



Developmental & cognitive assessments

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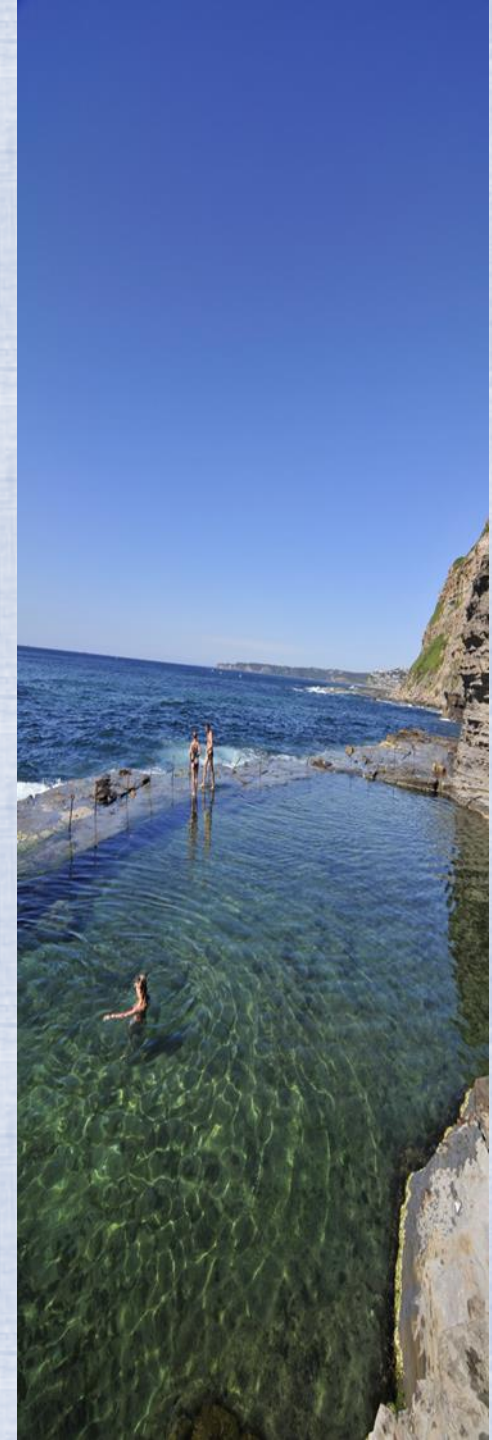
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Developmental & Cognitive Assessments

- Identify a child's strengths and challenges.
- Identify and diagnose global intellectual delay (less than 5 years).
- Early identification of developmental issues and early interventions, can prevent early challenges from compromising a child's development.
- Identify intellectual disabilities or learning disorders.

- Design appropriate and tailored learning plans and life-skill programs to maximise a child's developmental potential.
- Accessing additional funding
 - 22q11.2 deletion syndrome is listed on the NDIS list B, as a permanent condition for which functional capacity is variable and further assessment of functional capacity is (generally) required.
 - Educational system support children with moderate to severe intellectual disability, mental health disorders, or autism spectrum disorder



Test considerations

Age of the person
Potential Developmental Delay
Speech and Language Ability
Attention/Concentration
Anxiety



Bayley Scales of Infant & Toddler Development

Birth to 3yrs5mths

Griffiths Scales of Child Development

Birth to 5yrs11mths

Wechsler Preschool and Primary Scale of Intelligence

2yrs6mths to 7yrs7mths

Differential Ability Scales

2yrs6mths to 17yrs11mths

Wechsler Intelligence Scale for Children

6yrs to 16yrs11mths

Wechsler Adult Intelligence Scale

16 – 90 years

Developmental assessments

- Play based
- Purpose is to identify children experiencing developmental delay
 - Cognitive
 - E.g., exploration, manipulation, concept formation, memory, etc.
 - Fine and gross motor
 - e.g., object manipulation, grasping, head control, crawling, walking.
 - Expressive and receptive language
 - E.g., babbling, gesturing, turn taking) (e.g., identify objects.
 - Social-emotional development
 - Adaptive functioning



Early development and 22q11.2 deletion syndrome

- Few studies of early development in 22q11DS
 - Gross/fine motor difficulties
 - Expressive language delays and speech problems
 - Preschool age learning difficulties
- Each infant/toddler with 22q11DS is unique, and concerns may be present in a few or in several areas.

Intellectual functioning

- Intelligence quotient (IQ).
- Theoretical construct used to describe a person's intellectual level.
- Importantly, the construct describes a subset of human functioning believed to be important in modern society.
- Culturally specific



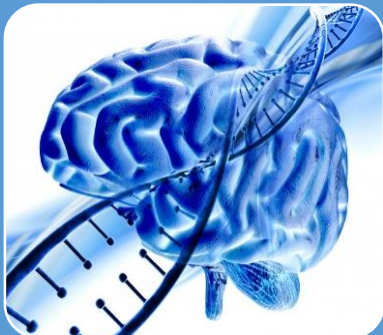
Standardised

- Administered and scored in a consistent manner.



Norm based

- Compares an individual's performance to others of the same age and background.



Validity/Reliability

- The test has been designed and tested so that it actually measures what it claims to measure.
- Refers to how accurate the measure is across different times and different people.

Verbal Comprehension

- Ability to access and apply acquired word knowledge.

Visual Spatial

- Ability to evaluate visual details and understand visual spatial relationships.

Fluid Reasoning

- Detect conceptual relationships among visual objects and use reasoning to identify and apply rules.

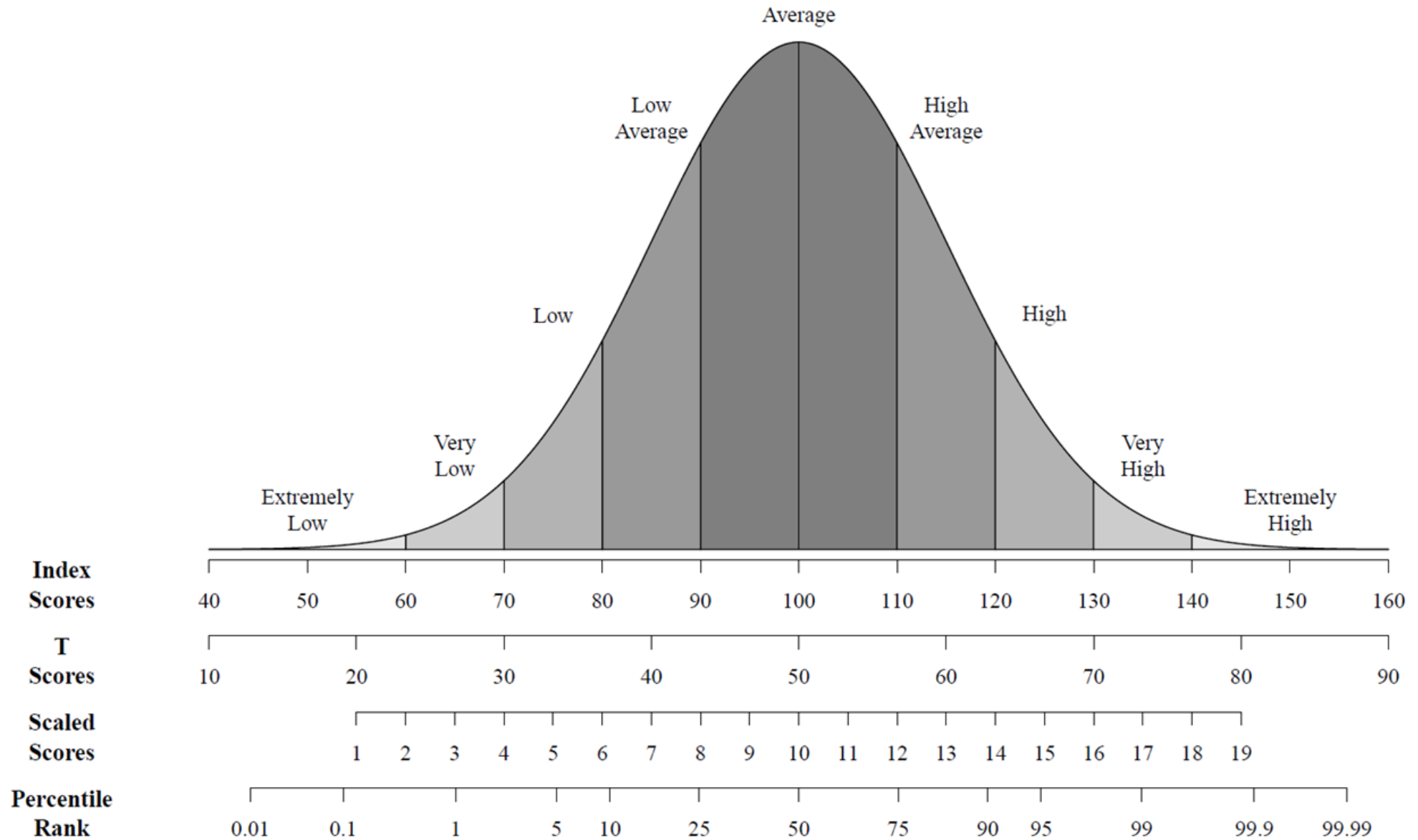
Working Memory

- Register, maintain, and manipulate visual and auditory information in conscious awareness.

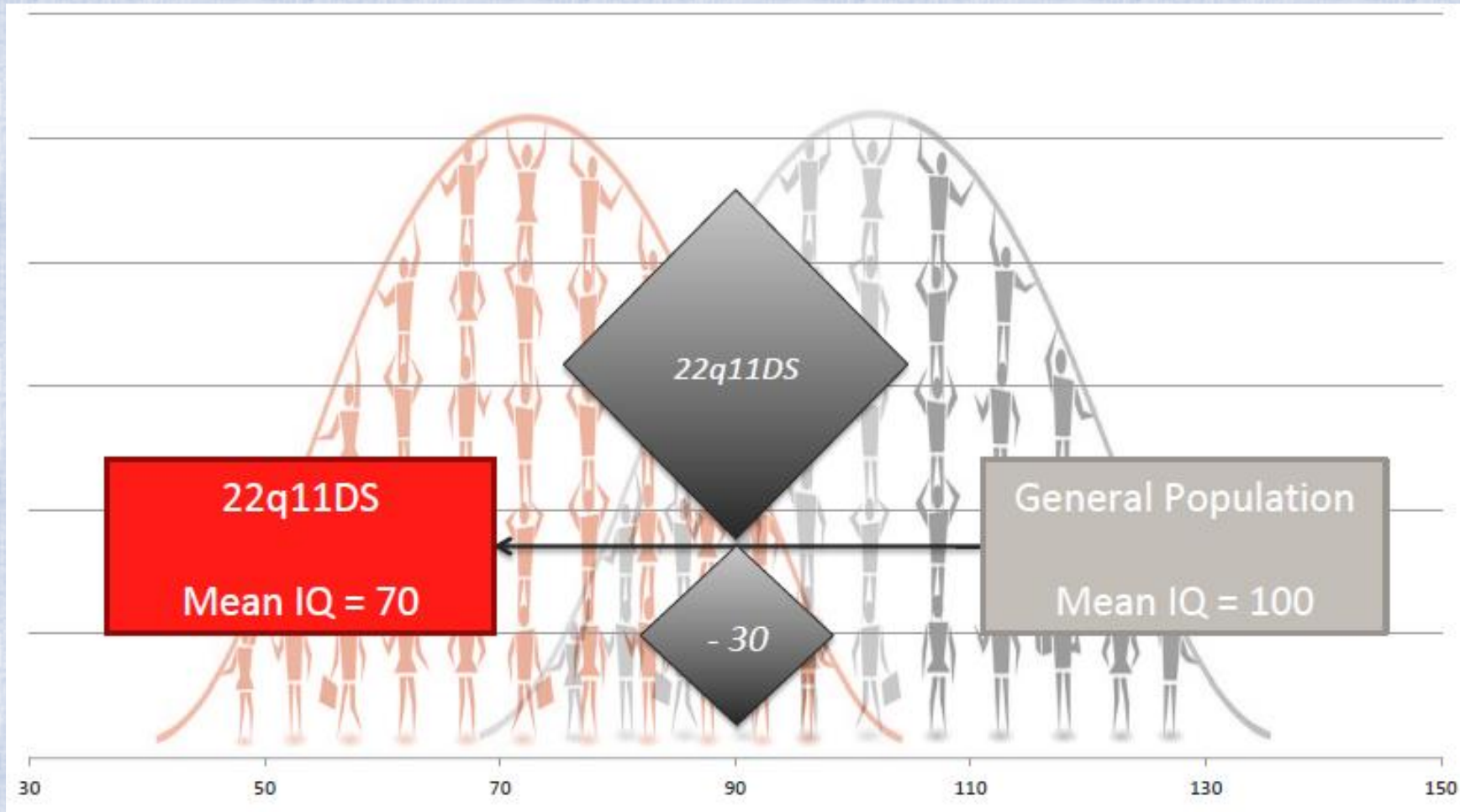
Processing Speed

- Speed and accuracy of visual identification, decision making, and decision implementation.

Standard Scores



22q11DS and IQ



- Many children with 22q11.2DS have a 'spiky' uneven IQ profile.
- Strengths in some areas, whilst exhibiting difficulties in another area
- Strengths can mask weaknesses
- Challenge of stimulating strengths and supporting weaknesses

Average
 Low
 Borderline
 Extremely low

12
 10
 8
 6
 4
 2
 0

Similarities

Vocabulary

Block Design

Visual Puzzles

Matrix Reasoning

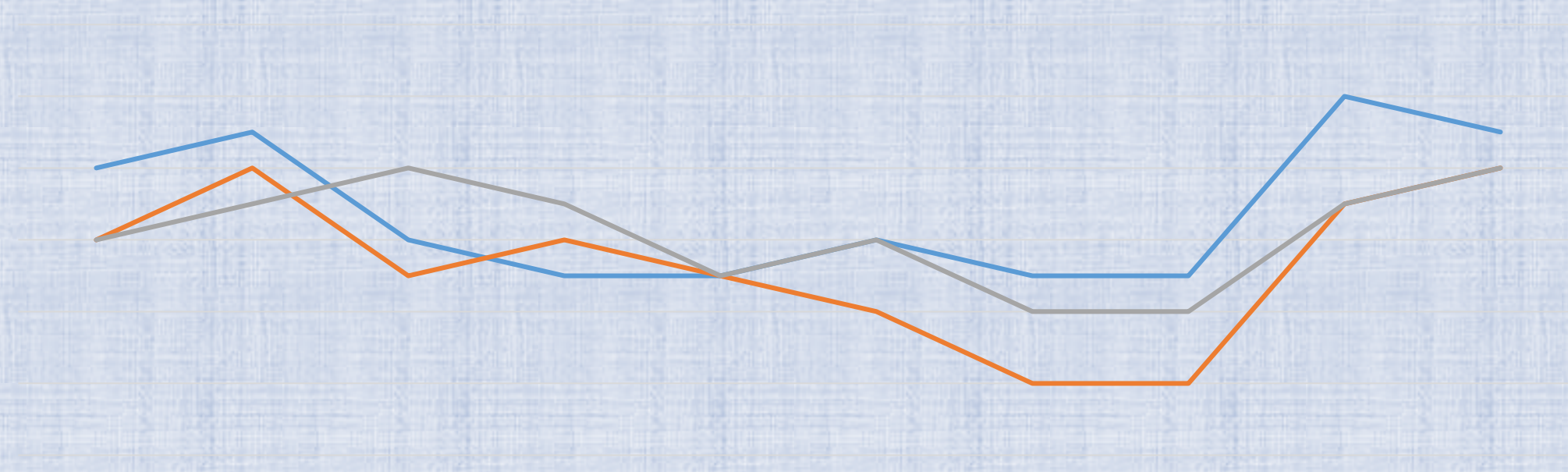
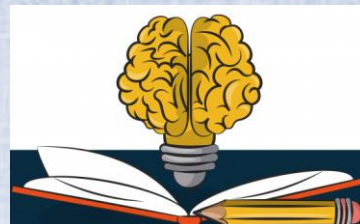
Figurer Weights

Digit Span

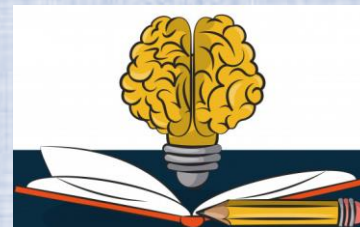
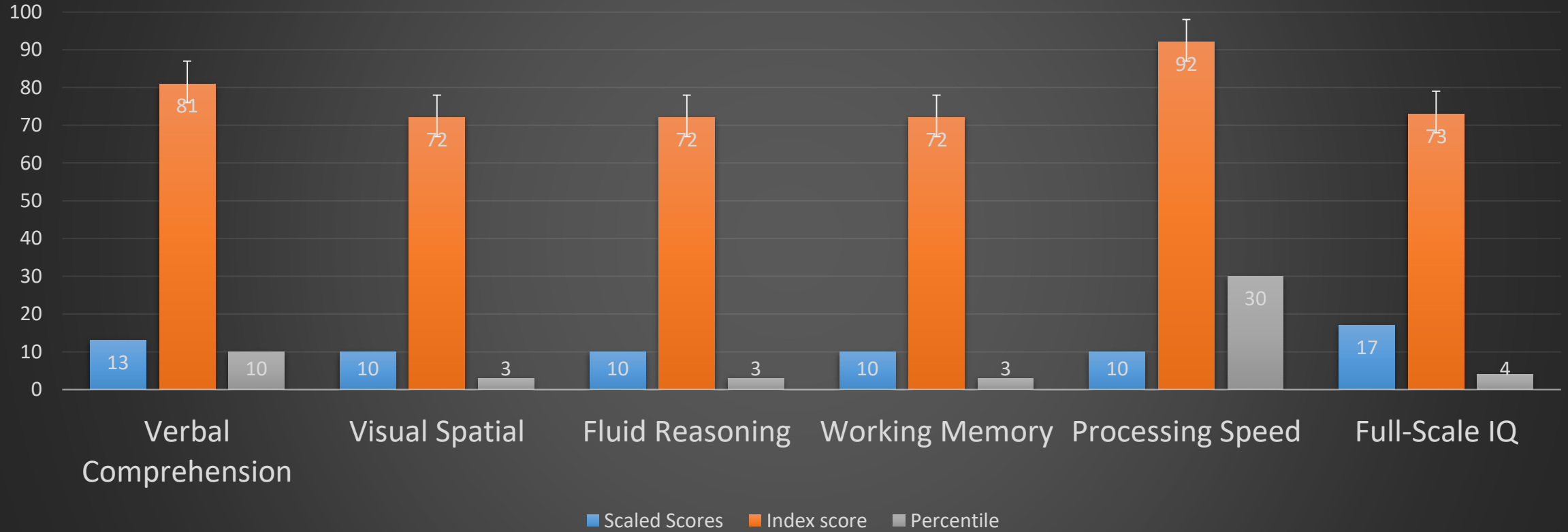
Picture Span

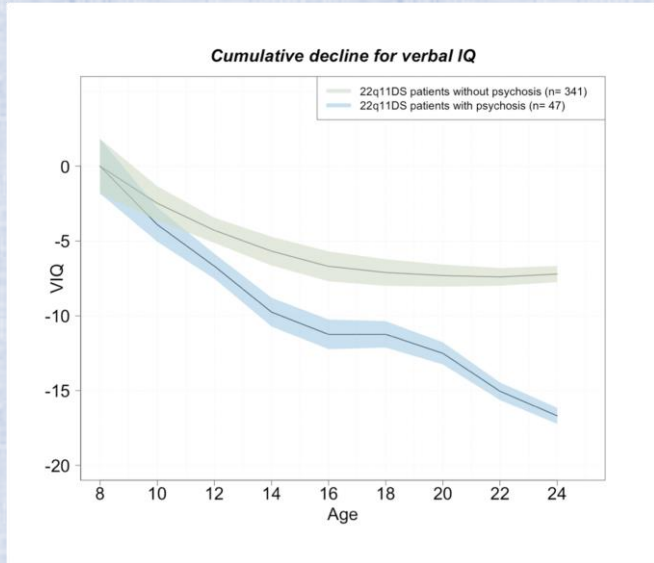
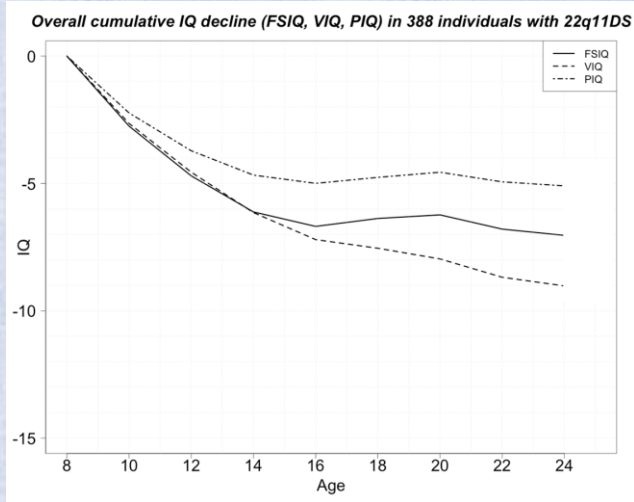
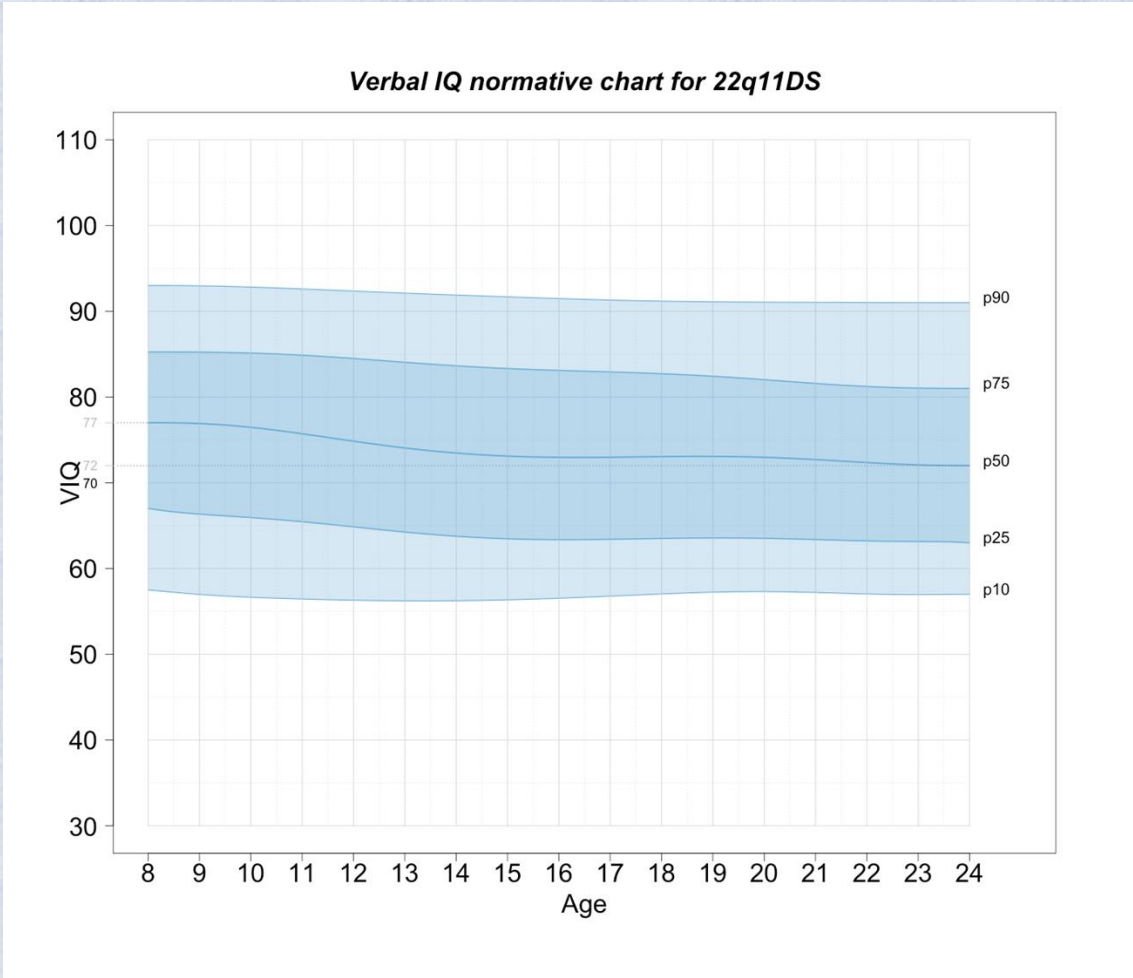
Coding

Symbol search



IQ profile – Jessica, aged 12





Other tests

- Neuropsychological tests (e.g., NEPSY, WMS)
 - provides an assessment that relates to the way the brain functions and assists in the diagnosis of possible deficits that can be linked to specific parts of the brain – memory, executive functioning, social skills.
- Achievement testing (e.g., WIAT)
 - Focusses on particular areas (e.g., mathematics, reading) to assess academic strengths and weaknesses.
- Adaptive behaviour assessments (e.g., ABAS or Vineland)
 - measure an individual's day-to-day functioning, for example, how a child acts and behaves and whether he or she has the necessary life skills to cope at school or at home.

Learning problems can result in

- A tendency to be easily distracted and less focused than other students
- An appearance to be a passive learner who is inclined to daydream
- A reluctance to engage in learning, and lack of internal motivation for academic pursuits
- An apparent lack of ability to think things through
- Difficulty in transferring and generalising from one task to another
- Slowness to start and difficulty in the completion of set tasks

- Children with learning problems frequently struggle to process instructions, acquire basic skills, keep up in class, construct their own learning and get along with others

How can you help your child?

- Try to get a good picture of the child's strengths and weaknesses
- Look at the details of the profile, what does it mean in real life
- If you get a report, read the recommendations
- Ask the Psychologist to explain the report
- Adjust your expectations
- Stimulate the strengths, support weaknesses
- Find a balance that is right for your child
- Too much pressure – overload – anxiety!






If you want to participate in online research on 22q11.2 deletion or learn more about what we do.

<http://www.findlab.net.au>



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