Intelligence and Education Assessment Report

Name: Sumit Mahajan

Date of Testing: 2021-07-03

Date of Birth: 2021-06-28

Gender: Female

Age: 0

Informant: father

Sumit Mahajan, 0 years 1 months old girl was brought to the center for intellectual and educational assessment by her father with referral from Department of Special Education (DSE) of his school. She is a student of class II at St. Andrews School, Keesara, Hyderabad, Telangana. She was referred with complaints of fear of exams, low academic performance and selective social interaction. He has been availing remedial support from DSE of his school.

Observations

Sumit Mahajan was cooperative for assessment. Her physical built was observed as age inappropriate. Assessment was done in a comfortable environment a fter establishing rapport. She was able to comprehend the instruction in English, Telugu & Hindi language, though with repetitions. Sumit Mahajan was well oriented and was motivated for the assessment. Her attention could not be aroused however sustaining the same for the required period of time required prompts in between. Her rate of responses was slow and needed more time to perform a task given. Assessment was completed with appropriate breaks in between sessions.

Tests Administered

In order to assess her Intellectual performance following test was administered;

- Malin' s Intelligence Scale for Indian Children (MISIC)
- Raven' s Colour Progressive Matrices (R-CPM)

Educational Assessment

✔ Sattler's Informal Writing Assessment
✔ Schonell's Reading test
✔ Schonell's Spelling Test
✔ Roswell-Chall Diagnostic Reading Test of word analysis
✔ Auditory Sequential Memory Test
✔ Nimhans SLD index- Arithmetic test

Test Findings

I. Intellectual Assessment

On MISIC, her verbal quotient is 133.0 which suggests average functioning on verbal scale (Average range is 90 -110; borderline range of intelligence is 71 -89). Her profile on the verbal scale is as follows;

Verbal Tests	Verbal Quotient
Information	11
Comprehention	22
Arithmetic	33
Similarities	44
Vocabulary	555

(The average range for reference of above table is 90 - 110; Borderline Range of intelligence is 71 - 89, 50- 70 mild intellectual impairment)

Information - fund of general knowledge; long-term memory; recall

The Information subtest reflects two factors in the child's development of language and knowledge: 1) The richness of the child's verbal environment during Her development is reflected in the fund of knowledge. 2) The ability to store that knowledge in long -term memory, recall it, and verbally express it is an individual ability that is measured by the Information subtest.On this subtest Sumit Mahajan has scored at Profound level.

Comprehension - Understanding social rules and ethics; common sense and judgment

The Comprehension subtest is based on social comprehension, a skill that is deficient in many LD and ADHD children. The social understanding that underlies the Comprehension subtest is greatly influenced by environment. Ethical judgment may be lacking for a variety of reasons - intellectual, environmental, and emotional. For children with significantly weak comprehension subtest scores, direct instruction in social skills may be required. She has scored at Severe level .

Arithmetic - Numerical reasoning; attention and concentration

The numerical tasks of the Arithmetic subtest are worked out "in the child's head". She must have the ability to attend to the verbally presented problem and concentrate on working out the answer in Her short-term memory. Performance on Arithmetic also requires a mastery of the mathematical operations required by each item, and therefore rev eals information on the child's achievement in arithmetic learning. On this subtest, her score is at Severe level.

Similarities - Verbal categories and concepts; abstract verbal reasoning

In order to store language and information in long -term memory, humans use a process of categorization and conceptualization that develops from the concrete to the abstract. The Similarities

subtest captures the child's ability to mentally process verbal information, categorizing and conceptualizing information in the long-term memory store. Over the course of the child's development, their conceptual skills progress from concrete to abstract reasoning, a process that is reflected in the Similarities subtest. <u>Sumit Mahajan has scored Moderate level on this subtest.</u>

Vocabulary: language development, word knowledge, verbal fluency

The degree to which one has learned, to be able to comprehend and verbally express vocabulary. This is a test considered to be a measure of general intelligence. This is also a measure of acquired knowledge. <u>Here she has scored at Very Superior level.</u>

Her performance quotient on the same test is 88.2 which fall in level of functioning (Average range is 90 -110; borderline range of intelligence is 71 -89). Her profile on the performance scale is as mentioned below.

Performance Tests	Performance Quotient
Picture Completion	66
Block Design	77
Object Assembly	88
Coding	99
Maze	111

(The average range for reference of above table is 90 - 110, borderline range of intelligence is 71 - 89)

Picture Completion - Visual discrimination; attention to visual detail

The skill reflected by the Picture Completion subtest is not visual acuity; it is visual discrimination. The child must look at the visual whole presented and analyze its parts to identify what is missing. A relatively simp le task, poor performance in a child with Learning Difficulty/Disability may be related to visual-perceptual difficulties or environmenta l awareness. <u>Here Sumit Mahajan has Mild Intellectual Disability score</u>

Block Design - Abstract visual-perceptual ability; spatial and nonverbal problem-solving

A pure test of perceptual intelligence, Block Design is the only perceptual subtest that factors heavily with overall intelligence. Block Design will give you a good clue to innate intellectual potential. However, Block Design is a visual- motor task and poor performance may be developmental or related to a motor deficiency<u>. Here Sumit Mahajan scored below Borderline score.</u>

Object Assembly - Visual analysis and construction of a whole from its parts

The Object Assembly subtest score reflects the visual -motor skills of puzzle construction. The child must analyze the object and construct the whole visual object from its parts within time constraints. <u>Her score on this subtest is at below Average level.</u>

Coding - Visual motor coordination; speed; concentration

An interesting performance subtests that measures visual motor skill. Coding gives clues to basic deficiencies in visual motor performance needed for writing. Good short-term memory improves performance on coding. It also factors with freedom from distractibility and the ability to concentrate to accomplish a visual motor task within time constraints. <u>On this subtest, her score is at Average range.</u>

Mazes- Mental Planning Skills

Mazes show the ability of mental planning, insight and attention to instructions of the child. It is a good measure of visuo - motor coordination with accuracy and speed. <u>Here also she has scored at Above average level.</u>

Overall, Sumit Mahajan's <u>Full-Scale Intelligence Quotient is 66.5</u>which indicate <u>average intellectual functioning.</u> Her verbal scale scores are better than her performance scale scores. There is a discrepancy of above 24 points between the two scale scores, suggestive of presence of learning difficulty.He might exhibit difficulties in the areas of, visual discrimination, attention to visual detail, abstract visual-perceptual ability, spatial and nonverbal problem-solving, visual analysis and construction of a whole from its parts and mental planning skills which could influence her academic and day today functioning. .

<u>**Raven's Colour Progressive Matrices (R-CPM)**</u>

On R-CPM, Sumit Mahajan`s score falls below 25th percentile which indicates low average intelligence. She struggled in items measuring visual analysis and organization, visual attention and visual sequencing .

Educational Assessment Report

- **Sattler's Informal Writing Assessment Tool**

Following rating is based on a writing sample taken from the child during testing time on an un-ruled paper.

Area	1	2	3	4	5
Spacing on the page	✔	✘	✘	✘	✘
Spacing of the sentences	✔	✘	✘	✘	✘
Spacing of words	✔	✘	✘	✘	✘
Spacing of letters	✔	✘	✘	✘	✘
Slant	✔	✘	✘	✘	✘

Letter Formation	✔	✗	✗	✗	✗
Pencil Grip	✔	✗	✗	✗	✗

(Penmanship Score 1- illegible to 5- Beautiful)

Sumit Mahajan's handwriting shows inappropriateness in most areas as assessed by this tool. However,he has macro letter formation and puts more pressure on paper.He writes in cursive letters and has pencil hold.

- **Schonell's Graded Word reading Test**

Her reading age as found on this test is 12 years 6 months , which is below her chronological age (0 years 1 months). This score shows in her word reading skills.

Schonell's Spelling Test-B

On Schonell's Spelling test her spelling age is calculated as 7 years 5 months, which is significantly below her chronological age (0 years 1 months). This score shows None in her spelling skills.

Roswell-Chall Diagnostic Reading Test of word analysis

The qualitative analysis of Roswell-Chall shows following observations;

- She has adequate knowledge of phonic sounds.
- She has adequate knowledge of blends.
- She has adequate understanding of vowel sounds.
- She could be syllabicate long and multisyllable words.
- She has appropriate understanding of silent 'e' sounds.
- She could read words and short sentences, however tries to read letter by letter, hence takes more time for reading for reading.

Auditory Sequential Memory Test

Her auditory sequential memory is found to be at 8 years 6 months level, showing significantly appropriate ability in sequential memory skills with her age level.

Nimhans SLD Index- Arithmetic test

Sumit Mahajan has inappropriate ability to perform basic operations of addition, subtraction, multiplication and division However,he makes mistakes in graded sums of multiplication, division and fractions.He makes visuospatial and procedural errors in calculations.

Summary

From the test results, interview and observation it can be concluded that Sumit Mahajan is having borderline level of intellectual functioning with learning difficulty. with learning expression mostly as inappropriate language processing and expression and significant difficulty in visuo perception and

processing. The profile and the observation data match with profile of Slow learner. .

<u>Recommendations</u>

From the assessments, it is recommended that Sumit Mahajan could benefit from

✔ Parental counseling regarding the understanding of child's diagnosis and results of the tests, so as to accept the child and help him in a more appropriate way.

✔ Individual counseling to learn how to cope up with academic and other stressful situations and build confidence.

✔ Cognitive Training to improve her deficient cognitive skills.

✘ Training on study skills to improve her overall academic performance.

✘ Remedial training to enhance her attentional skills, education skills like reading, writing, spelling, arithmetic skills and facilitate rate of expression

✘ Academic planning based on assessment results.

✘ Demeaning comments about her performance should be altered with productive feedback.

✘ Periodic review of intervention program with adequate modifications to be made from time to time and to work on appropriate transfer of learning

✘ An orientation to teachers about the results of assessment to provide suitable accommodations and appropriate classroom modifications like,

- extra t ime to complete her work
- appropriate monitoring and providing assistance for class work
- facilitate buddy system in classroom and outside activities so as to help monitor and develop her academic and adaptive functioning.

✘ She should also be provided accommodations during evaluations during the period of intervention namely

- extra time to write all her examinations
- to read out questions to him as and when required by him
- spelling errors to be overlooked for content
- provide distraction free environment to write her exams

working correctly