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Review Article

Paediatrics Section

Applicability of Various Intelligence Scales Utilised in Paediatric Population: An Overview

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ABSTRACT

Due to the imperfect development of the brain and the varied biological, environmental, and experiential elements that arise during childhood and adolescence, paediatric neuropsychology differs from adult neuropsychology. According to current theories, certain brain regions have a reciprocal effect on various neuro functioning systems, which, in turn, affects the child's ability to think and perceive. The interaction of functioning systems most likely affects the child's behavioural, psychological, and cognitive manifestation of a childhood condition. These days, parents worry about their children doing well in school. A variety of intelligence scores are utilised to evaluate children's cognitive abilities. Intelligence research is important since it sheds light on the individual's qualities, shortcomings, and special talents. Currently, a large number of standardised tests are used since intelligence is seen as a measurable commodity. When diagnosing dyslexia, attention-deficit/hyperactivity disorder, autism spectrum disorders, intellectual disability, and other problems in the paediatric population, intelligence scales play a critical role. It is vital to recognise that every exam has a unique set of constraints. This paper explores the benefits and drawbacks of the currently utilised intelligence measures while offering an overview of each. The goal of this evaluation is to make it easier to analyse different intelligence measures and decide which ones are applicable for what circumstances and needs.

Keywords: Cognitive function, Intellectual capacity, Intelligence score, Learning disability

INTRODUCTION

The definition of intelligence is given as the general mental capability concerned with the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, acquire skills quickly, and learn from experience [1]. Studying intelligence is crucial as it allows us to gain insights into an individual's strengths, weaknesses, and distinctive abilities. Intelligence, being quantifiable, has led to the development of numerous standardised tests that can accurately and consistently measure intelligence. Efficiently assessing a child's overall intellectual capacity is of utmost importance in education, especially when identifying Intellectually Gifted Children (IGC). This rapid and reliable evaluation plays a vital role in designing tailored educational programmes, such as accelerated or enrichment programmes, to cater to the unique needs of these gifted individuals [2]. These scales are designed to provide a comprehensive profile of a child's intellectual functioning, considering factors such as reasoning, problem-solving, memory, and language skills.

In recent years, numerous intelligence scales have been created, catering to different aspects of assessment. Nevertheless, each test comes with its own set of limitations, as shown. This study presents these various intelligence tests in one place, helping an individual to use these scales according to their needs. Various intelligence tests are frequently utilised in the paediatric population to assess cognitive abilities and aptitudes, each with its own set of strengths and weaknesses. However, despite the abundance of articles on intelligence scales, only a limited number offer comprehensive insights into their practical application. Individuals can leverage these scales based on specific requirements, utilising their diverse features to tailor assessments accordingly. This article provides insight into the same.

Types of Intelligence Scales [Table/Fig-1] [3-7]

1. Wechsler Primary and Preschool Scale of Intelligence (WPPSI) IV
2. Wechsler Intelligence Scale for Children (WISC) V
3. Kaufman Assessment Battery for Children (K-ABC)
4. Stanford-Binet Intelligence Scale 5
5. Differential Abilities Scale II
6. Woodcock-Johnson Test of Cognitive Abilities Cognitive Battery IV
7. Universal Non verbal Intelligence Test (UNIT)
8. Leiter International Intelligence Scale-3
9. Comprehensive Test of Non verbal Intelligence 4

Wechsler Primary and Preschool Scale of Intelligence (WPPSI) IV

Dr. David Wechsler first proposed the idea of intelligence in 1939. He defined intelligence as the total ability of a person to intentionally use information, make logical decisions, and successfully adapt to their environment. His first intelligence test, the Wechsler-Bellevue Intelligence Scale, was developed as a result [8]. The Wechsler Adult Intelligence Scale-Revised (WAIS-R; Wechsler, 1981) and the Wechsler Preschool and Primary Scale of Intelligence-Revised (WIPPSI-R; Wechsler, 1989) are the three independently administered intelligence scales in the Wechsler scales. The Third Edition of the Wechsler Intelligence Scale for Children (WISC-III; Wechsler, 1991) [9]. The WPPSI, created by psychologist David Wechsler, is a specialised instrument used to assess children's intelligence between the ages of two years and six months and seven years and three months. The WPPSI have been revised three times since their initial release: in 1989, WPPSI-R, in 2002, and in 2012, WPPSI-IV [9]. The most recent version, as shown in [Table/Fig-1], the WPPSI-IV, provides a thorough neuropsychological assessment, with subtest scores for verbal abilities and other intelligence-related areas, as well as an overall composite score that gauges a child's general intellect [10].

A more thorough evaluation of the child's cognitive functioning based on particular talents can be obtained with the Primary Index scales, whereas the Full-Scale Intelligence Quotient (FSIQ) provides a general summary of the child's intelligence. Conversely, the Ancillary Index scales-like the General Ability Index- are particularly pertinent

Intelligence scale	Age range (years)	Features	Demerits	Scoring criteria and interpretation
1. Wechsler Primary and Preschool Scale of Intelligence (WPPSI) IV	2,6-7,3	Calculates a final score based on verbal understanding, working memory, perceptual reasoning, and processing speed in addition to an overall score. Excellent technique for assessing cognitive abilities in kids who don't have language problems	The verbal and picture items on the Verbal Comprehension Index (VCI) subtests of the WPPSI-IV jointly evaluate verbal and non verbal skills, making their interpretation difficult	1. Below 70-extremely low 2. 70-79- borderline 3. 80-89-low average 4. 90-109- average 5. 110-119- high average 6. 120-129-superior 7. 130+- very superior [3]
2. Wechsler Intelligence Scale for Children V	6-16	Offers assessments of general aptitude, including data on general language and perception, working memory, and processing speed. Excellent psychometric qualities. Advanced training is required for both administration and interpretation	WISC's usefulness as a diagnostic tool for learning disabilities is limited	1.130 and above-extremely high 2.120-129- very high 3. 110-119- high average 4. 90-109-average 5. 80-89- low average 6. 70-79- very low 7. 69 and below- extremely low [4]
3. Kaufman Assessment Battery for Children II	2,6-12,6	It produces a measure of cognitive performance that is mostly independent of language. Offers a non verbal score in addition to scores for knowledge, planning, simultaneous, and sequential reasoning. Good approximation for kids from non English speaking families or those from diverse cultural backgrounds. To score and administer, it is not too tough. Psychologists and neuropsychologists typically administer this test	Concerns about its construct validity, norm representation, and reliability are present. Despite its visually appealing design and straightforward administration, its adherence to a specific theory narrows the spectrum of cognitive abilities assessed	Each of the K-ABC's global scales has a mean score of 100 with a standard variation of 15. A score of 100 on this test falls into the normal or average range, as it does for the majority of IQ tests. The standard deviation shows the extent to which a child's score deviates from the norm [5].
4. Stanford-Binet Intelligence Scale 5	2-85+	It generates a score for working memory, verbal ability, perceptual reasoning, and total ability. Excellent rating for younger kids who struggle with focus and motor control	Time-intensive, necessitating costly administration, having less representation of various languages, potential cultural biases, and requiring the capacity to capture real-world abilities fully	1. 145-160: Very gifted or highly advanced 2. 130-144: Gifted or very advanced 3. 120-129: Superior 4. 110-119: High average 5. 90-109: Average 6. 80-89: Low average 7. 70-79: Borderline impaired or delayed 8. 55-69: Mildly impaired or delayed 9. 40-54: Moderately impaired or delayed [6]
5. Differential Abilities Scale II	2-11	It provides verbal skills, memory, and non verbal processing tests. Offers an achievement scale as well. Excellent scale for kids with behavioural control issues, autism, and impaired attention spans	Not easy for administration	NA
6. Woodcock-Johnson Test of Cognitive Abilities Cognitive Battery IV	2-85+	Measures of visual-motor skills, memory, attention, auditory processing, and fluid reasoning. It resembles a test from school	A lengthy battery that can be administered in more than 90 minutes. Used more commonly in teaching than by neuropsychologists on a rare occasion	1.131 and above-very superior 2. 121 to 130-superior 3.111 to 120 -high average 4. 90 to 110-average 5. 80 to 89-low average 6. 70 to 79- low 7. 69 and below- very low [7].
7. Universal Non verbal Intelligence Test (UNIT)	5-11	It does not employ language; instead, it provides an overall ability measure. Excellent tool for youngsters who have hearing impairments and those learning English as a second language	Lack of user-friendliness	NA
8. Leiter International Intelligence Scale-3	3-75+	Great for those who are hard of hearing, deaf, or learning English as a second language	Deficiency of factor index scores specifically for fluid reasoning and visual-spatial abilities in addition to the global Non verbal IQ score	NA
9. Comprehensive Test of Non verbal Intelligence 4	6-11	It is useful for determining precise service needs, identifying intellectual impairments, and assessing general intellectual capacity	Not useful for individuals with visual impairments	NA

[Table/Fig-1]: Shows various scales tailored to specific age groups, detailing their clinical characteristics and drawbacks. It also states the scoring criteria and interpretation of scores. Each scale is copyrighted of freely available [3-7].

in clinical contexts when additional domain- or process-specific assessments are needed, like when evaluating kids who have language impairments. In terms of administration time, the 2:6-3:11 age groups take about 27 minutes to achieve the FSIQ, whereas the 4:0-7:7 age groups take about 31 minutes. The thorough evaluation of cognitive capacities in young children between the ages of two years six months and seven years seven months is one of the advantages of the Wechsler Preschool and Primary Scale of Intelligence, Fourth Edition (WPPSI-IV). It offers a thorough assessment of a child's cognitive abilities in a number of areas, such as verbal comprehension, working memory, perceptual reasoning, and processing speed. The WPPSI-IV is also suited for use with young children who might have trouble understanding complex instructions or have short attention spans because it provides age-appropriate testing materials and procedures. Clinicians and educators can make well-informed judgments regarding intervention and educational planning because of its standardised administration and scoring processes, which guarantee reliability and validity of results [11].

The WPPSI-IV has certain limitations, primarily related to interpreting the test results. The interpretation of the Verbal Comprehension Index (VCI) subtests in the WPPSI-IV can be complex due to including picture and verbal items, which simultaneously assess verbal and

non verbal abilities. Although the Technical and Interpretive Manual offers essential step-by-step guidance for examiners to conduct primary and ancillary profile analysis, it lacks detailed elaboration on score interpretation [11].

One area where interpretation can be challenging is when working with examinees placed in English Language Learner (ELL) educational programmes. The manual provides limited guidance on interpreting test results for such students, indicating the need for caution when using the test in these contexts. Additional considerations and expertise are necessary to ensure accurate and meaningful assessment for ELL students [11].

Wechsler Intelligence Scale for Children (WISC) V

Children between the ages of 6 and 16 can take the independently administered Wechsler Intelligence Scale for Children (WISC), which does not need reading or writing skills. The WISC typically takes 65 to 80 minutes to administer and yields an Intelligence Quotient (IQ) score that indicates a child's general cognitive abilities. The WISC-IV consists of 10 fundamental subtests that are divided into four scales or clusters. Furthermore, five additional subtests can be used in place of the basic subtests to provide a more thorough spectrum of mental and intellectual assessments [12].

The WPPSI-IV is considered one of the most comprehensive assessments of overall cognitive abilities. It offers valuable insights into working memory and processing speed, providing crucial information about general language skills and perceptual abilities. The WISC not only serves as an intelligence test but also as a valuable clinical tool. Many practitioners use it to diagnose Attention-Deficit Hyperactivity Disorder (ADHD) and learning disabilities [13]. This process often involves pattern analysis, where the scores of different subtests are compared to each other (ipsative scoring), and clusters of notably low scores are identified [13].

Research indicates that using the WISC as a diagnostic tool for ADHD or learning disabilities may be ineffective because most children with ADHD do not exhibit significantly lower subscores than others, and many children who show such patterns do not have ADHD [13]. Similarly, the WISC's usefulness as a diagnostic tool for learning disabilities is limited, as other patterns observed in children with learning disabilities also show little correlation with the test results [13].

The consensus from empirical research suggests that the WISC is most effective as an intelligence evaluation tool rather than a means to diagnose ADHD or learning disabilities in children. It is valuable in identifying discrepancies between a child's intellectual abilities and academic performance. In clinical settings, learning disabilities are typically diagnosed by comparing intelligence scores (obtained from tests like the WISC-IV) with achievement test scores, such as the Woodcock Johnson III or Wechsler Individual Achievement Test II. If a child's academic achievement falls below what is expected based on their level of intellectual functioning, it may indicate the presence of a learning disability [13].

Kaufman Assessment Battery for Children (K-ABC)

The K-ABC is an assessment tool used to measure cognitive abilities in children. It was developed by psychologists Kaufman AS and Kaufman NL. The K-ABC is a recently developed assessment tool for measuring intelligence and achievement. It is built on a robust theoretical foundation reinforced by a wide range of cognitive and neuropsychological research [14]. This test assesses cognitive abilities that rely less on language proficiency. It yields scores in planning, knowledge, simultaneous, sequential reasoning, and a non verbal score. It is particularly suitable for children from diverse cultural backgrounds or those with a non English first language. It possesses ease of administration and scoring [15].

Designed for kids 2.5 to 12.5 years old, the K-ABC skillfully combines advances in psychological theory with statistical methods. Its structure comprises four or five scales, depending on the age of the child and the interpretative method selected. These scales include concurrent, sequential, planning, learning, and knowledge dimensions. The accompanying scale has the largest subtest collection. Tasks such as triangles, block counting, face recognition, conceptual thinking, pattern reasoning, story completion, rover, and gestalt closure are all included in the processing and cognitive exam. The sequential scale uses hand gestures, word order, and number recall to assess cognitive ability. The planning scale uses story completion and pattern recognition to assess cognitive abilities. Learning assessments use rebus (drawings) and Atlantis (non sense names) to gauge brain thinking. The knowledge scale includes verbal knowledge, expressive vocabulary, and a riddle-based cognitive test [16].

The passage discusses concerns about the K-ABC related to its construct validity, norm representation, and reliability. While the K-ABC has a visually appealing design and straightforward administration, some critics argue that its adherence to a specific theory narrows the spectrum of cognitive abilities assessed [17]. Critics of the K-ABC argue that its narrow focus on the theory of fluid and crystallised intelligence limits its ability to fully capture the range of cognitive abilities that children may possess. This narrow focus may not adequately represent the diverse ways in which children think and problem-solve [17].

The demographic features of the normative sample utilised to standardise the test are referred to as norm representation. Concerns have been raised about whether the normative sample used for the K-ABC accurately represents the diversity of the population, particularly in terms of cultural and socio-economic backgrounds. If the normative sample is not representative, it can impact the validity of the test results, especially for individuals from underrepresented groups. Reliability refers to the consistency of scores obtained from the test. Critics argue that the K-ABC may not demonstrate adequate reliability across different administrations or in different populations [17]. This could be due to factors such as inconsistent scoring procedures or variability in the administration of the test. Overall, while the K-ABC may have certain strengths such as its visually appealing design and straightforward administration, concerns about its construct validity, norm representation, and reliability suggest that it may not be the most comprehensive or accurate assessment tool for measuring cognitive abilities in children [17].

Stanford-Binet Intelligence Scale 5

The Stanford-Binet Intelligence Scale 5 is a widely used intelligence test that assesses cognitive abilities in individuals from the age of 2 to 89 years. It measures a broad range of cognitive skills, including reasoning, problem-solving, verbal comprehension, and visual-spatial processing. The test is individually administered and consists of various tasks and questions progressively increasing in difficulty. The Stanford-Binet 5 provides an IQ score that reflects a person's cognitive functioning compared to peers of the same age. It has undergone several revisions, with the fifth edition being one of the most recent and comprehensive versions. The test is frequently used in educational and clinical settings to assess intellectual abilities, identify giftedness, and diagnose intellectual disabilities [18]. It is an excellent measure for younger children with difficulty with attention and motor control [18].

The Stanford-Binet Intelligence test employs a dual measurement approach to enhance the accuracy of its scoring. In its present iteration, the Stanford-Binet Intelligence Scale encompasses five distinct factors: fluid reasoning, knowledge, quantitative reasoning, visuospatial processing, and working memory. Each element comprises specific subtests that are categorised into one of two domains. These domains were created to ensure an equilibrium between tasks necessitating language skills and those with reduced dependence on verbal components [19]. This approach

encompasses the verbal scale, appraising language-centred aptitudes like vocabulary and comprehension, alongside the non verbal scale, which evaluates visual-spatial proficiencies and problem-solving capabilities [15]. The test covers a broader spectrum of cognitive abilities through this dual-scale methodology.

Its drawbacks include being time-intensive, requiring costly administration, having limited representation of various languages, potential cultural biases, and lacking the capacity to fully capture real-world abilities [15].

Differential Abilities Scale II

A personally delivered assessment tool called the Differential Ability Scales, Second Edition (DAS-II; Elliott, 2007) is used to measure various cognitive skills in toddlers and adolescents between the ages of two years, six months and 17 years, 11 months. Individual subtests that evaluate strengths and weaknesses across a wide range of learning processes make up the DAS-II. A composite score representing conceptual and reasoning abilities is produced, known as the General Conceptual Ability (GCA) composite score. Three cluster scores-verbal, non verbal reasoning, and spatial abilities-are obtained from the DAS-II and are focussed on more specialised learning processes. Furthermore, for people of any age, a special non verbal composite can be acquired, particularly in cases where verbal demands impede standardised outcomes [20].

Individually administered, the test is crafted to assess general conceptual and reasoning ability ("g") in addition to a wide array of specific and diverse capabilities [21]. It includes an accomplishment scale and provides language, memory, and non verbal processing examinations. For kids with autism, poor attention spans, and issues with behavioural control, it's a great tool [21].

The DAS-II assesses the planned initial populations in an efficient manner. It now includes younger and older kids as well as people with hearing issues or speech/language disabilities, depending on their skills. The test boasts swift administration and captivating materials, making it particularly attractive for young children. While examiners might find the scoring procedures somewhat laborious, the computerised scoring assistant can assist in alleviating this challenge. In summary, the DAS-II offers a user-friendly and time-efficient means of gauging general cognitive ability, proving valuable within a comprehensive psychoeducational assessment battery [22].

Woodcock-Johnson Test of Cognitive Abilities Cognitive Battery IV

Schrank et al., (2014b) describe the Woodcock-Johnson IV (WJ IV) as the most recent iteration of the well known Woodcock-Johnson test battery. The Woodcock-Johnson IV (WJ IV) features three co-normed assessment batteries, in contrast to its previous iterations that included separate achievement and cognitive batteries: the Woodcock-Johnson IV Tests of Achievement (WJ IV ACH; Schrank et al., 2014c), the Woodcock-Johnson Test of Oral Language (WJ IV OL; Schrank et al., 2014d), and the Woodcock-Johnson Tests of Cognitive Abilities (WJ IV COG; Schrank et al., 2014a). The assessment batteries can be used separately or in combination with each other, based on the particular requirements of the evaluation [23]. It is similar to an academic evaluation in that it assesses memory, attention, fluid reasoning, auditory processing, and visual-motor skills.

It is an extensive battery that can take over 90 minutes to administer. Neuropsychologists less commonly employ it and find more frequent usage in educational settings [15]. Utilising an advanced tool like the Woodcock-Johnson IV tests of cognitive abilities requires an equally advanced grasp of assessment principles. To harness the full potential of the WJ-IV's remarkable attributes, examiners need a well-defined comprehension of the theory underlying the WJ IV and the instrument's inherent limitations. The functional aspects of each test within the WJ IV are examined, considering the strengths and weaknesses of each assessment. While the WJ IV offers a comprehensive assessment of cognitive abilities and academic achievement, it is essential to consider both its strengths and weaknesses when selecting and interpreting specific tests within the battery. The WJ IV can be demanding in terms of time, requires careful interpretation due to its complexity, and may not fully account for cultural diversity. Professionals should use their judgment to determine which tests are most appropriate for the individual being evaluated and consider supplementary assessments if needed to provide a more holistic understanding of functioning [24].

The Universal Non verbal Intelligence Test (UNIT)

The UNIT (UNIT; Bracken and McCallum, 1998) comprehensively evaluates general intelligence and cognitive capacity. The UNIT was designed to cater to individuals for whom verbal assessment methods are unsuitable [25]. The UNIT is tailored for children and adolescents aged 5:0 to 11:0, serving as an alternative to conventional assessments involving verbal and linguistic content. This cognitive evaluation offers a comprehensive appraisal of non verbal intelligence. The UNIT comprises six subtests: symbolic memory, spatial memory, object memory, cube design, analogic reasoning, and mazes [26].

It does not use language and offers an overall ability measure. It is a great tool for hard-of-hearing kids, and the UNIT's English as a second language learners component was designed to serve people for whom spoken evaluation techniques are insufficient. Clinical observations indicate that the authors successfully achieved their objective, establishing the UNIT as a valuable tool for practitioners and researchers. However, a primary critique of the UNIT is its comparative lack of user-friendliness, potentially demanding more time for even expert administrators to attain proficiency in its utilisation protocols that align closely with those of other existing cognitive measures [27].

Leiter International Performance Scale

The Leiter International Performance Scale (Leiter-R; Roid and Miller, 1997), commonly known as the Leiter scale, is an intelligence test structured as a pure performance assessment. Initially developed for individuals aged 2 to 18 years, this scale can provide an IQ and a logical ability measure applicable across all age groups. A standout characteristic of the Leiter scale is its unique ability to be entirely administered without verbal language, encompassing instructions and responses from the participant. This distinct trait means that the Leiter scale solely measures non verbal intelligence. Its exclusion of verbal subtests makes it particularly valuable for accurately assessing children unable or unwilling to provide verbal responses. This test applies to children with various conditions, such as non native language speakers, autism, traumatic brain injury, speech impairments, and hearing issues [28].

Initially employed as a non verbal alternative to the Binet scale, which places more emphasis on verbal elements, the Leiter scale has found utility not only among researchers but also extensively within clinical practice. It is frequently utilised to assess the intellectual capabilities of children with pervasive developmental disorders [29]. Its strengths include its ability to encompass various special groups, such as individuals with speech impairments, deaf or hard-of-hearing individuals, those with motor delays, traumatic brain injuries, intellectual delays, ADHD, giftedness, learning disabilities, autism spectrum disorder, and English as a Second Language [29].

Based on the current reviews, a limited number of weaknesses are identified for the Leiter International Performance Scale. These include the absence of factor index scores specifically for fluid reasoning and visual-spatial abilities in addition to the global non verbal IQ score. Other weaknesses include a relatively minor

participant count in criterion-group studies and lower test-retest coefficients than internal consistency estimates [30].

Comprehensive Test of Non verbal Intelligence 4

To provide assessors with a tool for non verbally evaluating reasoning skills throughout a broad age range, from 6-0 to 11-0, the Comprehensive Test of Non verbal Intelligence (CTONI; Hammill, Pearson, & Wiederholt, 1997) was created. The test evaluates the ability to recognise connections between images of well known things and unusual geometric patterns. It consists of five subtests: pictorial analogies, geometric analogies, pictorial categories, pictorial sequences, and geometric sequences. To complete the test, participants only need to indicate their answers; manipulating items, reading, writing, or verbal responses are not required [31]. Given the TONI-4's emphasis on individual capabilities, it is a valuable supplement for assessments of intellectual functioning. It proves beneficial for appraising overall intellectual capabilities, identifying intellectual deficits, or determining specialised service requirements.

Nonetheless, as the TONI-4 primarily employs pictorial-based items, it may not be well-suited for individuals with visual impairments. In such instances, it is recommended exploring alternative intelligence tests [31].

CONCLUSION(S)

The comparison of various intelligence tests used in children reveals a diverse landscape of assessment tools, each with its unique strengths and limitations. The Wechsler scales, such as the WPPSI-IV and WISC-V, offer comprehensive evaluations of a child's overall intelligence through measures like the FSIQ and provide detailed insights into specific cognitive domains through primary and ancillary index scales. However, concerns exist regarding the interpretation of certain subtests, such as the VCI, which may pose challenges in clinical settings. On the other hand, the K-ABC boasts visually appealing designs and straightforward administration but has faced criticisms regarding its narrow focus on specific cognitive theories, potentially limiting its ability to capture the full spectrum of cognitive abilities. Concerns about construct validity, norm representation, and reliability have also been raised. The Woodcock-Johnson IV (WJ IV) offers a comprehensive battery of tests assessing cognitive abilities and academic achievement, with standardised procedures and extensive normative data. However, some tests may be time-consuming or complex to administer, and cultural biases may still be present despite efforts to mitigate them. In selecting an intelligence test for children, it is crucial for professionals to consider factors such as the child's age, developmental stage, cultural background, and the specific purposes of assessment. Additionally, using a combination of tests and supplementary measures may provide a more comprehensive understanding of the child's cognitive functioning. Ultimately, no single intelligence test is perfect, and a nuanced approach that considers the strengths and limitations of each assessment tool is essential for accurate and meaningful evaluation.

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