

MOVING TOWARD SOCIAL JUSTICE FOR HISPANIC CHILDREN USING A NEUROCOGNITIVE METHOD FOR THE ASSESSMENT OF SLD

AVANZANDO HACIA LA JUSTICIA SOCIAL PARA LOS NIÑOS HISPANOS USANDO UN
MÉTODO NEUROCOGNITIVO PARA LA EVALUACIÓN DE TEAp

Recibido: 03 de septiembre de 2018 | Aceptado: 17 de octubre de 2018

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ABSTRACT

The purpose of this article is to present legal aspects related to the evaluation processes of Hispanic students with SLD and propose a neurocognitive approach in the diagnostic process of them. Health Inequities have been evidenced in Hispanic population. Federal regulations, regarding special education eligibility services, encourage the inclusion of measures of psychological processes to identify SLD's. The laws also establish that these assessments must not be discriminatory on a racial or cultural basis. Research-based assessment approaches, such as the Discrepancy/Consistency (D/C) Method (Naglieri, 2011; Naglieri & Otero, 2017), to identify students with different diagnosis using neurocognitive measures have been suggested as reliable and valid method to serve populations with cultural diversity (Sotelo-Dynega, Flanagan & Alfonso, 2011).

KEYWORDS: Law, Policy, Special Education Law, Neucognitive Model PASS, Social Justice.

ABSTRACT

El propósito de este artículo es presentar aspectos legales relacionados con los procesos de evaluación de estudiantes hispanos con TEAp y proponer un enfoque neurocognitivo en el proceso de diagnóstico de los mismos. Inequidades de salud se han evidenciado en la población hispana. Las regulaciones federales, con respecto a los servicios de elegibilidad para educación especial, alientan la inclusión de medidas de procesos psicológicos para identificar TEAp. Las leyes también establecen que estas evaluaciones no deben ser discriminatorias por motivos raciales o culturales. Los enfoques de evaluación basados en la investigación, como el Método Discrepancia / Consistencia (D / C) (Naglieri, 2011; Naglieri y Otero, 2017), para identificar a estudiantes con diferentes diagnósticos usando medidas neurocognitivas han sido sugeridos como un método confiable y válido para atender a las poblaciones con diversidad cultural (Sotelo-Dynega, Flanagan y Alfonso, 2011).

PALABRAS CLAVE: Ley, Política Pública, Ley en Educación Especial, Modelo Neurocognitivo PASS, Justicia Social.

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“To criticize inequality and to desire equality is not, as is sometimes suggested, to cherish the romantic illusion that men are equal in character and intelligence. It is to hold that, while their natural endowments differ profoundly, it is the mark of a civilized society to aim at eliminating such inequalities as have their source not in individual differences but in (social) organization.” R.H. Tawney

The United States Census Bureau estimated that by July 2016 the U.S. Hispanic population was 18% of the total U.S. population and by 2020 would be 19% (USCB, 2017). Examining school age populations, by 2020 Hispanic's children will represent 27% of U.S. Public school enrollment (NCES, 2015) and are projected to represent 30% by 2023 (USCB, 2017). Migration tendencies in some Latin-American countries suggest that the increased tendencies of Hispanics in the U.S. will remain. Growth rates for Hispanic children exceeds those of other minority groups, they have disproportionately high prevalence of health disease and limited access to healthcare (Zambrana & Logie, 2000). Similarly, a large number of these children have learning difficulties, and they are eligible for special educational services (Alliance for Excellent Education, 2006). According to the U.S. commission on civil rights (2009) an overrepresentation in special education is concentrated among minority groups, including Hispanics. There is inequality in educational opportunities, and children who were misidentified with a specific learning disabilities (SLD) or who were never identified could be significantly harmed. The described situation presents a serious problem that demands psychological and educational research and has important legal considerations with which researchers and professionals in both fields of knowledge should be acquainted.

Against this scenario, it is urgent to examine non-discriminatory diagnostic evaluation methods that provide reliable data

to guide interventions for the growing Hispanic population. Hispanic children with special education needs are victims of disproportionate inadequate access to services and related inequities (Shiffer et al. 2011), and it has been suggested that legislation does not consider Hispanic children needs (Hacker et. al, 2015). The purpose of this article is to present legal aspects related to the evaluation processes of Hispanic students with SLD and propose a neurocognitive approach in the diagnostic process of them.

Health Inequities have been evidenced in Hispanic population. For example, 22 percent of Puerto Rican children have asthma compared to 15 percent of non-Hispanic blacks and 11 percent of non-Hispanic white children. Also, all Hispanic groups except for Cuban Americans have significantly higher prevalence of diabetes than non-Hispanic whites, with Puerto Ricans and Mexicans having twice the rate of diabetes as non-Hispanic whites (National Research Council, 2002). Compared to non-Hispanic white children, Hispanic children are twice as likely to develop asthma and are 60% more likely to develop depression and attempt suicide as a high-schooler (FUSA, 2014). Hispanic youth has the fastest growing rates of Type 1 and Type 2 diabetes, outpacing other ethnic groups (Dabelea et al., 2014). These children are less likely to have health insurance as well (Bloom et al., 2009).

The lack of access to adequate health services for Hispanic children with chronic conditions such diabetes, as well as the lack of adequate access to educational services for those with SLD, evidence the unfairness on current legislation. In fact, several health problems have been demonstrated to impact neurocognitive processes and academic achievement (Compas, Reesiund, Patel & Yarboi, 2017). According to the U.S. commission on civil rights (2009) an overrepresentation in special education is concentrated among minority groups, including Hispanic. This trend confronts

school systems with several challenges in the assessment and interventions with this population. Federal regulations, regarding special education eligibility services, encourage the inclusion of measures of psychological processes to identify SLD's. The laws also establish that these assessments must not be discriminatory on a racial or cultural basis.

Research-based assessment approaches, such as the Discrepancy/Consistency (D/C) Method (Naglieri, 2011; Naglieri & Otero, 2017), to identify students with different diagnosis using neurocognitive measures have been suggested as reliable and valid method to serve populations with cultural diversity (Sotelo-Dynega, Flanagan & Alfonso, 2011). Based on the Planning, Attention, Successive and Simultaneous Processing theory (PASS), the D/C Method makes emphasis in the analysis of the pattern cognitive strengths and weakness (PSW) rather than acquired ability, which is determined by culture and language. PASS theory represents a fusion of cognitive and neuropsychological constructs including executive functioning (planning); selective, sustained and shifting attention (attention); visual-spatial tasks (simultaneous); and serial features of language and memory (successive). There is evidence that scores based on neurocognitive measures developed from the PASS theory obtain minimal differences between race and ethnic groups (Otero, González, & Naglieri, 2013), and it is linked to assessment and interventions tools in a less discriminatory, racial or cultural basis (Sepúlveda & Moreno, 2014). Aligned also with current federal and state law and policy as well as with the goal of achieving social justice for our Hispanic youth.

To achieve social justice and equity for this population we need to examine law and policy in a broader sense and select evaluation methods aligned to them. We must start the examination through the biggest aspiration to stop inequities according to human rights, as well as how it relates to public health and

public policies and laws, to guarantee access to needed services for this population. It is necessary that professionals who service ethnic minorities know the legal procedures for better clinical practices, which include the evaluation of neurocognitive processes, for the benefit of Hispanic children in the United States and, its territories, such as Puerto Rico. In this article, we present a neurocognitive method to evaluate and intervene with this population that is aligned with a human rights approach as well as with current binding law and policy.

Approach

The approach used in this article was a reflexive analysis of the practice (Pacheco Lora, 2013). In the educational field this qualitative method is being increasingly used. It is made up of different strategies, of which we use two: analysis of observations and dialogical inquiry. The dialogue about observations of the practice with the practitioners is a strategy that allows the analysis of implicit conceptions that can hinder or facilitate the activity that is carried out. In this work, the analysis was oriented to the correspondence of a neuropsychological model with the laws and policies in special education and its use for the practice of psychoeducational evaluation. We draw from our collective expertise and academic backgrounds in psychology, law, and public health. Furthermore, the article is based on cross disciplines and theoretical perspectives drawn from law, psychology and public health.

This writing is the result of an integration of literature reviews of federal and state regulations related to the evaluation, diagnosis, and intervention of children with SLD. Here we offer a rich interdisciplinary approach to evaluation of SLD in Hispanic children that can contribute to the establishment of best practices with regard to achieving social justice and leveling-up existing inequalities. Through the interpretation of available binding regulations and available neurocognitive methods, this

article identifies a model that responds to the presented laws.

Theoretical Framework

Professionals in the field of clinical, neuro and school psychology, as well as test authors have become increasingly mindful of the need for theory-based intelligence tests. Several theories of intelligence have been attached to traditional ability tests such as the Wechsler scales (Plucker & Esping, 2014). We have observed several of these to applied to existing tests in a seemingly ad hoc manner. One theory, first described by Das, Kirby, and Jarman (1979), was used explicitly to develop a new way to build an intelligence test from the ground up. In 1997 Naglieri and Das (1997a) published the Cognitive Assessment System (CAS) that was built on a PASS neurocognitive theory. These authors reasoned that a neurocognitive theory of intelligence provides the foundation necessary for test construction and equally important for test interpretation. Additionally, these authors anticipated that the PASS neurocognitive approach would yield better diagnostic information, have relevance to instructional decision making, and be more appropriate for diverse populations (Naglieri & Otero, 2011, 2017). PASS theory was most recently operationalized by the Cognitive Assessment System, Second Edition (CAS2) English version (Naglieri, Das, & Goldstein, 2014a), Spanish version (Naglieri, Moreno & Otero, 2017), CAS2: Brief (Naglieri, Das & Goldstein, 2014b), and the CAS2: Rating Scale (Naglieri, Das, & Goldstein, 2014c).

The PASS neurocognitive theory advances a concept of intelligence and learning that is best measured using tests devised explicitly to measure the four PASS processes. Furthermore, the impetus for developing PASS theory and apply the theory to development a test of intelligence is because the authors believe that a test should be designed explicitly to measure specific constructs defined by the theory raising two important questions: First, what is a theory?

Second, what is a neurocognitive process? A theory is an organized set of concepts that explains a phenomenon or set of phenomena, preferably in the most parsimonious manner. Theories are concise, coherent, systematic, predictive, and broadly applicable, often integrating and generalizing many hypotheses. A test of neurocognitive functions should measure psychological processes based on a coherent theory that provides useful information in a concise and systematic way. There are different definitions in the literature for the term psychological process. However, all definitions share the notion that a psychological process involves the performance of some composite cognitive activity. Moreover, a test of neurocognitive processing should measure thinking apart from knowing.

Origins of the PASS Theory. The PASS theory is based on the neuropsychological, information processing, and cognitive psychological research of A. R. Luria (1966, 1973, 1980a, 1980b, 1982). Luria's view of the brain function was partially based on his own research and the integration of his findings with those of other researchers to whom he gives ample credit in his 1973 book: *The Working Brain: An Introduction to Neuropsychology*. Luria described the basic building blocks of intelligence as functional systems. Luria viewed the PASS cognitive processes to be dynamic. Each functional system was characterized by a specific aim and carried out by several participating subprocesses. Modern neuroscience methods of studying the brain have validated and extended Luria's original conceptualizations and these have been explicitly delineated in recently by (Naglieri & Otero, 2018).

The three-brain systems Luria spoke of are referred to as "functional units" because the neurocognitive mechanisms work in separate but interrelated systems. Recent functional magnetic resonance imaging (Avram et al. 2013; Zaytseva et al. 2014; Yeo et al. 2011) have shown that each area of the brain

participates in numerous large and small scale functional systems within and across cortical and subcortical brain structures (Koziol, Barker, Joyce & Hrin, 2014). Cognition and behavior are a product of functional brain networks and these have a profound impact on constructs such as attention, executive function, learning and memory, and information processing.

Three Functional Units. The function of the first unit provides regulation of cortical arousal and attention; the second codes information using Simultaneous and Successive processes; and the third provides for strategy development, strategy use, self-monitoring, and control of cognitive activities. These functional units also intersect with functional networks. The functional units and networks of the brain provide the infrastructure necessary to interact with the environment, acquire knowledge, and learn.

First Functional Unit. The attention–arousal system is the first of these three functional units of the brain, and is located primarily in the brainstem, the diencephalon, and the medial regions of the cortex (Luria, 1973b) and subserves the Attention process of PASS. This unit provides the brain with the appropriate level of arousal or cortical tone, as well as directive and selective attention. When many stimuli are presented to a person who is then required to pay attention to only one stimulus, the inhibition of responding to other (often more salient) stimuli and the focus of attention to the target stimulus, depends on the first functional unit. Moreover, only when individuals are aroused sufficiently, and their attention is focused adequately can they utilize processes in the second and third functional units. Activation of the first functional unit exerts influence on the dorsal and ventral attention networks. The ventral attention network (VAN) informs other brain regions about the importance of what is being attended to externally, and the dorsal attention network's (DAN) role is to shift the focus of attention (Naglieri & Otero, 2018).

Second Functional Unit. The second functional unit provides for Simultaneous and Successive processing through the activation and coactivation of the frontal-parietal network and the temporal/parietal junctions of both the right and left hemispheres. Activation of the parietal regions is vital to both simultaneous and successive processing as this region is considered the association cortex, a zone in which many related functions such as attention, spatial representation, working memory, eye movements, an assortment of other sensory information, and the guidance of actions come together.

Simultaneous is a neurocognitive ability used to integrate separate stimuli into a single whole or interrelated group (Naglieri et al., 2014a). The essence of Simultaneous processing is that separate elements must be combined into a conceptual whole. For example, for a person to produce a diagram correctly when given the instruction, “Draw a triangle above a square that is to the left of a circle under a cross,” the relationships among the different shapes must be comprehended correctly. Another example is comprehending the main idea of a story or movie. In short, simultaneous processing involves understanding and appreciating how the separate parts of a task result in a final product. Whereas simultaneous processing involves working with stimuli that are interrelated, successive processing is important whenever actions or information form a chain-like progression.

Successive is a neurocognitive ability used to work with information that is arranged in a specific serial order in which each part follows the other in a strictly defined order (Naglieri et al., 2014a). Successive processing is the primary neurocognitive process used in the production of sequences of sounds used to make words, decoding of unfamiliar words, production of syntactic aspects of language, and speech articulation. Other examples of successive processing include, following a sequence such as the order of operations in a math problem. Initial learning of most any new

activity or task often requires the use of successive processing. While simultaneous processing involves integration of separate elements into a cohesive whole, successive processing allows the learner to acquire the steps needed to solve a task.

Third Functional Unit. The third functional unit subserves the Planning process, is associated with the prefrontal areas of the frontal lobes of the brain (Luria, 1980) and interacts with the networks previously mentioned as well as the frontal-parietal and the somatosensory networks. Luria stated that “the frontal lobes synthesize the information about the outside world . . . and are the means whereby the behavior of the organism is regulated in conformity with the effect produced by its actions” (1980, p. 263). This functional unit provides for the programming, regulation, and verification of behavior, and is responsible for behaviors such as asking questions, solving problems, and self-monitoring (Luria, 1973b). The frontal lobes interact with posterior areas of the brain, establishing the Frontal-parietal network

(FPN). The FPN consists of the dorsolateral prefrontal cortex, anterior cingulate, anterior insula, caudate nucleus, and inferior parietal lobe. The left hemisphere FPN is responsible for internally guided behavior; the right FPN is activated by external influences when situations or information are unfamiliar and require problem solving. From a network perspective, the frontal systems of the brain need to have reciprocal interactions with posterior cortices and subcortical regions to produce the most complex of human behaviors. It is important to underlie the importance of Luria’s conception to current neurocognitive research (Ardila, 2018) and to consider its implications for cognitive assessment (Kozulin, 2014; Rodríguez Arocho, 2011) and cognitive education (Daniels & Hedegaard, 2011).

PASS processes are specifically related to behaviors that link to academic functioning. Table 1 presents examples of behaviors that may be present when a student has a weakness in one of the four PASS processes.

TABLE 1.
Examples of difficulties related with weakness in the PASS processes.

PASS Process	Problem Behavior
Planning	Using the same strategy even if it is not effective
	Struggling with how to complete tasks
	Not monitoring progress during a task
	Misinterpretation of what is read
Attention	Trouble focusing on what is important
	Difficulty resisting distractions
	Providing incomplete or partially wrong answers
	Unable to see all the details
Simultaneous	Providing incomplete or partially wrong answers
	Difficulty comprehending text
	Difficulty with math word problems
	Trouble with spatial tasks
Successive	Often miss the overall idea
	Trouble blending sounds to make words
	Reading decoding problems
	Difficulty remembering numbers in order
	Difficulty remembering steps to solve a variety of problems

Intelligence tests can play critically important roles in explaining academic performance and predicting future achievement. Studying the relationship between IQ and achievement is problematic by the fact that IQ test items often measure very similar content to achievement tests (e.g., vocabulary, arithmetic word problems, etc.). The similarity in content gives IQ tests an advantage over those measures that do not include verbal and quantitative test items (see Naglieri & Bornstein, 2003). Naglieri (1999) reported that the correlations between achievement test scores with the CAS and K-ABC were as high or higher than those found for the WISC-III and WJ-R. The results for the CAS were later reported by Naglieri and Rojahn (2004), who examined the relationships between the Planning, Attention, Simultaneous, and Successive scores as operationalized by the CAS, and achievement as measured by the Woodcock-Johnson Tests of Achievement-Revised (WJ-R; Woodcock & Johnson, 1989), using a nationally representative sample of 1,559 students. The correlation between the CAS Full Scale with the WJ-R was .71 and Naglieri et al. (2014a) reported an average correlation between the CAS2 and achievement of .70. Most important, the correlation for the CAS, which does not include these achievement-laden subtests was as high or higher than other traditional tests of intelligence.

These findings, as well as others (Naglieri & Bornstein, 2003; Naglieri & Rojahn, 2004) of the PASS theory as measured by the CAS and CAS2 illustrate that this neurocognitive approach to understanding intelligence is strongly correlated with achievement test scores, demonstrate that PASS processes are as effective for prediction of academic performance as traditional IQ tests even though the CAS and CAS2 do not include academically laden measures such as vocabulary and arithmetic. This provides an advantage for understanding achievement strengths and weaknesses for children who may be second language learners, come from disadvantaged environments, as well as those

who have had a history of academic failure. Being able to distinguish among these understandings about the profile of a child is the providers' responsibility to properly comply with current law to make sure that no bias or discrimination takes place at the time of diagnosis.

Discrepancy/Consistency Method

Comparing PASS scores to achievement test scores is a fundamental step in understanding if a cognitive processing strength corresponds to an academic strength and if a cognitive processing weakness corresponds to an academic weakness. There are several methods for detecting a Pattern of Strengths and Weaknesses (PSW) that can be used as part of the process of identifying a student with a specific learning disability have been suggested by Naglieri in 1999, Hale and Fiorello in 2004, and by Flanagan, Ortiz and Alfonso in 2007 (see Flanagan, D. P., & Alfonso, V. C. [2018] for updates on these other methods). The method of comparing PASS scores with a variety of achievement tests can be accomplished using the same methods following from Anastasi and Urbina (1997). Naglieri & Otero (2017) provide the values needed for significance for various tests by using the standard errors of measurement reported in the technical manuals such as the KTEA-3 (Kaufman & Kaufman, 2015); WIAT-III (Wechsler, 2015); WJ-IV (McGrew, LaForte & Schrank, 2014), Feifer Assessment of Reading (FAR; Feifer, 2015); Feifer Assessment of Math (FAM; Feifer, 2016); and the Bateria-III (Muñoz-Sandoval, Woodcock, McGrew, & Mather, 2005). The comparisons between ability (PASS neurocognitive) and achievement (reading, math, etc.) are effectively accomplished by the CAS2 because the PASS test items do not rely heavily on knowledge. Therefore, there is no content contamination, as items require very little knowledge.

Discrepancy/Consistency Method (DCM) should be used for the identification of SLD

based on a systematic examination of the variability of PASS scores from the CAS2 and academic achievement test scores. This method is based on evidence of a PASS weakness as and of variability in achievement test scores corresponding to PASS strengths and weaknesses. The result is two discrepancies and one consistency: 1) A discrepancy between high and low PASS scale scores; 2) A discrepancy between high PASS scores and low achievement test scores; and 3) A consistency between the PASS weakness(es) and low achievement test scores.

When these two discrepancies and a consistency are found, there is evidence that a child has “a disorder in the basic psychological processes” with academic failure, thereby identifying that student as having a specific learning disability (Naglieri, 1999, 2005, 2011).

A decision tree that can be used for determining that there is a pattern of strengths and weaknesses following the Discrepancy/Consistency Method are provided in Figure 1, and a graphic representation of findings of PASS scores and Reading achievement from the Bateria-III is found in Figure 2.

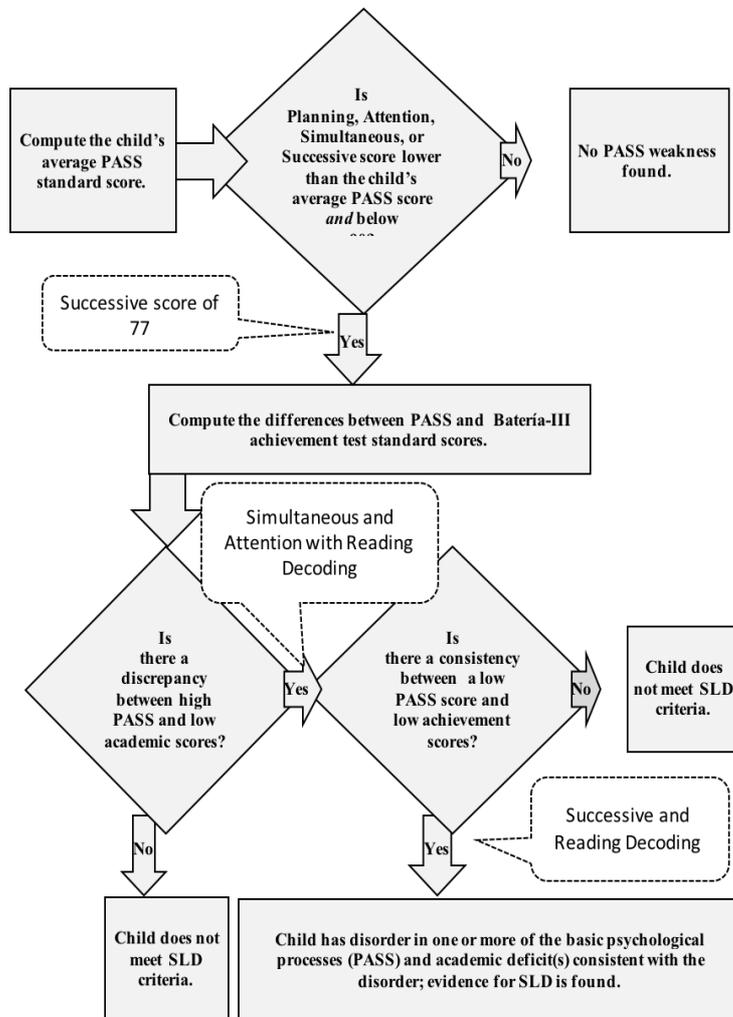


FIGURE 1. Using the Discrepancy Consistency Method for SLD Eligibility Determination.

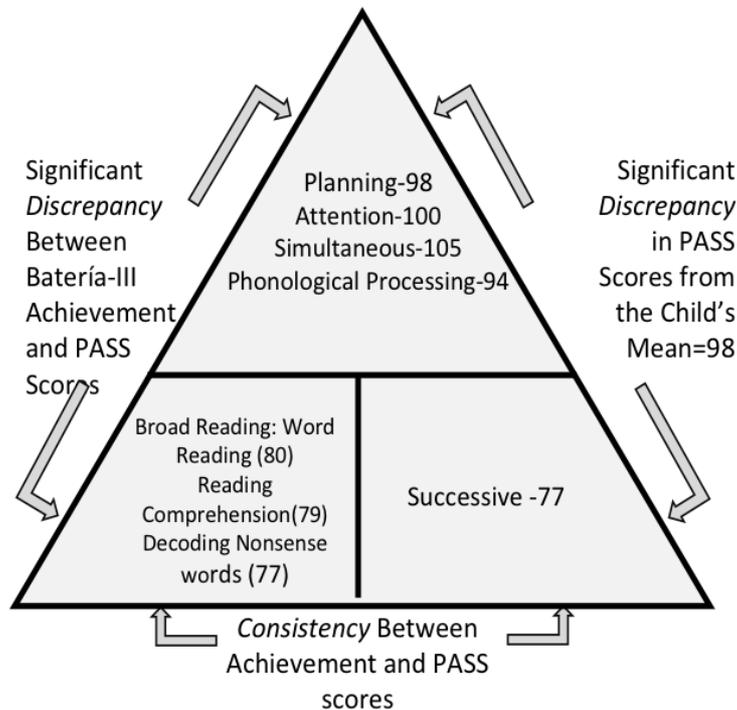


FIGURE 2.
PASS and Achievement scores for the Discrepancy/Consistency Method.

This model is aligned with legislation put forth for the adequate, comprehensive evaluation and diagnosis of a SLD. Evidence of a 'disorder in one or more of the basic psychological processes' referred to in IDEA is found in the Successive processing weakness and when combined with similarly low reading decoding scores eligibility is further supported. This kind of a weakness working with information that demands sequencing underlies that ability to successfully decode words, especially noted by a pseudo word decoding task. The lack of a significant difference (the consistency) between the low Successive score and reading scores for this illustration provides evidence of a cause of the academic failure (assuming adequate instruction, motivation to learn, etc.). The significant difference between the high PASS scores and the two low reading scores further suggests that the student's achievement is below the ability to work with information that forms a whole as well as to attend, shift focus and resist distraction. This evidence, in conjunction with other relevant

data and when other inclusionary/exclusionary conditions are also met supports eligibility as a student with a SLD.

DISCUSSION

Race and ethnic differences

The need for tests of ability to be appropriate for diverse populations has become more important as the characteristics of the populations we serve are ever increasingly diverse. Recent federal law (e.g., IDEA 2004) stipulates that assessments must be selected and administered so as to be nondiscriminatory on a racial or cultural basis. The psychometric analysis should include internal evidence such as reliability, item difficulty, factor structure, as well as mean score differences. Some researchers have suggested that conceptualizing intelligence on the basis of neuropsychological abilities would make tests more appropriate for diverse populations (Fagan, 2000; Naglieri, 2005).

Fagan (2000) and Suzuki and Valencia (1997) argued that measures of cognitive processes that do not rely on tests with language and quantitative content are more appropriate for assessment of racially, culturally and linguistically diverse populations.

Evidence of smaller race differences for a different kind of ability test was reported in the original K-ABC manual. For children ages 2.5 to 12.5, without controlling for background variables, Whites (N = 1,569) scored 7 points higher than African Americans (N = 807) and 3 points higher than Hispanics (N = 160) on the global measure of mental processing (i.e., the total test score). These differences are smaller than the differences of 16 points and 11 points, respectively, reported for the WISC-R Full Scale IQ (Kaufman & Kaufman, 1983, Tables 4.36 and 4.37; Kaufman, Lichtenberger, Fletcher-Janzen, & Kaufman, 2005, Table 6.7). Naglieri et al. (2005) compared PASS scores on the CAS for 298 African American children and 1,691 White children. Controlling for key demographic variables using regression analyses, they found a CAS Full Scale mean score difference of 4.8 points in favor of White children. Similarly, Naglieri, Rojahn, et al. (2007) studied the use of the PASS scores as measured by the CAS with Hispanic children by comparing Hispanic and White children. The study showed that the two groups differed by 6.1 points using unmatched samples, 5.1 with samples matched on basic demographic variables, and 4.8 points when demographics differences were statistically controlled.

Naglieri, Otero, et al. (2007) compared scores obtained on the CAS when administered in English and Spanish to bilingual children (N = 40) referred for reading difficulties. They found a 3.0 points difference between the CAS Full Scale scores, and these scores were highly correlated (.96). Otero, Gonzalez, and Naglieri (2013) replicated that study with another group of students referred for reading problems and found CAS Full Scale scores that differed by less than 1 point and had a high correlation between the scores

(.94). Results for the CAS2 Full Scale scores were reported in the test manual (Naglieri et al., 2014a & b).

Law: Aspirations and Standards

Achieving social justice and equity is not possible if we do not base such hopes within an enforceable context, such as the one provided by law and policy. Justice and the effective eradication of inequalities begin with human rights. It starts by establishing access to education as a fundamental right. Furthermore, it is achieved by access to education as a fundamental right; this cannot be achieved if proper legislation to guarantee equal access and equal benefit for all is not provided. Such access to enjoy fundamental rights is not possible if social determinants are not considered. Unfortunately, law and policy, do little in establishing warranties to prevent social determinants and institutional inequalities to keep people away from benefiting the full extent of available rights and liberties. In spite of the deficiency of current laws and policies, current legislation sets the foundation for a comprehensive system to properly serve our SLD population. Based on current legislation, providers can serve Hispanic children, to the standards set by law considering their diversity in hopes of aiding them to achieve justice and equity if a proper model is used to serve Hispanic children needs while complying with the law. The D/C method is an alternative that can guarantee children from diverse background experiences, language, and culture to be consistently appropriately diagnosed.

Human Rights. The primary goal of law is to provide justice to all its citizens without discriminating or limiting their access to the full enjoyment of the rights guarantee under our legal system. Justice represents the enjoyment of the rights and adequate access to benefit from them regardless of one's race, ethnic, language or culture. Human rights are the basis for the respect of human dignity in its broadest sense. Based on this approach then, individual's dignity and attainment of its

full development is the goal. This is why the Universal Declaration of Human Rights on Article 26, enumerate education as a fundamental right in order to secure individuals' right to enjoy an education. Furthermore, it argues that an education must be directed to fulfill citizens "human development". Moreover, the United Nations have additionally established the Convention of the Rights of the Child, where once more education is considered a fundamental right. Specifically, Article 29 of the Convention of the Rights of the Child establishes that a child's education must be directed so as to achieve the "development of the child's personality, talents and mental and physical abilities to their fullest potential" (NESRI, 1990).

Human rights represent the foundation to achieve social justice yet modern democracies, like the United States, failed to properly legislate and further "protect people from structural inequalities that amount to systematic assault on human dignity" (NESRI, 2016). Human rights lack a system to properly implement and enforce such fundamental rights, serving then just as a mere aspiration and inspiration for the development of law, policy, and best practices to better serve our communities while respecting their dignity to the fullest extent. Because nothing can be achieved without respect for human dignity human rights serve as guide for best practices and advocacy for policy and law development and implementation.

Federal Law. Within the legal structure of the United States and its territories the hierarchy of powers is as follow: U.S. Federal Constitution, Federal law, and finally, State law at the bottom of the hierarchy. Based on that model of powers the first binding force is the United States Constitution. The U.S. Constitution do not explicitly considers based on its language and U.S. Supreme Court interpretation, education as a fundamental right. More in detail, in the U.S., "there is no explicitly enumerated positive fundamental federal constitutional right to education" (Smith, 1997; Urchick, 2007). Nonetheless,

the fourteenth and the tenth amendment guide states to somewhat provide a right of education that the federal government contemplates yet has failed to positively protect and guarantee as a fundamental right.

The lack of a constitutional guarantee to positively protect education has led to the development of several federal legislations to set forth the minimum securities push by the government and the powers of the U.S. Constitution to safeguard people's minimum right to education and enjoyment of equal access to it. When it comes to children and youth with learning disabilities, access to their full enjoyment of their rights, the primary legislations on a federal level are the Individuals with Disabilities Education Act (IDEA), American Disability Act (ADA), and Section 504 from the Civil Rights Act.

IDEA's purpose is to make certain that "all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for future education, employment, and independent living" (20 USC § 1400 (d)(1)(A)). For a child to be covered he or she must fit into one of the listed disabilities categories under IDEA, under which one is SLD (Colker et. al., 2013). IDEA then defines a specific learning disability as a "disorder in one or more of the basic psychological process involved in understanding or using language, spoken, written, which disorder can manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (20 USC § 1401 (30)). Here the key is the language of the law, in how it defines a SLD as a "basic psychological process" (meaning practitioners must seek ways to evaluate and intervene with these underlying processes) and how SLD manifest as an "imperfect ability", not a failure necessarily, but an imperfect ability. Congress even put forward under IDEA specifically that it "shall not be required to take into consideration whether a child has a severe discrepancy between achievement

and intellectual ability” (20 USC § 1414 (b)(6)(B)). This mentioned discrepancy refers to the formula not the discrepancy model, since IDEA does not preclude districts from using the discrepancy model, which is also recognized in ADA and Section 504 and is “fundamental to the category of learning disorders as it separates learning disorders from other disorders” (Colker et. al., 2013). In this matter, once again the PASS as conceptualized by the CAS can provide the correct information, based on the D/C method to properly identify, diagnose and intervene accordingly with children in a timely, fair and effective way.

ADA likewise, provides that the application of the definition for disability must be considered in the highest favorable range for individuals who can qualify for services under the provisions of the law (Sepulveda & Moreno, 2014). ADA, just as IDEA, defines a SLD as “impairment in a process that leads to the imperfect ability to engage in activities” (Colker et. al., 2013). More in depth, ADA guarantees related services in educational settings that could aid in the adequate accommodation of the student based on the needs as identified by their SLD. Furthermore, Section 504 from the Civil Rights Act, is the legislation that ensures that no discrimination action is taken based on a disability. Section 504 also agrees with IDEA and ADA on its definition on a SLD. Even more, Section 504 specifically says that no one, based on disability, shall not be excluded from participation in or be denied of benefits or be subject of discrimination under any federally funded program (34 C.F.R. Part 104). Section 504 ensures equal access to educational settings, yet in contrast with IDEA, it has fewer procedural safeguards for the child with special needs and its parents, not being the ideal go to policy to serve children right to adequate special education resources and related services.

State Law: Puerto Rico versus California a case study. To properly examine state law, Puerto Rico and California would be used as

examples on how federal regulations comes into effect, and how each commonwealth has developed law and policy to implement federal regulations and how each one protects or not the right to education.

Education is a fundamental right protected both in the California constitution and the constitution of Puerto Rico. Education is established as a fundamental right as it is protected under both states Constitutions. Nevertheless, the extent to which both rights are protected on each constitution differ. California constitution for an instance, on Article IX, section 1, states the right to education as “a general diffusion of knowledge and intelligence being essential to the preservation of the rights and liberties of the people, the Legislature shall encourage by all suitable means the promotion of intellectual, scientific, moral, and agricultural improvement.” Whereas, the constitution of Puerto Rico on article II under the Bill of Rights, section 5, states that:

“every person has the right to an education which shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. There shall be a system of free and wholly non-sectarian public education. Instruction in the elementary and secondary schools shall be free and shall be compulsory in the elementary schools to the extent permitted by the facilities of the state. No public property or public funds shall be used for the support of schools or educational institutions other than those of the state. Nothing contained in this provision shall prevent the state from furnishing to any child non-educational services established by law for the protection or welfare of children”.

Clearly the protection for the fundamental right of education in Puerto Rico is broader

than it is in California. Puerto Rico imposing them more pressure on the state to meet a higher standard when it comes to providing an adequate education that fulfills the obligations sets forth in the constitution. Moreover, when it comes to children with special education needs, they now not only have cause under federal law, but also under state's constitutional law, to be served accordingly and their right to education, at least in this commonwealth becomes then a fundamental right under their constitutional provisions.

Examining the department of education guidelines to implement national and local laws and policies, California special education is administered by the department of education on policies that were born out of IDEA and further federal obligations, all adapted in ways that better meet the state's needs. Puerto Rico implementation of securing access to special education services in the other hand are almost an exact copy/paste of IDEA as the policy is put forth in their Manual de procedimientos de educación especial del Departamento de Educación de Puerto Rico (Manual of procedures of Special Education of the Department of Education of Puerto Rico) and some updates based on a key case, *Rosa Lydia Vélez v. Department of Education* (Sepúlveda, 2018). Puerto Rico's policy is extraordinary yet the state struggles significantly with its implementation prejudicing mostly the population that rely on this service to succeed in school. In 2016 and 2017, two years in a row, Puerto Rico have been graded as next to inefficient by the federal department of education to properly serve its population of special education and assigned an oversight and direct support from the federal department in hopes of improving its execution (Sepúlveda, 2018).

All the presented laws and policies are next to nothing if a proper implementation does not take place. Effective implementation cannot take place if important facts around Hispanic children are not considered. Among infinite factors that can be highlight, some key aspects that must be considered when

working with Hispanic children and youth is that in the United States for Hispanics: 1) "Educational experience is one of accumulated disadvantage" (Schneides, Martinez & Ownes, 2006); 2). "Child health is not randomly distributed across the population and an increasing body of literature documents considerable disparities in the health and wellbeing of young children" (Aber, Bennett, Conley, & Li, 1997); and 3) "Child health has important consequences for children's social functioning, educational attainment, and quality of life" (Adams, Streisand, Zawacki, & Joseph, 2002). Advocacy, justice, or equity, in favor of Hispanic children with SLD, is not possible if action is not taken to fulfill the law while uplifting a human rights approach that considers relevant social determinants.

Conclusion

As presented above, law and policy seek to promote the use of best practices to adequately evaluate and further grant access to services to those sectors of the population that needs it most. Hispanic children with SLD represent a growing population that if not addressed effectively will lead to a massive societal and justice failure. As shown, Hispanic children might be exposed to social determinants may well contribute to their lack of access to services. Moreover, following evaluation frameworks that do not respond to a human rights perspective, while also supported by federal and state law is a direct attack to Hispanic children development, access to educational opportunities, and health outcomes.

It is urgent to examine non-discriminatory diagnostic evaluation methods that provide reliable data to guide interventions for the growing Hispanic population. This article examined legal aspects related to the evaluation process of Hispanic children with SLD and demonstrated that a neurocognitive approach in the diagnostic process is the best method to achieve social justice for this population. The D/C method, based on PASS

neurocognitive theory as operationalized by the CAS is a model that responds to all the mentioned legal requirements and aspirations, and so, a method to promote social justice to the population of Hispanic children that will remain in a vulnerable position if no action is taken on their behalf.

Cumplimiento con Estándares de la Ética en la Investigación

Financiamiento: Ninguno

Conflicto de intereses: No hubo conflictos de interés

Aprobación de la Junta Institucional Para la Protección de Seres Humano en la Investigación: No hubo participantes humanos en el proyecto.

Consentimiento o Asentimiento Informado: No aplica.

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34 C.F.R. Part 104

20 USC § 1400 (d)(1)(A)

20 USC § 1401 (30)