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**Autism Spectrum Disorder Diagnostic Assessment Report:  
Greg Example**

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*This report adheres to the diagnostic criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-5<sup>TM</sup>) for Autism Spectrum Disorder.*

## BIOGRAPHICAL DETAILS

Name:	Greg Example
Date of Birth:	14/11/2004
Date of Assessment:	29/04/2016
Age at Assessment:	11
Gender:	Male
School:	Primary School
Grade:	6
Home Address:	123 Fourth Street SUBIACO WA 6008
Mothers Name:	Jenny
Fathers Name:	John
Parent's Phone Number:	0414 234 234
Parent's Email:	jennyjohn@hotmail.com

## REFERRAL INFORMATION

Greg was referred to Psychological and Educational Consultancy Services (PECS) by Dr James Smith (General Practitioner) for an Autism Spectrum Disorder assessment.

## CURRENT CONCERNS

From a presented list, Greg's parents identified concerns in the following areas:

- Learning
- Social skills

## BRIEF BACKGROUND INFORMATION

### Background information reported by Greg's parent(s):

- Was born with no apparent complications
- Reached all of the major developmental milestones (e.g., walking, speaking, toileting) during the expected age ranges
- Is solely right-handed/right-footed
- No major medical or neurological conditions
- Normal auditory acuity reported (last tested in 2010)
- Requires glasses/contact lenses (last tested in 2016)
- Is prescribed Nasonex for allergies
- Has fine motor movement problems – Hypermobility
- Greg's Hypermobility impedes his physical activity
- OT and Physiotherapy has strengthened Greg's body and improved his fine/gross motor skills
- Swimming has been beneficial to both his body strength and communication with the teacher – he also likes swimming very much
- Greg's dominant language is Mandarin
- Greg has been exposed to 6 months of full time English, following 3 years of 1.5 hours English tutoring per week
- Greg attends the Intensive English Centre learning programme
- Greg has difficulty socialising and making friends – he likes to have friends but his interpersonal skills are poor
- Socialising was a difficulty for Greg in China, as well as here in Australia
- School teacher has arranged a buddy to help Greg with daily school activities and play with him - which in turn, has encouraged him to go to school
- Greg likes to talk with people he is familiar with, but appears to be nervous when facing unfamiliar people under new circumstances
- The teacher in China apparently had no concerns about Greg's Reading and Mathematics
- Father thinks Greg can read no problem, but often has difficulty with the 'why' questions
- Greg can have an unsteady temper at times
- Greg's parents indicated that they have always found something puzzling about Greg, but each quirky behaviour Greg had disappeared with time, without intervention
- Greg's parents indicated that it is likely that this is now only coming to light, because in China there was more emphasis on Greg's academic performance than his behaviour and social skills

### Background information reported by Greg's teacher:

- Greg tends to repeat favoured words such as "margin together" with strange facial expressions
- Greg used inappropriate scratching and fidgeting to suggest he wants to go to the toilet
- Calming strategies have been used to address Greg's fidgeting and scratching
- Greg has difficulties socialising, maintaining friendships, and making eye contact
- Social stories have been used to improve Greg's social skills and eye contact
- Greg has an awkward gait and has difficulties with large muscle control
- An IEP is in place to address Greg's lack of muscle control
- Greg has comprehension difficulties, linking literal knowledge to inferential, interpretive, and evaluative questions
- Greg has difficulties identifying line spacing and starting point of letters
- Greg has excellent recall skills of basic number facts, but has difficulty understanding more complex concepts and problem solving

**Past testing:**

- OT Assessment (at age 11 years): Further OT intervention was recommended to address fine and gross motor skills, proprioception, strength, independence and assistance in self-care tasks, organisational skills, sensory preferences, and social skills. It was recommended that Greg be assessed for potential ASD, support for his cultural transition, and social skill intervention.
- School Psychologist Assessment (at age 11 years): Recommendations were made that Greg be seen by a psychologist for a nonverbal cognitive assessment. Additionally, GP / Paediatrician consultation was recommended to address developmental concerns, particularly comprehension and social communication. Lastly, extra support was recommended to improve English skills in literacy and numeracy.

*Please note that only a brief overview was obtained due to Greg and his parents already having provided more detailed background information to the referrer.*

*See checklists for more behavioural information.*

## COGNITIVE ASSESSMENT

Please note, a Cognitive Assessment is conducted due to Intellectual Disability/Global Developmental Delay needing to be ruled out (i.e. DSM-F Criteria D in a latter section) before an Autism Spectrum Disorder diagnosis can be given.

### Cognitive Test Administered:

Universal Nonverbal Intelligence Test-Second Edition (UNIT-2, 2016)

*Date of Administration*

29/04/2016

### Examiner's Details:

EXAMINER: Dr Shane Langsford

QUALIFICATIONS: BPsych, BEd (First Class Hons), PhD

TEST SITE: Psychological & Educational Consultancy Services – Subiaco Office

### Test Behaviour and Observations:

Greg engaged in verbal stereotypy and consequent laughing outbursts throughout the assessment

Was observed to be impulsive with decisions during the Analogic Reasoning subtest

Greg found it difficult to grasp the idea of a 3D image during the Cube Design subtest, and was quick to give up. He acknowledged this by saying, “not easy, very hard”.

It is my opinion that the scores that Greg achieved on the WISC-IV are an accurate reflection of his cognitive functioning at this particular point in time.

### UNIT-2 Test Results:

*Age at Testing: 11 years 5 months*

**Table 4: UNIT-2 Composite Scores**

WISC-IV Index	Composite Score	Percentile Rank	95% Confidence Interval	Descriptive Term
Memory	97	42	90-105	Average
Reasoning	100	50	94-106	Average
Quantitative	103	58	98-108	Average
<b>Full Scale (FSIQ)</b>	<b>100</b>	<b>50</b>	<b>96-104</b>	<b>Average</b>

*Index scores have a mean Composite Score of 100 (50<sup>th</sup> percentile) and a standard deviation of 15.*

*Percentile Rank refers to Greg's standing among 100 children of similar age.*

*Therefore, a Percentile Rank of 50 indicates that Greg performed exactly at the average level for his chronological age.*

*The FSIQ is not considered to be valid if there is an 18+ difference between any of the Composites.*

**Table 5: UNIT 2 Subtest Scaled Scores**

Subtests	Scaled Score	Percentile Rank	Descriptive Term
<b>Memory</b>			
Symbolic Memory	8	25	Average
Spatial Memory	11	63	Average
<b>Reasoning</b>			
Analogic Reasoning	11	63	Average
Cube Design	9	37	Average
<b>Quantitative</b>			
Nonsymbolic Quantity	10	50	Average
Numerical Series	11	63	Average

## ADAPTIVE BEHAVIOUR ASSESSMENT

Please note, an Adaptive Behaviour Assessment is conducted due to it providing a wealth of information to address DSM-% Criterion D in a latter section (i.e. clinically significant impairment in important areas of functioning). It is considered by DSC an essential component of a “gold standard” assessment.

### Adaptive Behaviour Tests Administered:

<i>Test</i>	<i>Date of Administration</i>
Adaptive Behaviour Assessment System–Second Edition (ABAS-II, 2008)	29/04/2016

### Adaptive Behaviour Test Results:

#### (1) Parent Form (Ages 5-21)

*Age at Testing: 11 years 5 months*

**Table 1: Sum of Scaled Scores to Composite Score Conversions**

Composite	Sum of Scaled Scores	Composite Score	Percentile Rank	95% Confidence Interval	Qualitative Range
Conceptual	10	63	1	57-69	Extremely Low
Social	3	56	0.2	49-63	Extremely Low
Practical	22	75	5	68-82	Borderline
<b>GAC</b>	<b>35</b>	<b>64</b>	<b>1</b>	<b>60-68</b>	<b>Extremely Low</b>

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

**Table 2: Raw Score to Scaled Score Conversions**

Skill Areas	Scaled Scores	Qualitative Range
Communication (Com)	5	Borderline
Community Use (CU)	7	Below Average
Functional Academics (FA)	2	Extremely Low
Home Living (HL)	1	Extremely Low
Health and Safety (HS)	9	Average
Leisure (LS)	2	Extremely Low
Self-Care (SC)	5	Borderline
Self-Direction (SD)	3	Extremely Low
Social (Soc)	1	Extremely Low

*Scaled scores have a mean of 10 (50th percentile) and a standard deviation of 3.  
Percentile Rank refers to Greg’ standing among 100 individuals of a similar age.*

(2) Teacher Form (Ages 5-21)

Age at Testing: 11 years 5 months

**Table 1: Sum of Scaled Scores to Composite Score Conversions**

<b>Composite</b>	<b>Sum of Scaled Scores</b>	<b>Composite Score</b>	<b>Percentile Rank</b>	<b>95% Confidence Interval</b>	<b>Qualitative Range</b>
Conceptual	4	53	0.1	49-57	Extremely Low
Social	3	58	0.3	54-62	Extremely Low
Practical	4	45	<0.1	41-49	Extremely Low
<b>GAC</b>	<b>11</b>	<b>43</b>	<b>&lt;0.1</b>	<b>40-46</b>	<b>Extremely Low</b>

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

**Table 2: Raw Score to Scaled Score Conversions**

<b>Skill Areas</b>	<b>Scaled Scores</b>	<b>Qualitative Range</b>
Communication (Com)	33	1
Community Use (CU)	17	1
Functional Academics (FA)	28	1
Home Living (HL)	30	1
Health and Safety (HS)	22	1
Leisure (LS)	23	2
Self-Care (SC)	13	1
Self-Direction (SD)	35	2
Social (Soc)	26	1

*Scaled scores have a mean of 10 (50th percentile) and a standard deviation of 3.  
Percentile Rank refers to Greg' standing among 100 individuals of a similar age.*

## ASD SYMPTOMOLOGY ASSESSMENT

### Checklists Administered:

	<i>Date of Administration</i>
(1) ASRS Parent Rating Scale: Long Form (ASRS -P, 2014)	04/05/2016
(2) ASRS Teacher Rating Scale: Long Form (ASRS -T, 2014)	03/05/2016

### ASRS Checklist Results:

#### (1) ASRS Parent Rating Scale:

The ASRS-P is a reliable and valid instrument that contains 71 items pertaining to their perception of their child's behaviour over the past month.

#### ASRS-P Summary Results

ASRS Subscales	T-Score*	Percentile	Classification
<b>ASRS TOTAL SCORE</b>	<b>66</b>	<b>95</b>	<b>Elevated Score</b>
<b>ASRS SCALES</b>			
Social/Communication	73	99	Very Elevated Score
Unusual Behaviours	64	92	Slightly Elevated Score
Self-Regulation	57	76	Average Score
<b>DSM-5 SCALE</b>	<b>66</b>	<b>95</b>	<b>Elevated Score</b>
<b>TREATMENT SCALES</b>			
Peer-Socialisation	74	99	Very Elevated Score
Adult Socialisation	56	73	Average Score
Social/Emotional Reciprocity	70	98	Very Elevated Score
Atypical Language	70	98	Very Elevated Score
Stereotypy	56	73	Average Score
Behavioural Rigidity	86	96	Elevated Score
Sensory Sensitivity	47	38	Average Score
Attention	57	76	Average Score

*\*T-scores have a mean of 50 and a standard deviation of 10.*

*\*T-scores above 60 are deemed by the checklist authors to be clinically significant.*



(2) ASRS Teacher Rating Scale:

The ASRS-T is a reliable and valid instrument that contains 71 items pertaining to their perception of their student's behaviour over the past month.

**ASRS-T Summary Results**

<b>ASRS Subscales</b>	<b>T-Score*</b>	<b>Percentile</b>	<b>Classification</b>
<b>ASRS TOTAL SCORE</b>	<b>84</b>	<b>99</b>	<b>Very Elevated Score</b>
<b>ASRS SCALES</b>			
Social/Communication	82	99	Very Elevated Score
Unusual Behaviours	83	99	Very Elevated Score
Self-Regulation	66	95	Elevated Score
<b>DSM-5 SCALE</b>	<b>85</b>	<b>99</b>	<b>Very Elevated Score</b>
<b>TREATMENT SCALES</b>			
Peer-Socialisation	81	99	Very Elevated Score
Adult Socialisation	71	98	Very Elevated Score
Social/Emotional Reciprocity	84	99	Very Elevated Score
Atypical Language	80	99	Very Elevated Score
Stereotypy	77	99	Very Elevated Score
Behavioural Rigidity	72	99	Very Elevated Score
Sensory Sensitivity	79	99	Very Elevated Score
Attention	63	90	Slightly Elevated Score

*\*T-scores have a mean of 50 and a standard deviation of 10.*

*\*T-scores above 60 are deemed by the checklist authors to be clinically significant.*

**Summary of ASRS results:**

The authors of the ASRS state that *T*-Scores greater than 60 are usually taken to indicate a clinically significant problem.

Greg's scores exceeded the cut-off for 8 subscales on the Parent-report ASRS checklist, and 13 subscales on the Teacher-report ASRS checklist.

Ratings on the DSM-5 treatment scales indicate how closely Greg matches the DSM-5 criteria for Autism Spectrum Disorder. This DSM-5 *T*-score was 66 (95<sup>th</sup> percentile – Elevated Score) on his parent report, and 85 (99<sup>th</sup> percentile – Very Elevated Score) on his teacher report.

The Total Score is a summary score and measures the extent to which the individual's behavioural characteristics are similar to the behaviours of youth diagnosed with Autism Spectrum Disorder. It yielded a *T*-Score of 66 (95<sup>th</sup> percentile – Elevated Score) on his parent report, and 84 (99<sup>th</sup> percentile – Very Elevated Score) on his teacher report.

## AUTISM SPECTRUM DISORDER DIAGNOSTIC CRITERIA AS PER DSM-5

There are seven DSM-5™ criteria for Autism Spectrum Disorder, separated into two domains: **Social Communication and Interaction (A)** and **Restricted, Repetitive Patterns of Behaviour (B)**. To meet the diagnostic criteria for Autism Spectrum Disorder, all three criteria from the Social Communication and Interaction domain (A) and at least two criteria from the Restricted, Repetitive Patterns of Behaviour domain (B) must be met.

The difficulties must have been present in the early developmental period; cause clinically significant impairment in social, occupational, or other important area of functioning; and not be better explained by intellectual disability or global developmental delay.

These criteria are addressed below for Greg, based on information gathered from direct observation, parent clinical interview, and parent checklist information.

### DSM-5 CRITERIA

#### A. PERSISTENT DEFICITS IN SOCIAL COMMUNICATION AND SOCIAL INTERACTION ACROSS MULTIPLE CONTEXTS, AS MANIFESTED BY THE FOLLOWING, CURRENTLY OR BY HISTORY:

##### A1. Deficits in social-emotional reciprocity (e.g., abnormal social approach; failure of normal back-and-forth conversation; reduced sharing of interests, emotions, or affect; failure to initiate or respond to social interactions).

###### Examples of behaviours relevant to this criterion displayed by Greg:

- Greg does not appear to share enjoyment, interests, or activities with other people; even though his parents have tried to show him how to engage with others
- Greg does not appear to be interested in what games others want to play or what others want to do
- Greg does not often smile back at his mother and father when they smile at him
- When Greg's parents used to say "I'm going to get you" or cover their eyes for peek-a-boo, Greg did not get excited for what happens next
- Greg did not show any interest in playing imitative games such as pat-a-cake, peek-a-boo or "so big" as a child; even though they were introduced by his parents
- As a younger child, Greg did not imitate his mother and father when they waved bye-bye, clapped their hands for pat-a-cake or shook their head "no"
- Greg did not make hand gestures or movements to familiar songs such as "itsy-bitsy-spider" or "wheels on the bus"
- Greg does not engage in activities at appropriate times; for example, when his grandmother passed away everyone was very busy and all he wanted to do was read his book. When he was not allowed to read his book he cried for a long time.
- Greg is very quiet when he is drawing and does not share his excitement with others after he has finished
- Greg will not come up and initiate a hug or kiss without being asked
- In a new or disturbing situation, Greg does not look at his parents for comfort
- Greg doesn't often recognize how others are feeling, e.g., when they are happy, angry or sad.
- When Greg's parents are upset, sad or ill, he will not try to comfort them; for example when his father's mother passed away, he did not comfort him
- He does not understand the expressions of other people's faces
- Greg's behaviour is dictated by the rules he has to follow rather than the impact it has on other people
- When Greg is angry or unhappy he makes noises and doesn't consider the impact on those around him
- Greg does not seem to understand when he is being teased and bullied

- Greg tends to ask socially inappropriate questions, e.g., if we take a taxi he will tell the driver private information about our family
- Greg cannot take turns in a conversation i.e., he likes to talk about his subject of interest and often repeats himself
- Sometimes Greg has to be forced to change topics because he is only interested in talking about a narrow topic of interest
- Greg appear to have abnormalities in relation to affection – this was apparent after three years of age
- Greg does not understand jokes unless they are very simple
- Greg doesn't appear to do things to try and make others laugh
- Greg uses language that is immature for his age
- When Greg is emotionally stable, his tone and pace of voice is consistent

### **Information collected by the Speech Pathologist as part of their assessment:**

#### Social Approach

- Greg did not verbally greet the assessor even after waiting. Parents report that Greg usually needs to be prompted to greet someone.
- Greg will usually farewell someone spontaneously.
- Greg's parents report that he will often position his face very close to theirs' when he comes to talk to them.
- Jenny commented that Greg's cuddles and kisses can be excessively 'strong' and firm. He is also said to have a strong grip when he takes her arm.
- Greg's parents have observed him using their hand as tool, for example using it to grab a pen.

#### Sharing of Interests, Emotions or Affect

- Greg responded to the assessor's introduction with a brief social smile.
- Greg shared some enjoyment today, such as in response to visual humour (e.g. the doll repeatedly falling off a horse).
- Greg frequently interrupted the adults' conversation to show the assessor words or symbols he had drawn, each time asking for them to be labelled or read aloud but without engaging in social chat around these (e.g. ignoring questions such as 'is that a street near your house?').
- Greg will only bring selected items, for which he has a strong interest, to parents to show them (e.g. puzzles, shapes books on planets). When Greg brings his drawings to his parents, they believe this is for the purpose of seeking praise.
- Greg's parents report that Greg rarely seeks to share joint attention by pointing out or commenting on things he notices.
- Greg's parents report that Greg has huge difficulty coping with and sharing his emotions when a problem occurs. They can usually infer that he is upset from his behaviour; he will bite his hand without puncturing the skin, shudder slightly, cry, sometimes hit his head and or bang a table or chair repetitively when he is upset. When parents described this at the assessment Greg commented 'very very rude' as this is what he has been told by his teacher. Greg rarely approaches his parents for comfort and he doesn't use words to express his feelings.

### Initiating and Responding to Social Interactions

- On assessment Greg presented as very passive, rarely initiating interactions and inconsistently responding to the assessor. When the adults spoke Greg sat at the table idly. Greg preferred to direct comments to his parents and he asked them to interpret for him several times. Overall, Greg was pleasant and cooperative.
- During language-loaded interactions (e.g. conversation, sharing a book) Greg often disengaged from the assessor.
- Greg initiates interactions with parents mostly to 'seek protection' and sometimes to seek assistance with an activity (e.g. to show him the next instruction in a construction).

### Conversation

- Back-and-forth conversation could not be developed today.
- Greg responded to simple, concrete questions most of the time. He displayed anxiety and distress in response to more complex or abstract questions, particularly those around social or emotional content (e.g. 'do you like school?' 'tell me about a time when you felt cross').
- Greg asked some questions about what words meant (e.g. 'what is pour?') however he did not ask conversational questions or respond to conversational comments (e.g. 'I am not good at drawing...').
- Julie Smith's report from February 2016 states that Greg '*showed some difficulties with social-emotional reciprocity.. he mainly responded when asked questions, rather than initiated conversation.*'

**This criterion is rated as having been Met.**

## **A2. Deficits in nonverbal communicative behaviours used for social interaction (e.g., poorly integrated verbal and nonverbal communication; abnormalities in eye contact and body language; deficits in understanding and use of gestures; total lack of facial expressions and nonverbal communication).**

### **Examples of behaviours relevant to this criterion displayed by Greg:**

- Greg has abnormalities with regard to mood; for example, he smiles and giggles for no apparent reason
- Greg showed limited emotion when his grandmother passed away, and did not show empathy at her recent funeral (1<sup>st</sup> of May 2016)
- Greg has a delayed reaction to environmental stimuli; for example, he will start laughing at a situation long after it has occurred
- In general, Greg only looks others in the eye for a moment before looking down when he wants something or when he is talking to them
- Greg does not like making eye contact with unfamiliar people when they are close in proximity
- At times, Greg stands too close to people during conversations
- Greg does not always turn his head to look at others when they start talking to him or doing things next to him; particularly when he is doing something he is interested in
- Greg responds better to visual instructions than verbal instructions
- Greg doesn't appear to use words and gestures together regularly (coordinate use of words and gestures); for example, pointing to an object and saying "look Mommy," waving bye-bye and saying "bye-bye," and shaking his head and saying "no"
- Greg uses his mother's and father's hand like a tool, to place it on what he wants
- Greg points to things repetitively to show you that he is excited about something
- Greg's shows a range of facial expressions; however they do not often match the situation; for example, when his grandmother fell down in the rain, Greg just laughed
- Greg has abnormalities with regard to mood (e.g., giggling or weeping for no apparent reason)
- In 2016, he wet his pants under stressful conditions – an MRI indicated no physical problems

### Information collected by the Speech Pathologist as part of their assessment:

- Greg's social eye gaze was limited. He tended to look ahead, around the room or down at the table rather than at the assessor.
- When objects were present Greg had difficulty regularly shifting his gaze between these and the adult (though referential eye gaze was observed).
- Frequently Greg did not integrate eye contact with other forms of communication, such that Greg was often speaking whilst looking away from the adult.
- Greg's parents commented that his eye contact is generally poor with unfamiliar people.
- Greg displayed integrated proximal pointing and referential eye gaze when showing his drawings and writing to the assessor.
- Greg was unable to use gesture or facial expression in a task requiring him to describe and mime actions associated with brushing his teeth. He briefly brought his index finger to his mouth and made a brushing motion, and briefly imitated a turning tap motion when explicitly asked, however even with significant prompting, Greg was unable to perform other gestures (e.g. drinking, wiping his face, drying his hands, etc).
- Greg was observed to use one descriptive gesture; when asked how it felt to be angry, Greg banged his chest and mimicked the assessor's angry expression.
- Greg displayed facial expressions indicating emotional extremes only (enjoyment, fear/distress) and generally his facial expression was neutral. This is in keeping with parental reports.
- Greg did not direct subtle or otherwise facial expressions to share affect (e.g. to share humour, to express confusion, etc).
- Greg could identify when characters were 'happy' and 'angry' and he commented 'oh!' pointing to the man's fearful expression in the story.
- Greg was observed to use a learned, 'teacher-like' intonation pattern as he read.
- Greg raised his voice anxiously but also had frequent difficulty modulating his voice volume on assessment.
- Julie Smith's report from February 2016 states that Greg :
  - *'tended to look down with reduced eye contact but did look up when excited with noted body tensed and hand flexed)*
  - *'was noted to grin to himself frequently but was unable to explain why he was smiling'*

**This criterion is rated as having been Met.**

### **A3. Deficits in developing, maintaining, and understanding relationships (e.g., difficulties in adjusting behaviour to suit various social contexts; difficulties in sharing imaginative play or in making friends; absence of interest in peers).**

#### **Examples of behaviours relevant to this criterion displayed by Greg:**

- At times, Greg has difficulties adjusting his behaviour to suit social contexts
- Greg shows an obvious disinterest in other children his own age and prefers to engage in solitary activities (e.g., painting, crosswords, and drawings)
- He has always had difficulty engaging in imaginative play
- Although Greg likes to play with other children, he lacks interpersonal skills and finds it difficult to make friends
- Greg finds it easier to communicate with adults than peers his own age
- Greg does not try to talk to or join other children in their play at school
- Greg can follow other children but does not understand them and will not follow the rules of games they play
- Greg said that he has one friend at school, but that boy has been specifically asked to engage with Greg as part of a buddy program
- The kids Greg has mentioned as friends, do not see Greg as their friend
- Greg has been to other people's houses and has had students over to his house; however they have all disappeared and never come back.
- He seldom engages in make believe play and only dresses up in costumes if made to for school
- Greg has difficulty with adjusting his behaviour to suit the varying social contexts – for example smiling at another person getting in trouble at school, or laughing at his grandmother's funeral

#### **Information collected by the Speech Pathologist as part of their assessment:**

- Greg named his friend 'Michael' but did not respond to questions about their friendship other than to say they played soccer together.
- Greg laughed hysterically about another child getting in trouble at school and parents commented that Greg will find it funny when others break rules and 'get in trouble.'
- Greg's parents have observed that their neighbours' children often appear disinterested in playing with Greg and leave him after a short time.
- Greg has told his parents that he is unable to understand the rules of games.
- Julie Smith's report from February 2016 states that Greg has
  - *'difficulties developing and maintaining relationships... he has always had difficulty with making friends and did not socialise much in China, preferring to play on his own and draw.'*
  - *'currently has only one friend at school but was unable to describe what they do or talk about'*
  - *'the teacher reports he often demonstrates social inappropriateness in the classroom.'*
- Greg had significant difficulties engaging in imaginative play today. When presented with dolls and objects from a small world household set, Greg selected items and labelled them. He engaged the dolls in simple actions (e.g. riding on a horse) and made some comments about what he was doing (e.g. 'haha he fall off'), however he was unable to develop a sequence of events or a coherent story.
- Greg sometimes tried to imitate the assessor's actions or respond to simple prompts (e.g. 'I'm thirsty' - Greg gave the doll a drink) but he was largely unable to elaborate on the assessor's ideas in play or engage in joint interactive play.
- Greg was able to generate a simple story based with objects that largely followed the assessor's model and showed limited spontaneity.

- Greg's parents have observed that he finds it difficult to accept one object as representing another.
- Greg was not able to understand the emotional causality or theory-of-mind elements of the story (e.g. recognising that the man didn't know about the cows approaching behind him) and became distressed when questioned about these.

**This criterion is rated as having been Met.**

**B. RESTRICTED, REPETITIVE PATTERNS OF BEHAVIOUR, INTERESTS, OR ACTIVITIES, AS MANIFESTED BY AT LEAST TWO OF THE FOLLOWING, CURRENTLY OR BY HISTORY:**

**B1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypes; lining up toys or flipping objects; echolalia; idiosyncratic phrases).**

**Examples of behaviours relevant to this criterion displayed by Greg:**

- Greg was observed to have verbal stereotypy that was followed with hysterical laughter throughout the cognitive assessment; for example, “louder: kiss the ball” (was from a TV or movie), “see you on Monday” (was said by teacher before the weekend), “Do you know my name, Greg” (social story), “Keep safe” (before he went back to China to visit sick family member). Greg explained what each of these verbals meant to the examiner.
- Greg was observed to mimic the examiners voice when answering a phone call after the assessment. This was done in the same tone of voice. Following the phone call, Greg fixated and repeated phone conversations he had mimicked in the past – for example; good morning, how are you, hello.
- Greg is quite talented at imitation, he can mimic tone of voice and multiple dialects
- Greg was observed to sing along to the songs and bob to the beat of each song on the radio
- Greg tends to repeat phrases, jingles, and commercials at home.
- At times, Greg uses stereotyped and repetitive language; for example, he will repeat ‘house’ or immediately’ over and over again
- When Greg does not want to do something, he will say “Whoahoooh”
- Greg tends to use language that can only be understood by his parents
- Sometimes Greg exhibits repetitive whole body movements
- At times Greg spins the parts of a toy that rotate
- Greg used to pull toys apart
- From 12 to 24 months of age, Greg liked to whirl a plastic basin. After 24 months of age he gradually lost interest in that game
- When Greg was younger he liked the outside air conditioning unit because it had fans that rotated
- Greg flaps his right hand when he is excited or angry

**Information collected by the Speech Pathologist as part of their assessment:**

- Immediate echolalia was observed on several occasions (e.g. copying the assessor saying ‘jump’ with the same intonation pattern, during make believe play). Parents have noticed this at home, and more so when Greg was younger.
- Greg repeats advertisements and slogans, and recently he has repeated the weather forecast in verbatim.
- Greg is able to mimic both of his grandmothers’ accents, dialects and tones of voice, and he uses these patterns of speech when talking with them.
- Greg’s parents report that he will often list things of interest (e.g. shapes, planets) without communicative purpose.
- Greg will reportedly engage in non-speech sound making when he is playing (e.g. building constructions) and when he is excited.
- Greg’s parents report that he does occasionally use ‘nonsense’ words.
- Greg was confused about what to do with the dolls or objects, and he engaged in repetitive placement of items inside other items, for example he placed a doll’s head in a cup, stood the doll in a sink and tried to fit it in a cupboard. Later he tried to place a large bath inside a small cupboard.

**This criterion is rated as having been Met.**



**B2. Insistence on sameness, inflexible adherence to routines, or ritualised patterns of verbal or nonverbal behaviour (e.g., extreme distress at small changes; difficulties with transitions; rigid thinking patterns; greeting rituals; need to take same route or eat same food every day).**

**Examples of behaviours relevant to this criterion displayed by Greg:**

- Greg exhibits an inflexible adherence to specific non-functional routines and rituals; for example, Greg insists on reading the same books every night before bed
- Greg insists on catching the school bus every day, despite circumstances (i.e., doctors appointment) that may inhibit him from doing so
- Additionally, Greg gets very upset and angry for days if the bus driver decides to take a different route
- Books and stationary must remain in the place Greg put it, otherwise he gets very angry
- If Greg likes a certain pen, he will insist on using that pen only
- If a toy is lost or broken, Greg gets extremely angry
- Simple changes are perceived as catastrophic events to Greg; such that, when situations are changed unexpectedly, he cries and loses his temper

**Information collected by the Speech Pathologist as part of their assessment:**

- Greg perseverated on reading the text in a book despite prompts to describe the pictures, to the extent that the assessor needed to cover the text with paper.
- Greg often counted items on the pages aloud, interrupting the sharing of the story.
- Greg commented 'it should be past tense' about a line in the story. Greg asked about the meaning of 'leap' and when this was explained in the context of the story (the man was jumping), he responded 'leap year.' Greg's parents reported that Greg is very interested in the rules of language and makes very literal interpretations of text.
- Greg's parents report that he seldom understands humour and he will repeat a joke and laugh without appearing to understand why he is laughing.
- At the end of the session Greg appeared anxious to enquire to his parents about whether he was well behaved during the session. He also asked them on a few occasions what they were talking about with the assessor.
- Greg's parents reported that he likes to catch the school bus, and if his father should have to take him he becomes angry, especially if he goes an alternate route.
- Greg needs to read books every night, if he is not able to do so he becomes distressed. Parents described that in days leading up to Greg's grandmother's funeral he insisted on reading despite the circumstances preventing this.
- Greg is said to become distressed if he hears a parent comment that something is 'missing' or lost and he will immediately try to find the said item.

**This criterion is rated as having been Met.**

**B3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects; excessively circumscribed or perseverative interests).**

**Examples of behaviours relevant to this criterion displayed by Greg:**

- During the assessment at PECS, Greg was observed to have a fixated interest on writing the abbreviation of street signs, and mathematical symbols; for example, Reid HWY, Ocean Reef RD, Hodges DR, Shenton AVE, Grand BLVD, Mitchell FWY, %, \$, etc.
- Greg remembers a lot and can write down a driving route from memory
- Greg's father reported that Greg is often fixated on a narrow interest; for example, at the moment, he is preoccupied with eight planets in the solar and geometric shapes. He likes the songs, pictures, videos and descriptions of eight planets and geometric shapes. He is now familiar with lots of facts associated with these topics.
- When Greg was younger, he was very fixated on a particular toy

**Information collected by the Speech Pathologist as part of their assessment:**

- Greg has a very limited range of interests, which include puzzles, crosswords, building lego/other constructions according to the manuals, drawing and writing.
- When Greg was encouraged to draw he wrote a series of symbols (e.g. Celcius, Fahrenheit, currency, etc.), number and shape puzzles as well as words, which he frequently showed to the assessor or requested that the assessor read. The text and words included names of streets, traffic signs, shop signs/names, acronyms (e.g. LJBC: Lake Joondalup Baptist College), and school mottos (e.g. 'wisdom justice mercy'). Later he drew circles around many words.

**This criterion is rated as having been Met.**

**B4. Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature; adverse response to specific sounds or textures; excessive smelling or touching of objects; visual fascination with lights or movement).**

**Examples of behaviours relevant to this criterion displayed by Greg:**

- During the assessment, Greg was observed to run from one side of the room to the other whilst laughing – which may indicate a fascination with the sensation of air or visual movement
- From the ages of 3 to 5 years of age, Greg disliked the sensation of getting his hair cut. He would often cry and refuse the haircut.
- He still does not like getting his hair cut, but no longer gets upset
- Greg doesn't like people touching his head
- Greg cannot stand dirt on his basketball or clothes
- When Greg was younger, he refused to wear new clothes, due to it itching his skin
- Greg does not like loud or crowded places; for example, he did not like China because there were "too many people" on the streets
- Greg has a low pain tolerance
- Greg has had a fascination with spinning and the circular movement of fans

**Information collected by the Speech Pathologist as part of their assessment:**

- None observed.
- Julie Smith's report from February 2016 states that Greg '*can be a picky eater with food textures*'.

**This criterion is rated as having been Met.**

**C. SYMPTOMS MUST BE PRESENT IN THE EARLY DEVELOPMENTAL PERIOD (BUT MAY NOT BECOME FULLY MANIFEST UNTIL SOCIAL DEMANDS EXCEED LIMITED CAPACITIES, OR MAY BE MASKED BY LEARNED STRATEGIES IN LATER LIFE):**

Greg’s parents reported that they have noticed something a little bit “strange” about Greg’s behaviour since he was 2 years of age (e.g., hypersensitivity and repetitive behaviour); however, in China, more emphasis was placed on Greg’s academics than his social skills and behaviour. It is only since moving to Australia that this has become more apparent. At present he is only 11 years of age.

**This criterion is rated as having been Met.**

**D. SYMPTOMS CAUSE CLINICALLY SIGNIFICANT IMPAIRMENT IN SOCIAL, OCCUPATIONAL, OR OTHER IMPORTANT AREAS OF CURRENT FUNCTION.**

Observations, parental information and parent/teacher checklist results (i.e., ABAS) indicate that Greg’s difficulties cause significant impairment in multiple important areas of his current functioning.

**This criterion is rated as having been Met.**

**E. THE DISTURBANCE IS NOT BETTER ACCOUNTED FOR BY INTELLECTUAL DISABILITY OR GLOBAL DEVELOPMENTAL DELAY.**

Greg’s cognitive profile (FSIQ= 50<sup>th</sup> percentile) illustrates that he does not have an intellectual disability.

**This criterion is rated as having been Met.**

**SUMMARY OF THE ASD DSM-5 CRITERIA AND LEVEL OF SUPPORT REQUIRED**

<b>A. Social Communication and Interaction</b>		<b>B. Restricted, Repetitive Patterns of Behaviour</b>	
1.	Criterion Met	1.	Criterion Met
2.	Criterion Met	2.	Criterion Met
3.	Criterion Met	3.	Criterion Met
		4.	Criterion Met
<b>Total Met</b>	<b>3</b>	<b>Total Met</b>	<b>4</b>
<b>Severity</b>	Requiring moderate support	<b>Severity</b>	Requiring mild-moderate support
<b>C. Present in Early Developmental Period</b>		<b>D. Symptoms Cause Clinically Significant Impairment</b>	
1.	Criterion Met	1.	Criterion Met
<b>E. No Intellectual Disability/Global Delay</b>		<b>F. Specifiers</b>	
1.	Criterion Met	1.	Without accompanying Intellectual Impairment
		2.	With accompanying Language Impairment

As indicated in the summary table above, Greg meets sufficient DSM-5 criteria for a diagnosis of Autism Spectrum Disorder; requiring moderate support for deficits in social communication, and mild-moderate support for restricted, repetitive behaviours.

## OBSERVATIONS AND CLINICAL PRESENTATION

### **Rapport:**

- The examiner was able to establish good rapport with Greg – initially Greg's father translated verbal instructions, which was followed by the examiner and Greg communicating through hand signals, writing, and verbal language
- Greg appeared to be comfortable with examiner immediately, and made an effort to communicate

### **General Appearance:**

- Greg's physical appearance was neat

### **Psychomotor Behaviour:**

- Was observed as having a normal gait.
- His coordination of movements was observed to be awkward.
- Posture was relaxed.
- Tended to fidget with objects around him
- Had difficulty staying seated – was observed to get up and run from one side of the room to the other repetitively whilst laughing
- Was observed as having poor eye contact

### **Mood/Affect:**

- Was observed as having a happy affect
- Greg's affect /mood was inconsistent throughout the assessment
- Became emotional during testing when he incorrectly drew a symbol during the Coding subtest – it was the first symbol he drew and become so emotional and agitated that we had to start again on a new piece of paper
- Was observed as being overly excitable during the assessment – would laugh frequently at verbal self-stimulating behaviour and verbal cues of others

### **Speech:**

- His spoken language ability was judged to be below the level expected for someone his age – however it is possible that this is due to exposure – Greg has only lived in Australia for 6 months
- Greg did not initiate speech independently – speech was initiated by words that he had written, mimicking others, verbal stereotypy, and responses to questions and hand signals

### **Cognitive:**

- No obvious behaviours were observed that suggest cognitive deficiencies

### **Attention:**

- Greg put in a reasonable amount of effort throughout the assessment
- Greg's level of concentration/attention was observed as being sufficient during testing
- Greg was observed to write down irrelevant complex Mathematic equations, excessive street names, landmarks, and schools – despite being asked to do a specific written task

## SUMMARY

### **Reason for Referral:**

Greg was referred to Psychological and Educational Consultancy Services (PECS) by Dr Senq-J Lee (Consultant Paediatrician) for a *Comprehensive Psychological Assessment*.

### **Current Concerns:**

From a presented list, Greg's parents identified concerns in the following areas:

- Learning
- Social skills

### **Cognitive Assessment:**

Greg achieved index scores at the following levels:

- Memory = 42<sup>nd</sup> percentile
- Reasoning = 50<sup>th</sup> percentile
- Quantitative = 58<sup>th</sup> percentile
- Full Scale (FSIQ) = 50<sup>th</sup> percentile

The results clearly indicate that an Intellectual Disability is not present.

### **Adaptive Behaviour:**

Greg's overall level of adaptive behaviour is best described by his ABAS-II General Adaptive Composite score: Parent = (1<sup>st</sup> percentile; Extremely Low); Teacher = (0.1<sup>st</sup> percentile; Extremely Low).

Greg's father's score for Greg on the Conceptual Domain fell at the 1<sup>st</sup> percentile, at the 0.2<sup>nd</sup> percentile for the Social Domain and at the 5<sup>th</sup> percentile for the Practical Domain.

Greg's teacher's score for Greg on the Conceptual Domain fell at the 0.1<sup>st</sup> percentile, at the 0.3<sup>rd</sup> percentile for the Social Domain and at the 0.1<sup>st</sup> percentile for the Practical Domain.

### **ASD Symptomology Assessment:**

Ratings on the DSM-5 treatment scales indicate how closely Greg matches the DSM-5 criteria for Autism Spectrum Disorder. This DSM-5 T-score was 66 (95<sup>th</sup> percentile – Elevated Score) on his parent report, and 85 (99<sup>th</sup> percentile – Very Elevated Score) on his teacher report.

The Total Score is a summary score and measures the extent to which the individual's behavioural characteristics are similar to the behaviours of youth diagnosed with Autism Spectrum Disorder. It yielded a T-Score of 66 (95<sup>th</sup> percentile – Elevated Score) on his parent report, and 84 (99<sup>th</sup> percentile – Very Elevated Score) on his teacher report.

### **Autism Spectrum Disorder DSM-5 Criteria:**

As indicated in the summary table above, Greg meets sufficient DSM-5 criteria for a diagnosis of Autism Spectrum Disorder; requiring moderate support for deficits in social communication, and mild-moderate support for restricted, repetitive behaviours.

### **Main Observations and Clinical Presentation:**

- The examiner was able to establish good rapport with Greg – initially Greg’s father translated verbal instructions, which was followed by the examiner and Greg communicating through hand signals, writing, and verbal language
- Greg appeared to be comfortable with examiner immediately, and made an effort to communicate
- His coordination of movements was observed to be awkward.
- Had difficulty staying seated – was observed to get up and run from one side of the room to the other repetitively whilst laughing
- Was observed as having poor eye contact
- Became emotional during testing when he incorrectly drew a symbol during the Coding subtest – it was the first symbol he drew and become so emotional and agitated that we had to start again on a new piece of paper
- Was observed as being overly excitable during the assessment – would laugh frequently at verbal self-stimulating behaviour and verbal cues of others
- His spoken language ability was judged to be below the level expected for someone his age – however it is possible that this is due to exposure – Greg has only lived in Australia for 6 months
- Greg did not initiate speech independently – speech was initiated by words that he had written, mimicking others, verbal stereotypy, and responses to questions and hand signals
- Greg was observed to write down irrelevant complex Mathematic equations, excessive street names, landmarks, and schools – despite being asked to do a specific written task

### **CONCLUSION AND STATEMENT OF DIAGNOSIS**

Greg meets sufficient DSM-5 criteria for a provisional diagnosis of Autism Spectrum Disorder; requiring moderate support for deficits in social communication, and mild-moderate support for restricted, repetitive behaviours.

A formal diagnosis requires both a Paediatrician and a Speech Pathologist to concur with the findings of this assessment report.

Observations, parental information and checklist results (ie ABAS) indicate that Greg’ difficulties cause significant impairment in multiple important areas of his current functioning.

Greg’ cognitive profile confirms that an Intellectual Disability/Global Developmental Delay is not responsible for his difficulties/behaviours.

## RECOMMENDATIONS

*Please note, PECS does not provide micro-strategies (e.g., sit student at front of classroom, etc) as part of their recommendations. PECS provides recommendations on what further assessment is required, what intervention is necessary, and who is the most appropriate to provide the assessment/intervention recommended.*

### **Paediatric Involvement:**

- (1) Greg should be seen by a Paediatrician for the purpose of a formal decision of a diagnosis of Autism Spectrum Disorder, now that the Psychologist's and Speech Pathologist's assessment have both been completed.

### **Speech Pathologist Involvement:**

- (1) Greg should continue Speech Pathology to further develop his receptive and expressive language skills.

### **Occupational Therapist Involvement:**

- (1) Greg should undergo a sensory assessment with an Occupational Therapist to identify and assist his hyper reactivity to sensory input

### **DSC Involvement:**

- (1) Should the Paediatrician concur with the Autism Spectrum Disorder diagnosis, confirmation of that in writing should be sent to Disability Services Commission, along with a copy of this report.

### **School Involvement:**

- (1) A case-conference involving Greg's parents and the key school personnel should be held to discuss Greg's individual learning requirements.

### **Social Skills Development:**

- (1) Greg would benefit from a programme of Social Skills training and engaging in more social activities.

*Behaviour Tonics  
Level 1, 252 Cambridge Street, WEMBLEY WA 6014  
Phone: (08) 9382 1182  
[www.behaviourtonics.com.a](http://www.behaviourtonics.com.a)*

*Connect for Kids  
99 Loftus Street, LEEDERVILLE WA 6007  
Phone: 0402 101 060  
[www.connectforkids.com.au](http://www.connectforkids.com.au)*

### **Health & Well-Being:**

- (1) Greg needs to continue/implement regular exercise and maintain a healthy diet.

*Please note, the above is a generic recommendation that should be followed by all and is not a recommendation specific to Darcy due to any of his results or reported behaviours.*

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<b>Dr Shane Langsford</b> Managing Director -PECS Registered Psychologist APS College of Educational & Developmental Psychologists Academic Member	<b>Date of Report</b>
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