



Understanding IQ scores

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1. Why is it so important to talk about IQ scores in 22q11DS?
2. How to make sense of the information we get from an IQ - test?

A definition of **cognition / IQ**:



- Ability to reason and think
- Both verbal and perceptual
- Strongly related to daily life functioning
-?

What **all** people need:



What **all** people hate:

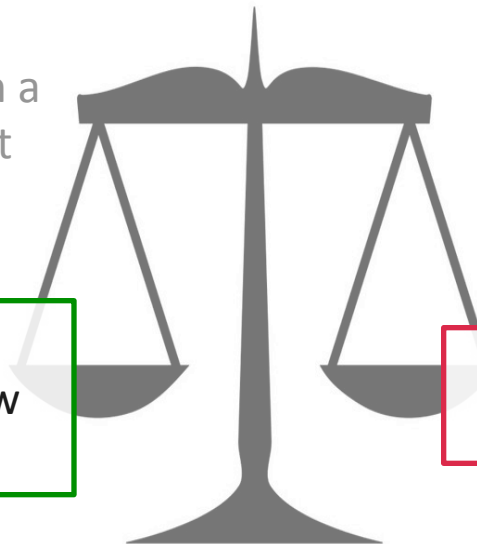


Learn & develop in a
safe environment

Demands exceeding
abilities

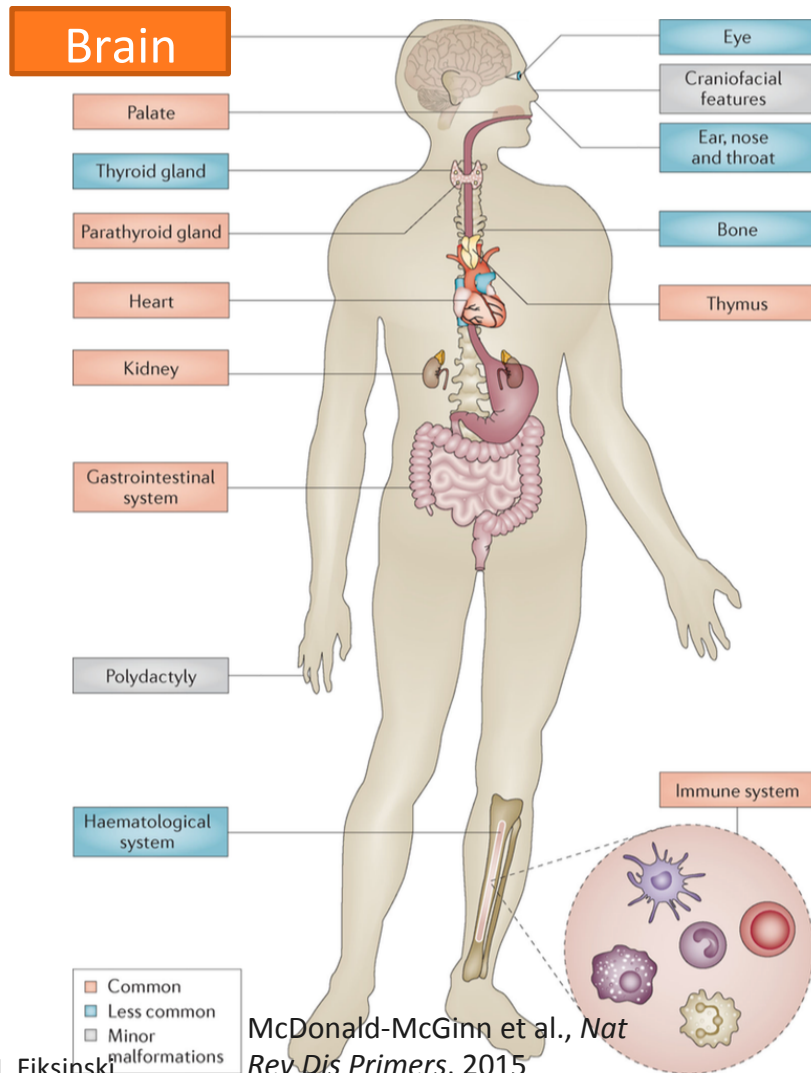
*Stimulating growth
& development of new
skills*

*Avoiding a too
demanding situation*



II. Goal 1: Why IQ? 1.A. BALANCE

Understanding IQ scores



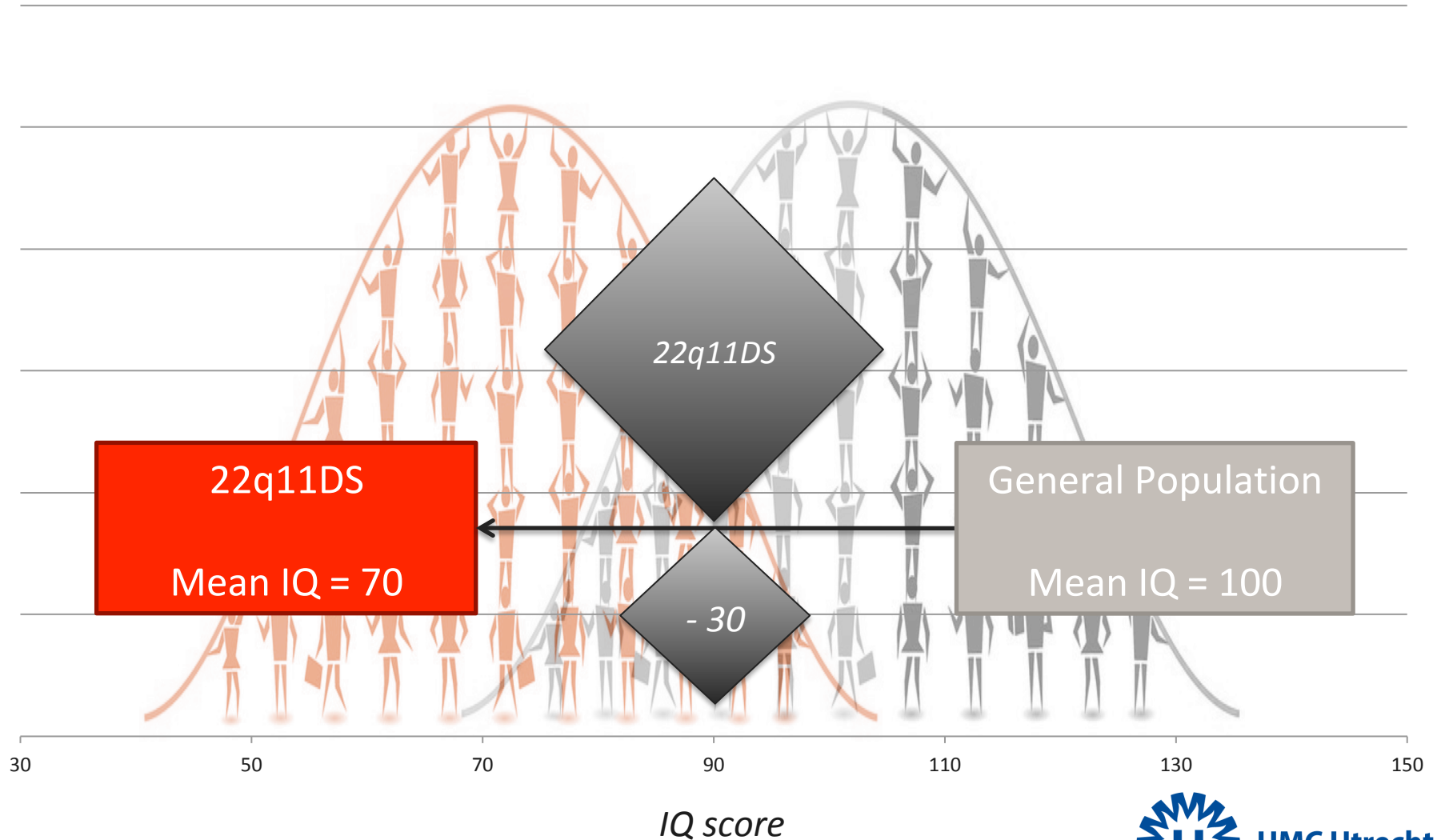
Balance in 22q11DS =

Challenging
&
Important!

II. Goal 1: Why IQ?

1.B. IQ in 22q11DS

Understanding IQ scores



II. Goal 1: Why IQ? 1.B. IQ in 22q11DS

Understanding IQ scores

1. Mean IQ in 22q11DS is on average 30 points lower than in the general population

- There are still large differences between people

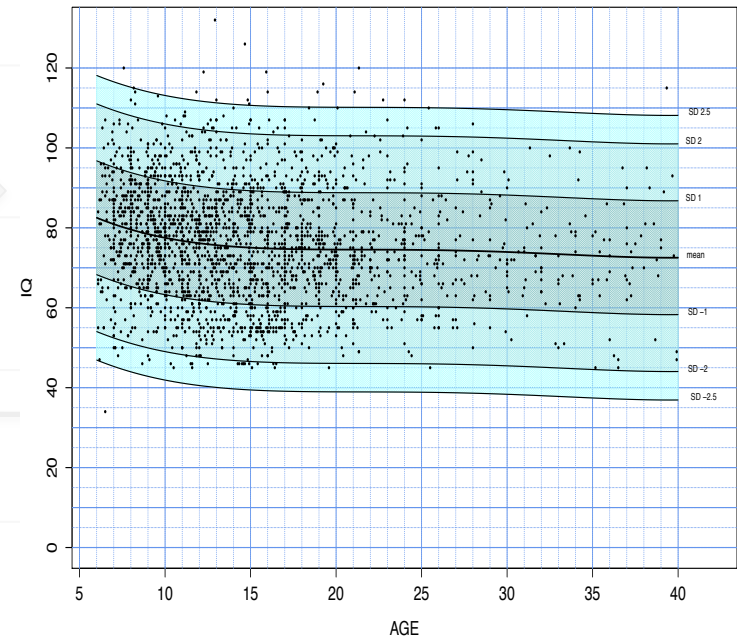
2. IQ in 22q11DS is not necessarily stable over the lifespan

3. Deviations from expected trajectories may indicate psychiatric risk

- Knowing this may aid in early intervention

4. Even within one person:

- “The IQ-profile” in 22q11DS is very often highly discrepant



II. Goal 1: *Why IQ?* 1.B. IQ in 22q11DS

Understanding IQ scores

1. Mean IQ in 22q11DS is on average 30 points lower than in the general population

- There is still large variability

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3. Deviations from expected trajectories may indicate psychiatric risk

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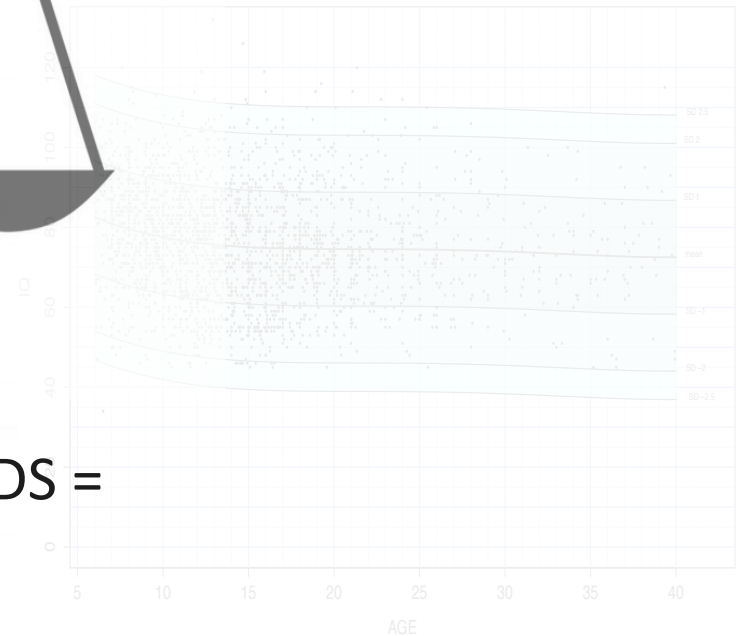
4. “The IQ-profile” in 22q11DS is

- Highly diverse
- Very often highly discrepant (within one individual)



Balance in 22q11DS =

**Important
&
Challenging**



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III. Goal 2: *What does it mean?*
2.A. Understanding the profile

Understanding IQ scores

“Highly diverse and discrepant IQ profile”

...?

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“Highly diverse and discrepant IQ profile”

...?

Mental vocabulary
Think and reason
- using visual input

Expressing oneself
Organize information

Reasoning skills
Structure surroundings
- within short time

Storing and retrieving simple information
Time it takes to process a simple stimulus and act upon it

Total / Full Scale IQ



Verbal Comprehension



Perceptual Reasoning



Working Memory



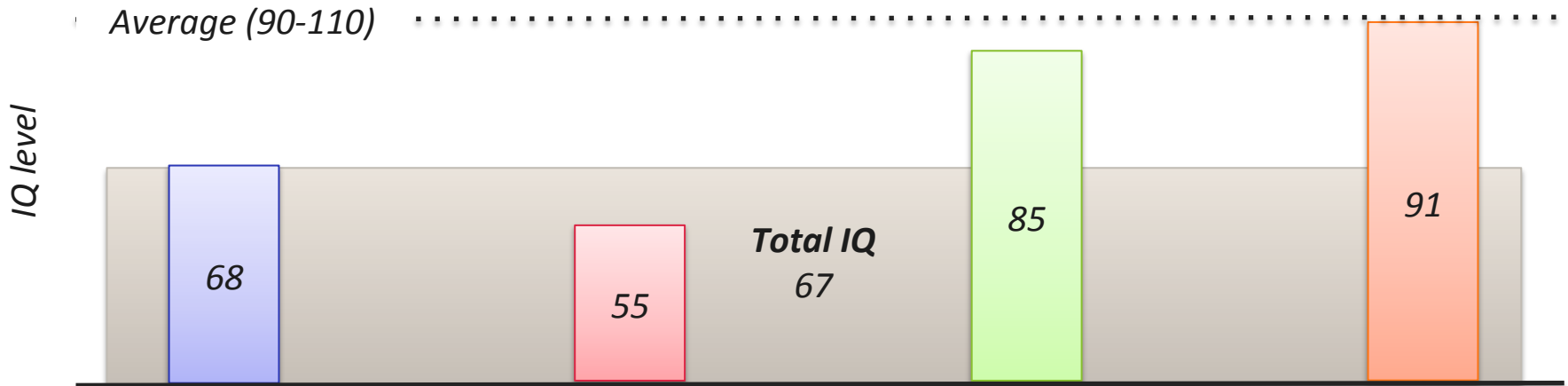
Processing Speed

III. Goal 2: What does it mean? 2.A. Understanding the profile

Understanding IQ scores

“Highly diverse and discrepant IQ profile”

...?



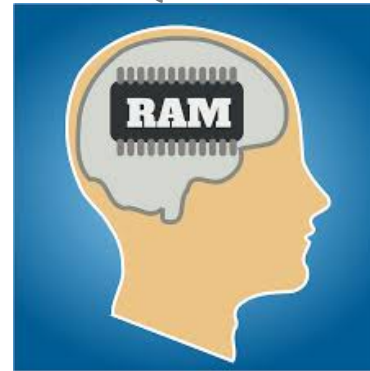
Total / Full Scale IQ



Verbal
Comprehension



Perceptual
Reasoning



Working
Memory



Processing
Speed

III. Goal 2: *What does it mean?*
2.A. Understanding the profile

Understanding IQ scores

“Highly diverse and discrepant IQ profile”

...?

1. “IQ” consists of different components
2. With often large differences amongst each other
3. Risk of overestimating – *BALANCE*
4. *Challenge of stimulating strengths and supporting weaknesses*

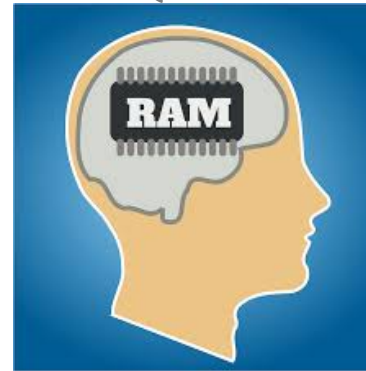
Total / Full Scale IQ



Verbal
Comprehension



Perceptual
Reasoning

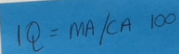


Working
Memory



Processing
Speed

III. Goal 2: *What does it mean?* 2.A. Translating the numbers


$$IQ = MA/CA \cdot 100$$

Understanding IQ scores

The numbers of the IQ score

→ **Mental age** (MA, age equivalent)

- Age = 10, IQ = 70 *Mental age = 7 years*

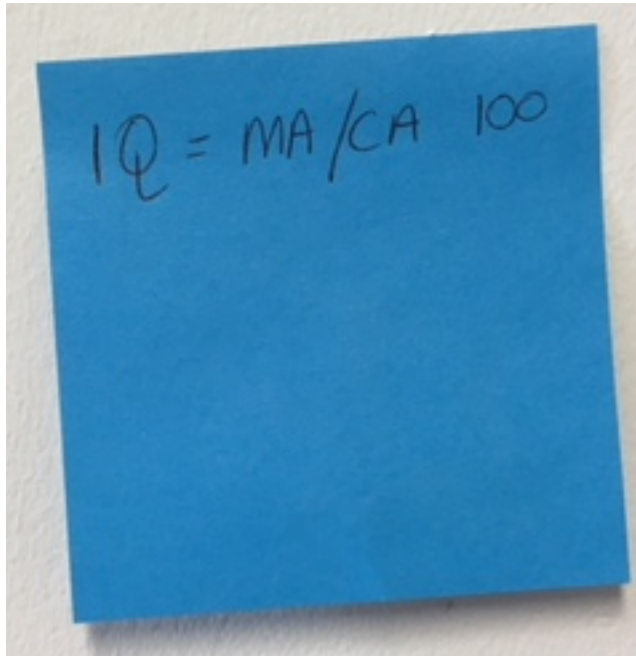
- Age = 12, IQ = 50 *Mental age = 6 years*

Age = 16

IQ = 67

$(\text{age} * \text{IQ}) / 100 = \text{MA}$

$(16 * 67) / 100 = 10.7 \text{ years}$



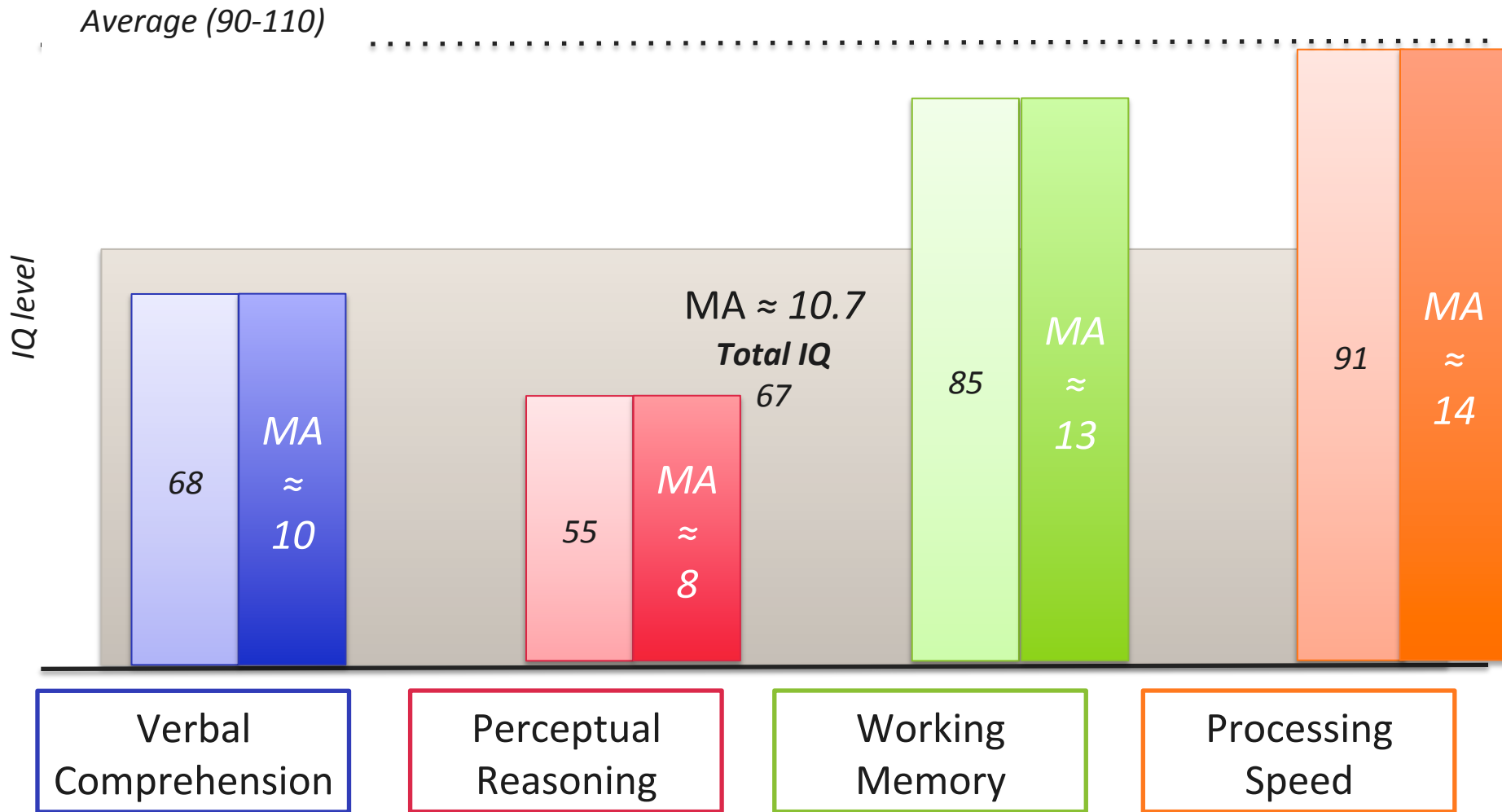
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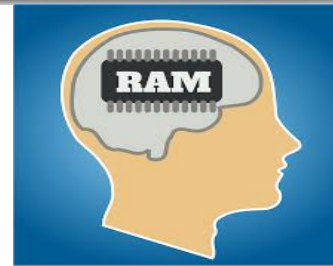
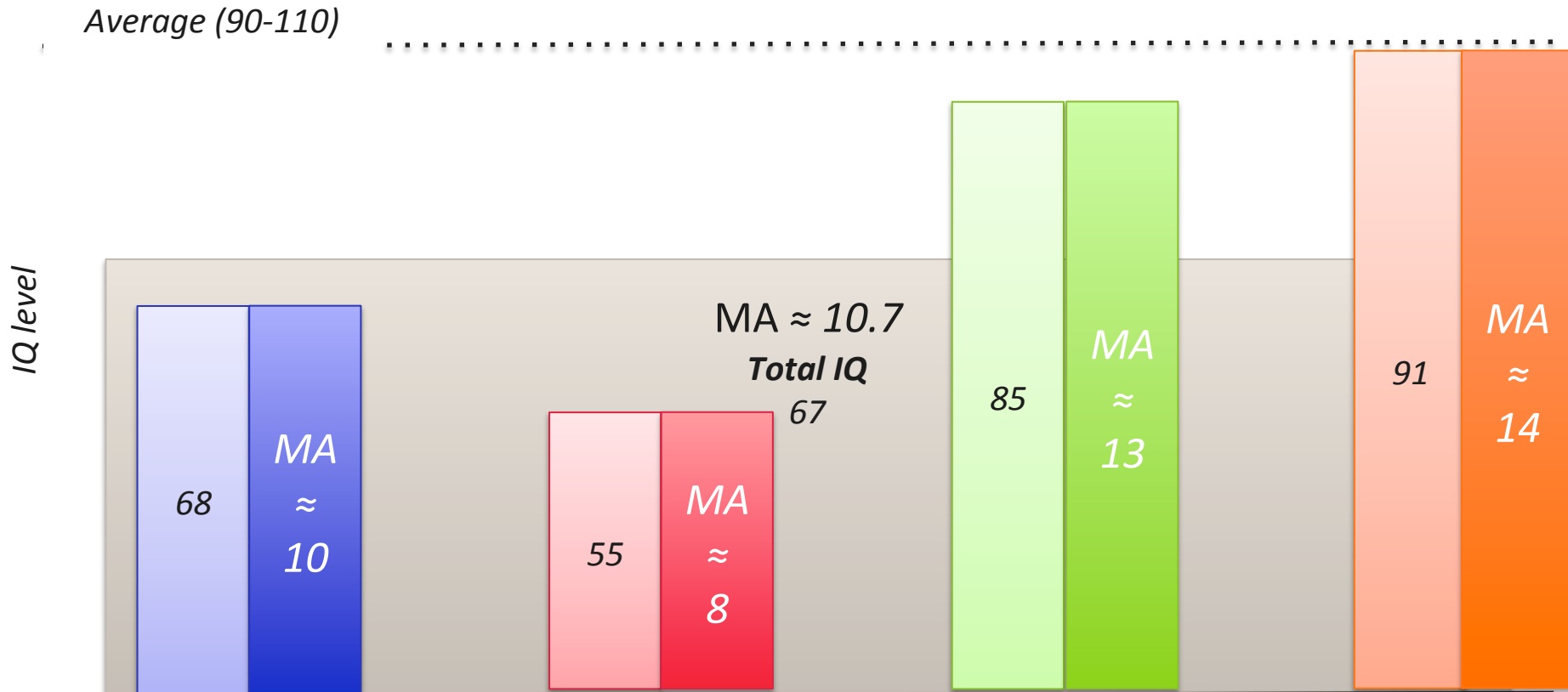
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Understanding IQ scores

The numbers of the IQ score

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1. Why is it so important to talk about IQ scores in 22q11DS?

The importance of **balance**

- *In particular* for individuals with 22q11DS
- It is *not easy*...
 - IQ = low
 - IQ = not always stable (monitoring!)
 - IQ-profile often discrepant



2. How to make sense of an IQ-score?

Understand the **different components**

- And what they mean in real life
- Stimulate the strengths, support the weaknesses

Translate the number to a **mental age**

- And adjust your expectations accordingly

Ask for it!

Let's work **together**.

