sample for data collection and therefore could not randomly select districts to evaluate.

Third, the current study defined "sufficiently comprehensive" as the minimum requirement specified by federal special education law and state policy and did not explore what would be considered best practice or most ideal regarding evaluations for ID. In future studies, researchers should consider more specific literature regarding best practice for sufficiently comprehensive evaluations and how evaluations in West Virginia LEAs compare to national records. Fourth, small sample size prevented trends of some disability categories, such as Emotional Behavioral Disturbance, Autism Spectrum Disorder, and Speech/Language Impairment, from being considered separately. By increasing sample size, future studies would be better equipped to determine trends in these major disability categories and simultaneously address the potential impacts of diagnostic substitution.

Fifth, the archival record review was limited to cumulative records located at the Department of Special Education in each of the evaluated LEAs. It is possible additional information for some files was sourced in other locations, such as the student's current school. Sixth, researchers prepared for the interview component appropriately, and did not anticipate such general responses from practitioners. It is possible that practitioners are trained to provide this type of answer when questioned about practices, policies, and procedures they follow. For example, stating that one "follows policy" may act as a safeguard when answering audit questions, and as such the interviewed practitioners may have taken the same approach.

Finally, time was a limitation that impacted n size. Researchers of the current study did not appropriately consider the significant amount of time required to sufficiently review each student file.

Additional future considerations include further exploration of each prong for ID diagnosis and consideration of other potential, confounding variables to the ID prevalence rate. Some graduate students in the Marshall University School Psychology program have begun to explore these areas. Specific to ID diagnosis, considering trends in adaptive behavior ratings and different ranges of ID (borderline, mild, moderate, and severe/profound ranges), as well as exploration in the area of triennial evaluations, would be beneficial for better understanding how ID evaluations can impact prevalence rate over time.

Future research outside the scope of comprehensive evaluations in West Virginia is two-fold. First, future research should further explore the potential effects of poverty. Low socioeconomic status is considered highly correlated to rates of ID (Oswald, Coutinho, Best, & Nguyen, 2001). Moreover, West Virginia is reported as one of the most highly impoverished states in the nation (Stephens, 2015). Second, future research should expand outside of West Virginia to better understand how states are identifying students with ID nationwide, especially states with low rates of ID.

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APPENDIX A

TABLES

Table 1
Intellectual Disability Characteristics

	Age		Grade		Ability		Parent GAC		Teacher GAC		Broad Reading		Broad Math		Broad Writing	
	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>	<i>n</i>	<i>M</i>
ID	34	8.26	28	3.36	30	68.30	4	70.50	31	75.83	25	69.36	26	66.50	12	72.17

Table 2
Primary Disabilities Characteristics

Primary Disability	<i>n</i>	<i>M</i> Age	<i>M</i> Grade	<i>M</i> Ability	<i>M</i> Reading	<i>M</i> Math	<i>M</i> Writing
ID	34	8.26	3.36	68.30	69.36	66.50	72.17
SLD	62	9.38	3.57	85.78	74.82	76.04	82.28
Ineligible	17	9.29	4.25	85.18	87.93	88.47	90.88
OHI	13	10.76	4.92	81.75	82.83	78.69	83.71
Other	9	7.00	3.60	82.80	81.50	80.00	74.50
Total	135	9.06	3.75	80.71	76.47	75.97	81.28

Table 3
Sufficiently Comprehensive Evaluation Components

Primary Disability	Sufficiently Comprehensive		All Areas of Need Addressed		Soft Data		Multi-disciplinary		Considering Comordity	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
ID	29	85.3	29	85.3	34	100.0	34	100.0	34	100.0
SLD	45	72.6	46	74.2	61	98.4	62	100.0	58	93.5
Ineligible	13	76.5	13	76.5	17	100.0	17	100.0	17	100.0
OHI	10	76.9	11	84.6	12	92.3	12	92.3	11	84.6
Other	5	55.6	6	66.7	8	88.9	9	100.0	7	77.8
Total	102	75.6	105	77.8	132	97.8	134	99.3	127	94.1

Table 4
Consideration of Adaptive Behavior

Primary Disability	0 AB Raters		1 AB Rater		2 AB Raters	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
ID	3	8.8	27	79.4	4	11.8
SLD	54	87.1	8	12.9	0	0.0
Ineligible	16	94.1	1	5.9	0	0.0
OHI	12	92.3	0	0.0	1	7.7
Other	5	55.6	4	44.4	0	0.0
Total	90	66	40	29.6	5	3.7

Table 5
Comorbid Disabilities

Primary Disability	Comorbid Disability					
	OHI		Speech/Language		OHI & Speech/Language	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
ID	1	2.9	9	26.4	1	2.9
SLD	1	0.7	9	14.5	0	0.0

Table 6
Contingencies

Comprehensive?	Counts	ID	SLD	OHI	Other	Ineligible
No	Count	5	17	3	4	4
	Expected	8.3	15.2	3.2	2.2	4.2
	Adjusted R	-1.5	.7	-.1	1.4	-.1
Yes	Count	29	45	10	5	13
	Expected	25.7	46.8	9.8	6.8	12.8
	Adjusted R	1.5	-.7	.1	-1.4	.1

Table 7
Cramer's V Statistics

	Value	Approx. Significance
Cramer's V	.172	.404

Table 8
ANOVA Summary of Composite Scores

		Sum of Squares	df	Mean Square	f	Significance
FSIQ	Between Groups	6381.049	4	1595.262	23.776	.000
	Within Groups	7581.154	113	67.090		
	Total	13962.203	117			
Broad Reading	Between Groups	3972.098	4	993.024	6.849	.000
	Within Groups	15369.542	106	144.996		
	Total	19341.640	110			
Broad Math	Between Groups	4851.991	4	1212.998	12.472	.000
	Within Groups	10600.930	109	97.256		
	Total	15452.921	113			
Broad Writing	Between Groups	1895.323	4	473.831	3.005	.026
	Within Groups	8358.263	53	157.703		
	Total	10253.586	57			

Table 9
Post-Hoc Analysis of Composite Scores

Dependent Variable	I	J	Mean Difference	Standard Error	Sig.	95% Confidence Interval	
						Lower	Upper
Full Scale	ID	SLD	-17.478*	1.865	.000	-22.82	-12.14
		OHI	-13.450*	2.798	.000	-21.46	-5.44
		Other	-14.500*	3.957	.004	-25.83	-3.17
		Ineligible	-16.876*	2.487	.000	-24.00	-9.76
Broad Reading	ID	SLD	-5.458	2.904	.630	-13.79	2.87
		OHI	-13.473*	4.229	.019	-25.60	-1.35
		Other	-12.140	6.485	.639	-30.73	6.45
		Ineligible	-18.573*	3.933	.000	-29.85	-7.30
Broad Math	ID	SLD	-9.536*	2.347	.001	-16.26	-2.81
		OHI	-12.192*	3.350	.004	-21.79	-2.59
		Other	-13.500	4.816	.060	-27.30	.30
		Ineligible	-21.967*	3.198	.000	-31.13	-12.80
Broad Writing	ID	SLD	-10.109	4.310	.228	-22.74	2.52
		OHI	-11.548	5.973	.585	-29.04	5.95
		Other	-2.333	9.591	1.000	-30.43	25.76
		Ineligible	-18.708*	5.732	.019	-35.50	-1.92

APPENDIX B



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

FWA 00002704

IRB1 #00002205
IRB2 #00003206

May 2, 2016

R. Lanai Jennings, PhD
School Psychology Department, MUGC

RE: IRBNet ID# 798247-1

At: Marshall University Institutional Review Board #2 (Social/Behavioral)

Dear Dr. Jennings:

Protocol Title: [798247-1] West Virginia School Age Disability Identification Practices Project

Expiration Date: May 2, 2017

Site Location: MUGC

Submission Type: New Project APPROVED

Review Type: Expedited Review

In accordance with 45CFR46.110(a)(7), the above study and informed consent were granted Expedited approval today by the Marshall University Institutional Review Board #2 (Social/Behavioral) Chair for the period of 12 months. The approval will expire May 2, 2017. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

This study is for students Charles Cooper, Ashleigh Dotson, Meghan Guz, Brittany Johnson, Jennifer Perdue, Felisha Nutter, Elizabeth Robinson, and Bryanna Doughty.

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

APPENDIX C

DISTRICT ID: 43

CASE NUMBER (NOT WVEIS ID): _____

DATE OF INITIAL EVALUATION						
SEX						
AGE						
GRADE						
RACE/ETHNICITY						
ELIGIBLE						YES NO.
DISABILITY CATEGORY (primary) NA – ineligible above						
ID Mild ID Moderate ID Severe/Profound						
Other Health Impairment Language/Communication Impairment Autism						
Specific Learning Disability Emotional Behavioral Disorder						
DISABILITY CATEGORY (secondary) <i>Check IEP for speech/language services too.</i>						
No secondary disabilities						
ID Mild ID Moderate ID Severe/Profound						
Other Health Impairment Language/Communication Impairment Autism						
Specific Learning Disability Emotional Behavioral Disorder						
Adaptive Y	IQ Y	Soft Data Y	All referral Concerns Addressed Y	Multi- Disciplinary Y	Eligibility Checklist Yes NO	
N	N	N	N	N	If no, any similar documentation.	
NOTES/ Types of Assessment					Referral Reason	
If re-evaluation...Is physician diagnosis available? YES NO						
<u>List diagnoses and dates if applicable</u>						

ASSESSMENT DATA FOR ALL INITIAL REFERRALS

Date of Cognitive Evaluation	Names of Cognitive Tests Administered
Global Composite Scores and Index or Cluster Scores (please be comprehensive)	
Date of Achievement Testing	Names of Achievement Tests Administered
Broad Achievement and Composite Scores (Broad Reading, Broad Math, and Broad Written Language or the equivalent)	
Date of Adaptive Testing	Names of Adaptive Tests Administered
<p>_____ Parent Rating 1</p> <p>Global Adaptive Composite/ Standard Score _____</p> <p>Conceptual Standard Score = _____</p> <p>Social Standard Score = _____</p> <p>Practical Standard Score = _____</p> <p>_____ Parent Rating 1</p> <p>Communication _____ F. Academics _____</p> <p>Self-Direction _____ Leisure _____</p>	<p>_____ Teacher Rating 1</p> <p>Global Adaptive Composite/ Standard Score = _____</p> <p>Conceptual Standard Score = _____</p> <p>Social Standard Score = _____</p> <p>Practical Standard Score = _____</p> <p>_____ Teacher Rating 1</p> <p>Communication _____ F. Academics _____</p> <p>Self-Direction _____ Leisure _____</p>

<p>Social _____ Community Use _____</p> <p>Home/School Living _____ Self Care; _____</p> <p>Health and Safety: _____ Work _____</p> <p>OTHER: _____</p>	<p>Social _____ Community Use _____</p> <p>Home/School Living _____ Self Care; _____</p> <p>Health and Safety: _____ Work _____</p> <p>OTHER: _____</p>
<p>_____ Parent Rating 2</p> <p>Global Adaptive Composite/ Standard Score = _____</p> <p>Conceptual Standard Score = _____</p> <p>Social Standard Score = _____</p> <p>Practical Standard Score = _____</p> <p>Communication _____ F. Academics _____</p> <p>Self-Direction _____ Leisure _____</p> <p>Social _____ Community Use _____</p> <p>Home/School Living _____ Self Care; _____</p> <p>Health and Safety: _____ Work _____</p> <p>OTHER: _____</p>	<p>_____ Teacher Rating 2</p> <p>Global Adaptive Composite/ Standard Score = _____</p> <p>Conceptual Standard Score = _____</p> <p>Social Standard Score = _____</p> <p>Practical Standard Score = _____</p> <p>Communication _____ F. Academics _____</p> <p>Self-Direction _____ Leisure _____</p> <p>Social _____ Community Use _____</p> <p>Home/School Living _____ Self Care; _____</p> <p>Health and Safety: _____ Work _____</p> <p>OTHER: _____</p>
<p>Physician diagnosis available YES NO</p> <p>List diagnoses and dates if applicable</p>	
<p>NOTES:</p>	