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# **Example Intellectual Developmental Disorder Report:**

# **John Smith**

This report was prepared for the purpose of the client's clinical and/or educational management.

The report is not intended for, and is unsuitable for, use in legal proceedings.

The information contained in this report is sensitive and confidential and must be treated accordingly.

The results should only be interpreted by an appropriately trained professional.

#### **CONTENTS**

- (1) Biographical Details
- (2) Referral Information
- (3) Informed Consent
- (4) Relevant Background and Clinical Presentation Information
- (5) Cognitive Assessment
- (6) Adaptive Behaviour Assessment
- (7) Conclusion and Summary of Intellectual Developmental Disorder DSM-5-TR Criteria
- (8) Recommendations
- (9) Appendix 1: ABAS-3 Skill Areas and Composites
- (10) Appendix 2: WAIS Subtest Descriptions
- (11) Appendix 3: Adaptative Behaviour Severity Summary Table
- (12) Appendix 4: Brief Biography of the Author

## **BIOGRAPHICAL DETAILS**

Name: John Smith Date of Birth: 15/01/1999

Age: 23 Gender: Male

## REFERRAL INFORMATION

John was referred to Psychological and Educational Consultancy Services (PECS) by his parents for a *Cognitive and Adaptive Behaviour Assessment* to assess for an Intellectual Disability.

### **INFORMED CONSENT**

John was informed of the reason for the assessment, the assessment components, and that the results would be used to compile a report which would be provided to them and the referrer (if applicable).

John indicated that she understood all that was conveyed to him and signed a Consent Form acknowledging that she consented to the administration of the assessment; and for the report to be generated and disseminated accordingly.

At John's request, his parents were also present during the Informed Consent stage.

#### RELEVANT BACKGROUND INFORMATION AND CLINICAL PRESENTATION

## 1. Pregnancy, Birth, and Development:

John's mother did not experience any significant illnesses during her pregnancy with John. John reported that there were no concerns in relation to maternal consumption of alcohol and/or substances during his mother's pregnancy. John was born with no apparent complications and did not require assistance with breathing nor time in the neonatal intensive care unit. John reached all the major developmental milestones (e.g., walking, speaking, toileting) after the expected age ranges.

## 2. Speech and Language:

John has a history of speech sound problems and underwent years of speech therapy when younger. John continues to demonstrate speech sound errors with /th/ sounds (e.g "fwee" for three, "bofe" for both, and "fing" for thing). Past reports demonstrate difficulties with both expressive and receptive language ability, however, John has never been formally diagnosed with a Language Disorder. John struggles to convey his thoughts, often speaking in short simple sentences that people report are difficult to understand.

#### 3. Handedness and Coordination:

John is a mix of right and left-handed/footed. John has both fine motor movement problems and gross motor movement problems. When younger, John received occupational therapy to develop his coordination, however, this was described as "not effective". John's parents report that he is quite clumsy and has never been good at sport.

## 4. Sight and Hearing:

John requires the assistance of glasses / contact lenses. John's parents report that he has normal auditory acuity, however, the most recent testing was more than 3 years ago. When younger, John had Glue Ear requiring grommets. John's parents report that he does not respond when being spoken to, however, John believes his hearing is normal.

## 5. Sleep Quality:

John has difficulty falling asleep and staying asleep during the night. John's parents reported that he often wakes up feeling tired even after a good night's sleep. John's parents have to give him reminders to go to sleep and to set his alarm for the morning.

#### 6. Peer Relations:

John's parents reported that he has difficulty forming and maintaining good friendships. John had difficulties with peer relations when at school and was the victim of bullying during Primary School. John's parents reported that he had a few friends in Primary School, however, he struggled to relate to other peers in High School and tended to avoid social situations due to this. John's parents reported that he struggles to make conversation which impacts his ability to form relationships with others.

## 7. Academic / Educational/Occupational:

John's parents reported that he experienced severe difficulties with both literacy and numeracy at school. John received extensive support throughout Primary and High School from an Education Assistant. John's parents also reported that he was on an Individual Education Plan/Documented Plan which commenced in Year 3. John received accommodations during Primary and High School. Previous NAPLAN results demonstrate that John was significantly below the national average across all academic areas. John's handwriting has always been illegible and messy.

John currently works two days per week at a supermarket. John's manager reported that John tries really hard, however, he does require supervision for nearly all tasks and requires constant instructions/reminders.

#### 8. Behaviour:

John's parents reported that he has issues with attention, concentration, following instructions, oppositional behaviour, and sensory sensitivity. John's parents also reported that he has some difficulty controlling his anger. John is easily distracted and struggles to engage in any kind of task/activity. When out in the community, John's parents reported that he becomes easily overwhelmed and overstimulated which often results in outbursts. John's parents also believe he is disorganised and is often late to appointments. John requires assistance with personal care, hygiene, diet, and exercise. John's parents reported that other people tend to order for him at restaurants and buy his food for him.

#### 9. Health/Mental Health/Medical/Medication:

John's parents reported that he has no major medical conditions. John is not currently taking any prescription medication. John's parents reported concerns in relation to poor short-term and long-term memory. There are no concerns over anxiety, however, depression was reported to be a current concern for John. John's parents reported that he has no previous history of self-harm and that he is not currently at risk of engaging in any self-harming behaviours.

## 10. Family History of Mental Health Conditions:

There is a family history of Specific Learning Disorder (SLD), Intellectual Disability, Anxiety, and Depression. John's parents reported that his sister was diagnosed with Global Developmental Delay as a child and then with an Intellectual Developmental Disorder as an adult. John and his sister demonstrate very similar behaviours and traits.

#### **COGNITIVE ASSESSMENT**

## **Cognitive Tests Administered:**

Test

Date of Administration 17/01/2022

Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV, 2008)

#### **WAIS-IV Overview:**

The Wechsler Adult Intelligence Scale-Fourth Edition (WAIS-IV) is a test designed to measure intelligence in older adolescents and adults (aged 16 years and above). It is composed of 10 core subtests and five supplemental subtests, with the 10 core subtests comprising the Full-Scale IQ. The WAIS-IV has been language adapted for Australia and New Zealand. Please see Appendix for Index and Subtest descriptions.

#### **Examiner's Details:**

TEST ADMINISTRATOR: Dr Shane Langsford

QUALIFICATIONS: Bachelor of Psychology (1994, UWA)

Bachelor of Education with First Class Honours (1996, UWA) Doctor of Philosophy in Educational Psychology (1999, UWA)

REGISTRATION: AHPRA/PBA Fully Registered Psychologist (PSY0001578191)

#### **Test Behaviour:**

Speech sound difficulties were observed during the testing (e.g., difficulties successfully producing the 'th' sound)

John seemed to have difficulty understanding the instructions of many subtests, which resulted in the instructions having to be repeated more often than the standard.

John often also had difficulty remembering to adhere to the completion instructions of various subtests (e.g., would repeatedly give two selections when three were required despite numerous reminders, etc).

John had a tendency to respond with "Don't Know", however, was able to provide a correct response if encouraged to provide an answer.

It is my opinion that the scores that John achieved on the WAIS-IV are indicative of his general cognitive ability at this particular time.

## **Psychological Test Results:**

Age at Testing: 23 years

Table 1: WAIS-IV Composite Score Summary

WAIS-IV Scale	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Description
Verbal Comprehension Index (VCI)	66	1	62-73	Extremely Low
Perceptual Reasoning Index (PRI)	77	6	72-84	Borderline
Working Memory Index (WMI)	69	2	64-78	Extremely Low
Processing Speed Index (PSI)	79	8	73-89	Borderline
Full Scale IQ (FSIQ)	67	1	64-72	<b>Extremely Low</b>
General Ability Index (GAI)	69	2	65-75	Extremely Low

Index scores have a mean Composite Score of 100 (50th percentile) and a standard deviation of 15. Percentile Rank refers to individual's standing among 100 individuals of a similar age.

Therefore, a Percentile Rank of 50 indicates that they performed exactly at the average level for their age. If there is a one standard deviation or more difference between any of the Index Composite Scores, often an Index rather than the FSIQ (e.g., GAI, FRI, etc) is deemed to provide a better estimate of the individual's true underlying natural cognitive ability. Composite Scores are intentionally removed from client copies of the report as per APS policy

Table 2: WAIS-IV Subtest Scaled Scores

Subtests	Scaled Score	Percentile Rank
Verbal Comprehension Index		
Similarities	4	2
Vocabulary	4	2
Information	4	2
Perceptual Reasoning Index		
Block Design	6	9
Matrix Reasoning	7	16
Visual Puzzles	5	5
Working Memory Index		
Digit Span	5	5
Arithmetic	4	2
Processing Speed Index		
Symbol Search	8	25
Coding	4	2
*Cancellation	7	16

See Appendix for complete subtest descriptions

\*Non-core subtest

Table 3: Differences Between VCI Subtest Scores and Mean of VCI Subtest Scores

	Scaled	VCI	Difference	.05	Strength or
VCI Subtests	Score	Mean	From Mean	Critical Value	Weakness
Similarities	4	4.0	0.0	2.5	
Vocabulary	4	4.0	0.0	2.5	
Information	4	4.0	0.0	2.5	

<sup>&</sup>quot;High" or "Low" is indicated when the score falls close to the critical value required for reaching statistical significance Statistical Significance (Critical Values) at the .05 level \*Non-core subtest

Table 4: Differences Between PRI Subtest Scores and Mean of PRI Subtest Scores

DDIG I.	Scaled	PRI	Difference	.05	Strength or
PRI Subtests	Score	Mean	From Mean	Critical Value	Weakness
Block Design	6	6.0	0.0	2.5	
Matrix Reasoning	7	6.0	1.0	2.5	
Visual Puzzles	5	6.0	-1.0	2.5	

<sup>&</sup>quot;High" or "Low" is indicated when the score falls close to the critical value required for reaching statistical significance Statistical Significance (Critical Values) at the .05 level \*Non-core subtest

Table 5: WMI and PSI Subtest Discrepancies From FSIQ Index Subtest Mean

Please note, the statistics provided in this table are not standard WAIS-IV analyses and are provided as a guide only

	Subtest	FSIQ	Difference	Nominal	Strength
	Scaled	Mean	From FSIQ	<b>Critical Cut-</b>	or
Subtest	Score	Score	Mean	off	Weakness
Working Memory					
Digit Span	5	6.7	-1.7	2.5	
Arithmetic	4	6.7	-2.7	2.5	Weakness
Processing Speed					
Symbol Search	8	6.7	1.3	2.5	
Coding	4	6.7	-2.7	2.5	Weakness
*Cancellation	7	6.7	-0.3	2.5	

Scores referred to as 'High' or 'Low' falls close to the critical value for statistical significance \*Non-core subtest.

#### ADAPTIVE BEHAVIOUR ASSESSMENT

## **Adaptive Behaviour Tests Administered:**

Test

Adaptive Behaviour Assessment System–Third Edition (ABAS-3, 2015)

Date of Administration 17/01/2022

## **ABAS-3 Overview:**

The Adaptive Behaviour Assessment System – Third Edition provides a comprehensive, norm-referenced assessment of adaptive skills for individuals ages birth to 89 years. The ABAS-3 may be used to assess an individual's adaptive skills for diagnosis and classification of disabilities and disorders, identification of strengths and limitations, and to document and monitor an individual's progress over time. Please see Appendix for Skill Area and Composite score definitions.

## ABAS-3 Test Results: Completed by John's Mother

Age at Testing: 23 years

Table 1: Composite Score Results

			95%	
	Standard	Percentile	Confidence	Qualitative
Composite	Score	Rank	Interval	Range
<b>General Adaptive Composite (GAC)</b>	63	1	60-66	<b>Extremely Low</b>
Conceptual	72	3	68-76	Low
Social	78	7	70-86	Below Average
Practical	61	0.5	57-65	Extremely Low

Adaptive Domain scores have a mean of 100 (50th percentile) and a standard deviation of 15. Percentile Rank refers to John's standing among 100 individuals of a similar age.

Table 2: Raw Score to Scaled Score Conversions

Skill Areas	Scaled Score	Qualitative Range
Communication	5	Low
Community Use	4	Low
Functional Academics	5	Low
Home Living	3	Extremely Low
Health and Safety	3	Extremely Low
Leisure	6	Below Average
Self-Care	3	Extremely Low
Self-Direction	5	Low
Social	5	Low

## ABAS-3 Test Results: Completed by John's Manager

Table 1: Composite Score Results

			95%	
	Standard	Percentile	Confidence	Qualitative
Composite	Score	Rank	Interval	Range
<b>General Adaptive Composite (GAC)</b>	54	0.1	51-57	<b>Extremely Low</b>
Conceptual	54	0.1	48-60	Extremely Low
Social	72	3	68-76	Low
Practical	54	0.1	49-59	Extremely Low

Adaptive Domain scores have a mean of 100 (50th percentile) and a standard deviation of 15. Percentile Rank refers to John's standing among 100 individuals of a similar age.

Table 2: Raw Score to Scaled Score Conversions

Skill Areas	Scaled Score	Qualitative Range
Communication	1	Extremely Low
Community Use	2	Extremely Low
Functional Academics	1	Extremely Low
Home Living	2	Extremely Low
Health and Safety	1	Extremely Low
Leisure	5	Low
Self-Care	1	Extremely Low
Self-Direction	1	Extremely Low
Social	3	Extremely Low

## **Adaptive Behaviour Summary:**

John's overall level of adaptive behaviour is best described by his Observers' ABAS-III General Adaptive Composite scores, both of which fell in the **Extremely Low** category (Mother = 1<sup>st</sup> percentile; Manager = .01<sup>st</sup> percentile).

#### DSM-5-TR INTELLECTUAL DEVELOPMENTAL DISORDER: STATEMENT OF DIAGNOSIS

"Intellectual Developmental Disorder (Intellectual Disability) is a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains." (DSM-5-TR, p.37).

"The essential features of intellectual developmental disorder (intellectual disability) are deficits in general mental abilities (Criterion A) and impairment in everyday adaptive functioning, in comparison to an individual's age-, gender-, and socioculturally matched peers (Criterion B). Onset is during the developmental period (Criterion C). The diagnosis of intellectual developmental disorder is based on both clinical assessment and standardised testing of intellectual functions, standardised neuropsychological tests, and standardised tests of adaptive functioning." (DSM-5-TR, p.38).

Therefore, as per the DSM-5-TR (p.37), the following three (3) diagnostic criteria must be met:

Criterion A.	unctions, such as reasoning, problem solving, planning, abstract thinking,
	arning, and learning from experience, confirmed by both clinical assessment
	dardised intelligence testing.
A.	Criterion Met
Clinical Assessment.	(see Background Information, Clinical Presentation, and Test Behaviour
	sections)
Intellectual Assessment <sup>1</sup>	(as per FSIQ/Index/ Subtest scores in Cognitive Assessment section) DSM-5-TR cut-off = 70 +/- 5
Criterion B.	
Deficits in adaptive fur	nctioning that result in failure to meet developmental and sociocultural
_	independence and social responsibility. Without ongoing support, the
_	functioning in one or more activities of daily life, such as communication,
	d independent living, across multiple environments, such as home, school,
work, and community.	
B.	Criterion Met
Adaptive Functioning <sup>2</sup>	(see Background and Clinical Presentation Information and Adaptive
	Behaviour section)
Criterion C.	
	l adaptive deficits during the developmental period.
C.	Criterion Met
Onset prior to age 18	(see Background and Clinical Presentation Information section)
Specifier: Severity:	
The various levels of sev	verity are defined on the basis of adaptive functioning, and not IQ scores,
because it is adaptive fu	nctioning that determines the level of supports required. Levels of severity
are: Mild, Moderate, Se	vere, and Profound.
Severity.	Mild
	(see Background and Clinical Presentation Information, Adaptive Behaviour
	section, and Severity information in Appendix 3)

<sup>&</sup>lt;sup>1</sup> As per the DSM-5-TR, page 38, "Individuals with intellectual developmental disorder have scores of approximately two standard deviations or more below the population mean, including a margin for measurement error (generally + 5 points). On tests with a standard deviation of 15 and a mean of 100, this involves a score of 65-75 (70+/-5).

#### **DIAGNOSTIC CONCLUSION:**

As indicated in the summary table above, John meets the criteria for a diagnosis of an Intellectual Developmental Disorder, which can be described as being of a "Mild" nature.

<sup>&</sup>lt;sup>2</sup>. As per the DSM-5-TR, page 42, "Criterion B is met when at least one domain of adaptive functioning-conceptual, social, or practical-is sufficiently impaired that ongoing support is needed in order for the person to perform adequately across multiple environments, such as home, school, work, and community."

#### RECOMMENDATIONS

## DEPARTMENT OF HUMAN SERVICES / CENTRELINK INVOLVEMENT

(1) A copy of this report should be provided to DHS/Centrelink for Disability Support Pension and employment assistance purposes.

#### NDIS/NDIA INVOLVEMENT:

(1) A copy of this report should be sent to NDIS/NDIA.

### **DISABILITY GATEWAY:**

(1) John would benefit from accessing the Disability Gateway for information and services to support him and his family.

www.disabilitygateway.gov.au National Helpline – 1800 643 787

The Disability Gateway can provide support in various areas including income and finance, employment, housing, transport, health, everyday living, education, and leisure.

## **DEVELOPMENTAL DISABILITY WA:**

(1) John may wish to contact Developmental Disability WA for support and resources relating to Intellectual Developmental Disorder.

9420 7203 www.ddwa.org.au ddwa@ddwa.org.au

## **BIZLINK QUALITY EMPLOYMENT:**

(1) John would benefit from contacting BizLink for assistance with employment opportunities.

BizLink is a West Australian not-for-profit organisation providing disability employment support. BizLink matches candidates with job vacancies and provides on-site training, support, and advice.

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**Dr Shane Langsford**Managing Director -PECS
Registered Psychologist

**Date of Report** 

APS College of Educational & Developmental Psychologists Academic Member

#### APPENDIX 1: ABAS-3 SKILL AREAS AND COMPOSITES

#### **ABAS-3 Skill Areas:**

Communication	Speech, language, and listening skills needed for communication with other
	people, including vocabulary, responding to questions, conversation skills etc
<b>Community Use</b>	Skills needed for functioning in the community, including use of community
	resources, shopping skills, getting around in the community etc
<b>Functional Academics</b>	Basic reading, writing, mathematics and other academic skills needed for daily,
	independent functioning, including telling time, measurement, writing notes and
	letters etc
School/Home Living	Skills needed for basic care of a home or living setting (or for the Teacher Form,
	school and classroom setting), including cleaning, straightening, property
	maintenance and repairs, food preparation, performing chores etc
Health and Safety	Skills needed for protection of health and to respond to illness and injury,
	including following safety rules, using medicines, showing caution etc
Leisure	Skills needed for engaging in and planning leisure and recreational activities,
	including playing with others, engaging in recreation at home, following rules in
	games etc
Self-Care	Skills needed for personal care including eating, dressing, bathing, toileting,
	grooming, hygiene etc
Self-Direction	Skills needed for independence, responsibility and self-control, including starting
	and completing tasks, keeping a schedule. following time limits, following
	directions, making choices etc
Social	Skills needed to interact socially and get along with other people, including
	having friends, showing and recognising emotions, assisting others, using
	manners etc
Work	Skills needed for successful functioning and holding a part or full-time job in a
	work setting, including completing work tasks, working with supervisors, and
	following a work schedule

## **ABAS-3 Composites:**

The **Conceptual Domain Composite** score is derived from the sum of scaled scores from the *Communication*, *Functional Academics* and *Self-Direction* Skill Areas. Conceptual skills include receptive and expressive language, reading and writing, money concepts and self-direction.

The **Social Domain Composite** score is derived from the sum of scaled scores from the *Social* and *Leisure* Skill Areas. Social skills include interpersonal relationships, responsibility, self-esteem, gullibility, naiveté, following rules, obeying laws and avoiding victimisation.

The **Practical Domain Composite** score is derived from the sum of scaled scores from the *Self-Care*, *Home/School Living*, *Community Use*, *Health and Safety* and *Work* Skill Areas. Practical skills include basic maintenance activities of daily living (e.g., eating, mobility, toileting, dressing), instrumental activities of daily living (e.g., meal preparation, housekeeping, transportation, taking medications, money management, telephone use) together with occupational skills and maintenance of safe environments.

The **General Ability Composite** (GAC) score is derived from the sum of scaled scores from seven, nine or ten skill areas, depending on the age of the individual and the type of rating form. The GAC represents a comprehensive and global estimate of an individual's adaptive functioning. The GAC describes the degree to which an individual's adaptive skills generally compare to the adaptive skills of other individuals within the same age group.

## APPENDIX 2: WAIS-IV SUBTEST DESCRIPTIONS

VERBAL COMPREHENSION	
Vocabulary	The Vocabulary subtest required John to explain the meaning of words presented in isolation, both visually and orally. As a direct assessment of word knowledge, the subtest is one indication of his overall verbal comprehension and fund of knowledge. Performance on this subtest also requires abilities to verbalise meaningful concepts as well as to retrieve information from long-term memory.
Similarities	On the Similarities subtest John was required to respond orally to a series of word pairs by explaining the similarity of the common objects or concepts they represent. This subtest examines his ability to abstract meaningful concepts and relationships from verbally presented material. As well as involving crystallised intelligence, abstract reasoning, auditory comprehension, memory, associative and categorical thinking, distinction between nonessential and essential features and verbal expression.
Information	The Information subtest required John to respond verbally to a series of orally presented questions that assess the individual's knowledge about common events, objects, places, and people. The subtest is primarily a measure of his fund of general knowledge. Performance on this subtest also may be influenced by his cultural experience, as well as his ability to retrieve information from long-term memory.
Comprehension	The Comprehension subtest required John to provide oral solutions to everyday problems and to explain the underlying reasons for certain social rules or concepts. This subtest provides a general measure of verbal reasoning and conceptualisation, verbal comprehension and expression. In particular, this subtest assesses his comprehension of social situations and social judgment, as well as his knowledge of conventional standards of social behaviour.
PERCEPTUAL REASONING	
Block Design	The Block Design subtest required John to use two-colour cubes to construct replicas of two-dimensional, geometric patterns. This subtest assesses ability to mentally organize visual information. More specifically, this subtest assesses his ability to analyse part-whole relationships when information is presented spatially. Performance on this task also may be influenced by visual-spatial perception and visual perception-fine motor coordination, as well as planning ability.
Matrix Reasoning	The Matrix Reasoning subtest involves a series of incomplete gridded patterns that John completes by pointing to or saying the number of the correct response from 5 possible choices. This subtest assesses fluid intelligence, broad visual intelligence, classification and spatial ability, as well as John's knowledge of part-whole relationships and perceptual organisation abilities.
Visual Puzzles	The Visual Puzzles subtest requires John to view a completed puzzle and to then select three response options, which when combined will form the completed puzzle. This is a measure of an individual's non-verbal reasoning ability and their ability to both analyse and synthesise abstract visual stimuli.
Picture Completion *	The Picture Completion subtest required John to identify the important missing part in each of a series of pictures of common objects, events, or scenes. An indication of his ability in visual discrimination, the Picture Completion subtest assesses the abilities to detect essential details in visually presented material and to differentiate them from nonessential details. Performance on this task also may be influenced by an individual's general level of alertness to the world
Figure Weights	around his and long-term visual memory.  The Figure Weights subtest involves John viewing a scale, which is missing weight(s) and then he has to select the response option which balances that scale. This is a measure of quantitative and analogical reasoning, which involves reasoning processes that can be expressed mathematically. The task emphasises the use of deductive and inductive logic.

WORKING MEMORY			
Arithmetic	John was required to mentally solve a series of orally presented arithmetic problems on the Arithmetic subtest. A direct measure of his numerical reasoning abilities, the subtest requires attention, concentration, short-term memory, and mental control. The Arithmetic subtest also measures logical reasoning, quantitative knowledge and sequential processing.		
Digit Span	The Digit Span subtest is a series of orally presented number sequences that John must repeat verbatim (Digit Span Forward), in reverse order (Digit Span Backwards) or recall the numbers in ascending order (Digit Span Sequencing). A direct assessment of John's short-term auditory memory, the Digit Span subtest requires attention, concentration, and mental control and can be influenced by the ability to correctly sequence information. The Digit Span Sequencing task increases the working memory demands of the task.		
Letter-Number Sequencing	The Letter-Number Sequencing subtest involves a series of orally presented sequences of letters and numbers that John simultaneously tracks and orally completes, with the numbers in ascending order and the letters in alphabetical order. This task is a measure of sequential processing ability, short term auditory memory span, mental manipulation, attention, and concentration. Letter-Number Sequencing also assesses an individual's underlying information processing abilities, cognitive flexibility and fluid intelligence.		
PROCESSING SPEED			
Symbol Search	On the Symbol Search subtest John was required to inspect several sets of symbols and indicate if special target symbols appeared in each set. A direct test of speed and accuracy, the subtest assesses scanning speed and sequential tracking of simple visual information. Performance on this subtest also may be influenced by visual discrimination and visual-motor coordination.		
Coding	The Coding subtest required John to use a key to associate a series of symbols with a series of shapes and to use a pencil to draw the symbols next to the shapes. A direct test of speed and accuracy, the Coding subtest assesses ability in quickly and correctly scanning and sequencing simple visual information. Performance on this subtest also may be influenced by short-term visual memory, attention, or visual-motor coordination.		
Cancellation	The Cancellation subtest asks John to scan a structured arrangement of shapes, for a specified target shape, which he will mark. The Cancellation subtest is a direct measure of processing speed, as well as visual selective attention, vigilance, perceptual speed and visual motor ability. The inclusion of a decision-making component (selection is based on both shape and colour) places more complex demands upon John.		

## APPENDIX 3: ADAPTIVE BEHAVIOUR SEVERITY SUMMARY TABLE

Severity	Conceptual domain	Social domain	Practical domain
Mild	For preschool children, there may be no obvious conceptual differences. For school-age children and adults, there are difficulties in learning academic skills involving reading, writing, arithmetic, time or money with support needed in one or more areas to meet agerelated expectations. In adults, abstract thinking, executive function (i.e., planning, strategizing, priority setting, and cognitive flexibility), and short-term memory, as well as functional use of academic skills (e.g., reading, money management), are impaired. This is a somewhat concrete approach to problems and solutions compared with age mates.	Compared with typically developing age-mates, the individual is immature in social interaction. For example, there may be difficulty in accurately perceiving peers' social cues. Communication, conversation, and language are more concrete or immature than expected for age. There may be difficulties regulating emotion and behaviour in age-appropriate fashion; these difficulties are noticed by peers in social situations. There is limited understanding of risk in social situations; social judgement is immature for age, and the person is at risk of being manipulated by others (gullibility).	The individual may function age-appropriately in personal care. Individuals need some support with complex daily living tasks in comparison to peers. In adulthood, supports typically involve grocery shopping, transportation, home and child-care organising, nutritious food preparation, and banking and money management. Recreational skills resemble those of age-mates, although judgement related to well-being and organisation around recreation requires support. In adulthood, competitive employment is often seen in jobs that do not emphasize conceptual skills. Individuals generally need support to make health care decisions and legal decisions, and to learn to perform a skilled vocation competently. Support is typically needed to raise a family.
Moderate	All through development, the individual's conceptual skills lag markedly behind those of peers. For pre-schoolers, language and pre-academic skills develop slowly. For school-age children, progress in reading, writing, mathematics and understanding of time and money occurs slowly across the school years and is markedly limited compared with that of peers. For adults, academic skills development is typically at an elementary level, and support is required for all use of academic skills in work and personal life. Ongoing assistance on a daily basis is needed to complete conceptual tasks of day-to-day life, and others may take over these responsibilities fully for the individual.	The individual shows marked differences from peers in social and communicative behaviour across development. Spoken language is typically a primary tool for social communication but is much less complex than that of peers. Capacity for relationships is evident in ties to family and friends, and the individual may have successful friendships across life and sometimes romantic relations in adulthood. However, individuals may not perceive or interpret social cues accurately. Social judgement and decision-making abilities are limited, and caretakers must assist the person with life decisions. Friendships with typically developing peers are often affected by communication or social limitations. Significant social and communicative support is needed in work settings for success.	The individual can care for personal needs involving eating, dressing, elimination, and hygiene as an adult, although an extended period of teaching and time is needed for the individual to become independent in these areas, and reminders may be needed. Similarly, participation in all household tasks can be achieved by adulthood, although an extended period of teaching is needed, and ongoing supports will typically occur for adult-level performance. Independent employment in jobs that require limited conceptual and communication skills can be achieved, but considerable support from co-worker, supervisors, and others is needed to manage social expectations, job complexities, and ancillary responsibilities such as scheduling, transportation, health benefits and money management. A variety of recreational skills can be developed. These typically require additional supports and learning opportunities over an extended period of time. Maladaptive behaviour is present in a significant minority and causes social problems.

#### Severe

Attainment of conceptual skills is limited. The individual generally has little understanding of written language or of concepts involving numbers, quantity, time, and money. Caretakers provide extensive supports for problem solving throughout life.

Spoken language is quite limited in terms of vocabulary and grammar. Speech may be single words or phrases and may be supplemented through augmentative means. Speech and communication are focused on the here and now within everyday events. Language is used for social communication more than for explication. Individuals understand simple speech and gestural communication. Relationships with family members and familiar others are a source of pleasure and help

The individual requires support for all activities of daily living, including meals, dressing, bathing, and elimination. The individual requires supervision at all times. The individual cannot make responsible decisions regarding well-being of self or others. In adulthood, participation in tasks at home, recreation, ad work requires ongoing support and assistance. Skills acquisition in all domains involves long-term teaching and ongoing support. Maladaptive behaviour, including self-injury, is present in a significant minority.

#### **Profound**

Conceptual skills generally involve the physical world rather than symbolic processes. The individual may use objects in goaldirected fashion for self-care, work, and recreation. Certain visuospatial skills, such as matching and sorting based on physical characteristics, may be required. However, co-occurring motor and sensory impairments may prevent functional use of objects.

The individual has very limited understanding of symbolic communication in speech or gesture. He she or may understand some simple instructions or gestures. The individual expresses his or her own desires and emotions largely through nonverbal, nonsymbolic communication. The individual enjoys relationships with well-known family members, caretakers, and familiar others, and initiates and responds to social interaction through gestural and emotional cues. Co-occurring sensory and physical impairments may prevent many social activities.

The individual is dependent on others for all aspects of daily physical care, health, and safety, although he or she may be able to participate in some of these activities as well. Individuals without severe physical impairments may assist with some daily work tasks at home, like carrying dishes to the table. Simple actions with objects may be the basis of participation in some vocational activities with high levels of ongoing support. Recreational activities may involve, for example, enjoyment in listening to music, watching movies, going out for walks, or participating in water activities, all with the support of Co-occurring physical and sensory impairments are frequent barriers to participation (beyond watching) in home, recreational, and vocational activities. Maladaptive behaviour is present in a significant minority.

#### APPENDIX 4: BRIEF BIOGRAPHY OF THE AUTHOR

- ➤ Dr Shane Langsford is a highly qualified and very experienced psychologist who has conducted and interpreted more than 7000 child and adult assessments since establishing Psychological & Educational Consultancy Services in 1999.
- > Dr Langsford's qualifications include a Bachelor of Psychology, a Bachelor of Education with First Class Honours, and a PhD in Educational Psychology.
- > Dr Langsford is fully registered with the Psychology Board of Australia (PBA) and the Australian Health Practitioners Regulation Agency (AHPRA).
- ➤ Dr Langsford is a full member of the Australian Psychological Society (APS), Australian Association of Psychologists (AAPi), Australian ADHD Professionals Association (AADPA), and the School Psychologist's Association of Western Australia (SPAWA).
- > Dr Langsford is also an APS College of Educational & Developmental Psychologists Full Academic Member. To be awarded Full Academic Member status, an individual must have completed a PhD in psychology, have at least two years' experience as a researcher or educator in psychology in the College specific area of practice, and have published a notable body of relevant research in the College-specific area of practice.
- In 2015, Dr Langsford was personally selected from a shortlist by the then Federal Minister of Health (the Hon Sussan Ley) to be part of the 13-member Mental Health Expert Reference Group (MHERG). The group was formed to provide advice to the Commonwealth Department of Health in relation to the government's response to the National Review of Mental Health Programmes and Services. Dr Langsford was the only practising psychologist in Australia appointed to the group, and the only member in the group from Western Australia. (For more information, see https://www.pecs.net.au/pecs-profile)
- ➤ With regards to ADHD, Dr Langsford has conducted over 3000 ADHD assessments for various Psychiatrists and Paediatricians, was asked in 2014 to be on the National Shire ADHD Expert Panel for the "A Snapshot of ADHD: A Consumer and Community Discussion", and in April 2018 was the only Psychologist from Australia participating in the ADHD Institute's "Meeting of the Minds" forum in Madrid which is an invite-only meeting "providing a forum for ADHD scientists and clinicians to discuss the latest scientific evidence and share best practice in the management of ADHD". Dr Langsford was for the second year running once again the only Psychologist from Australia invited to the 2019 Forum, which was held in Munich (Germany) in November 2019, and also again for the 2020 Forum in Stockholm (Sweden).
- ➤ Dr Langsford's extensive knowledge of a wide range of disorders led to the creation of the PsychProfiler, which is a reliable and valid instrument oriented to the DSM-5 and has been the most widely used Australian global psychiatric/psychological/educational assessment tool since 2004. (For more information, see https://www.psychprofiler.com)