

Tactual Processing Limitations in blind children born very prematurely

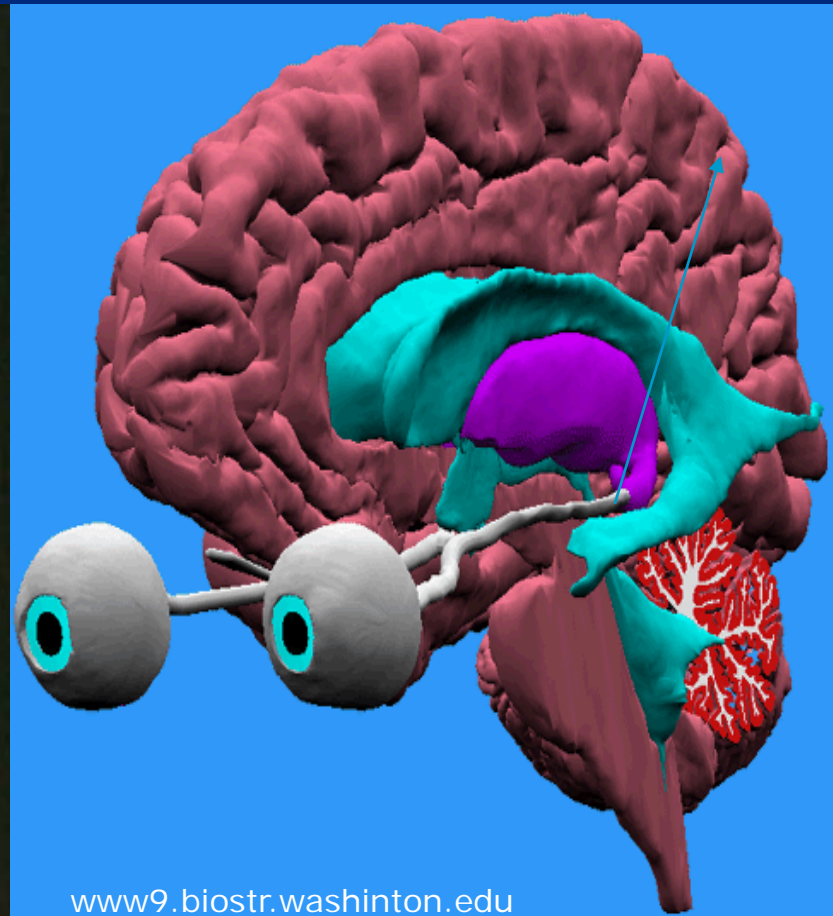
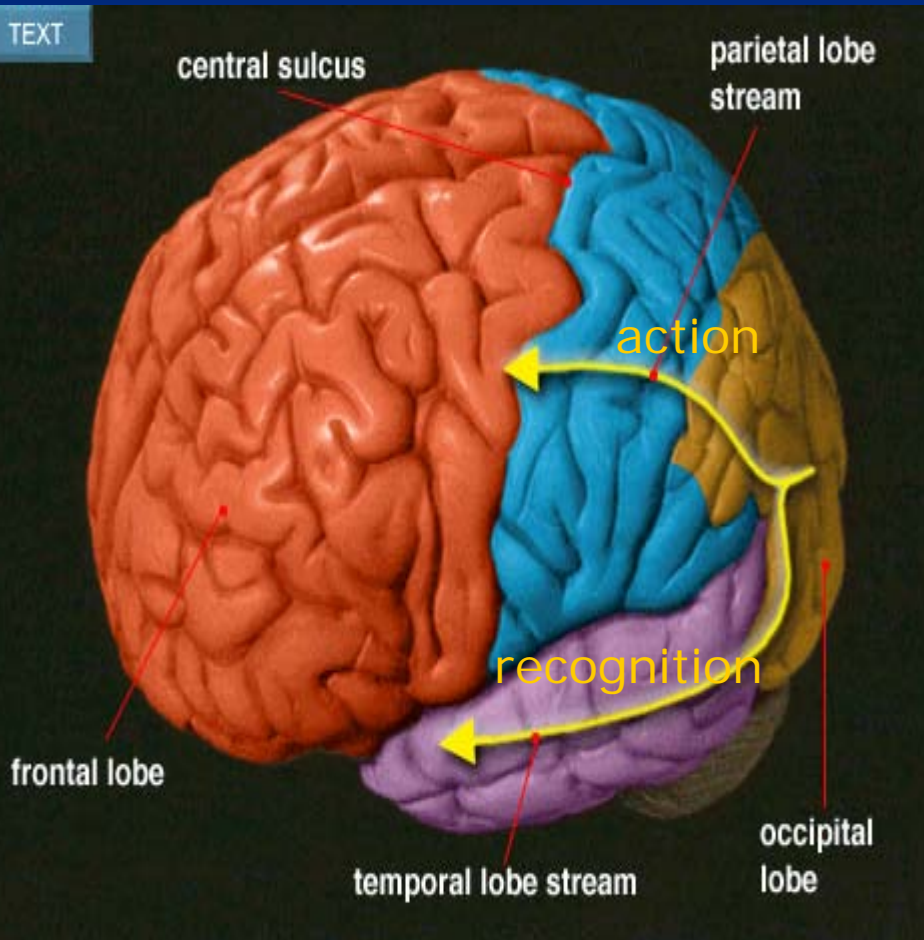
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♂'14 y, premature birth 27wk 935gr (gemelli) ROP (blind LP+) PVLI

- Sensory Information processing problems
- Oversensitive for touch and sound, vestibular ↓
- R bodyside stronger than L
- Verbal IQ (WISCIIIInI) 98; performal much lower,
- personality +, family +
- School history: doubts about cognitive capabilities, possibly dyslexia, severe problems in mobilitytraining and somewhat in arithmetic
- Has just started secondary education Visio

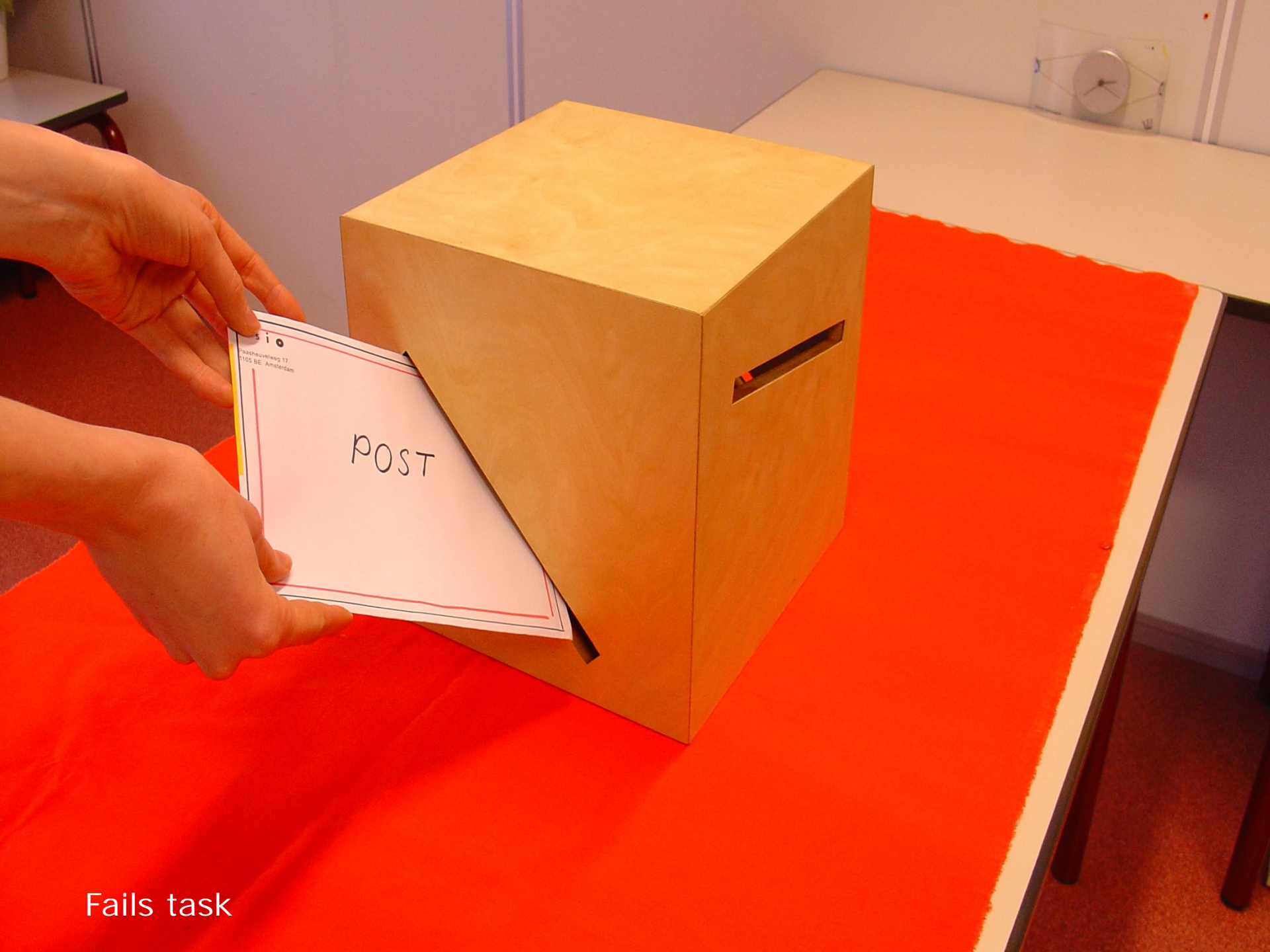
hypotheses

TEXT



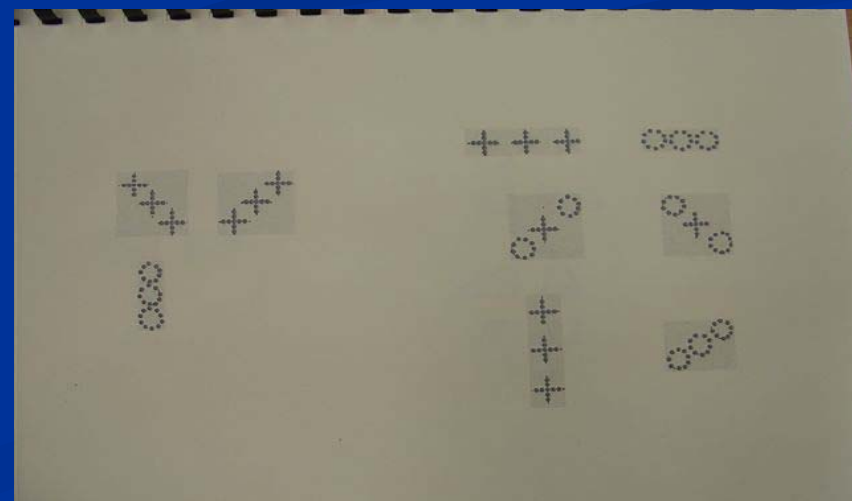
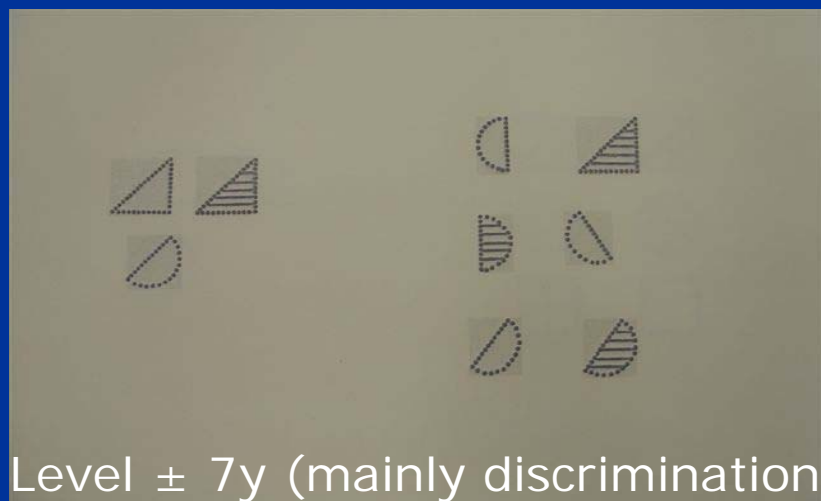
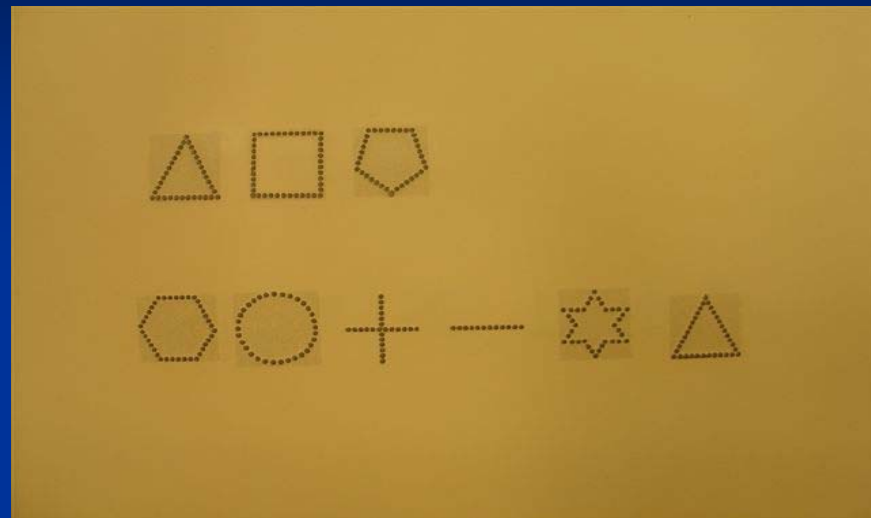
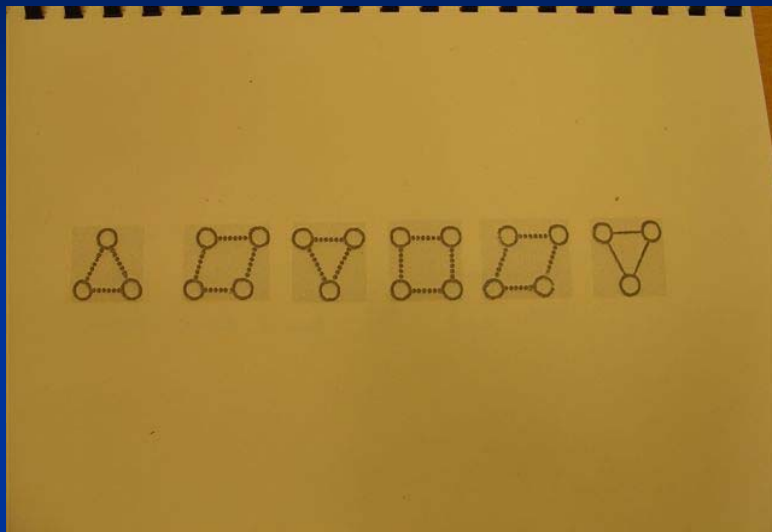
Test choices

- *Tactual*
- Letterbox (direction test)
- BLAT (blind learning aptitude test 6-19y)
- Tactual Form Perception (Benton) adapted 8y↑
- Simple Formboard Reitan 5y ↑ & drawingmap
- *Auditory*
- Memory: letters forward (ToMaL5-19y) and 15 words test
- Auditory Attention & Response (Nepsy 5-12y)
- Count! (TEA-CH 5-16y) & double task
- Knock & Tap (Nepsy 5-12y)
- Walk, don't walk (TEA-Ch 5-16y) go, no-go



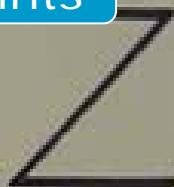
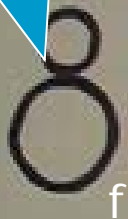
Fails task

Blind Learning Aptitude Test (BLAT)

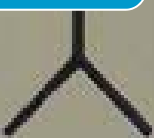


Level \pm 7y (mainly discrimination)

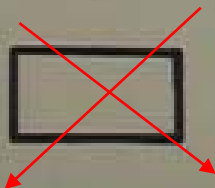
Circle+circle above



Collection of points

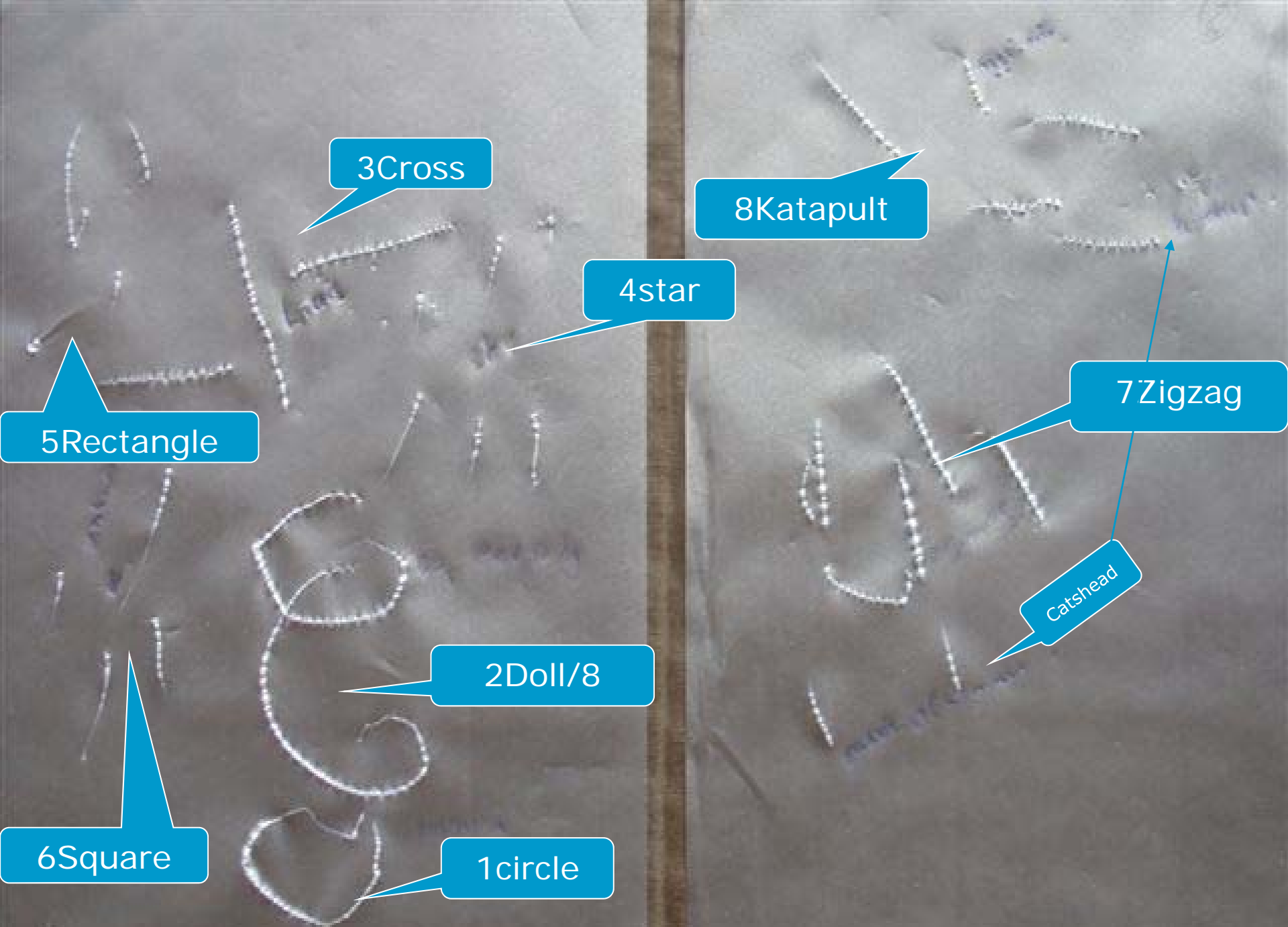


Circle with 2 points



8 found after naming!

(± 8yrs)



3Cross

8Katapult

4star

5Rectangle

7Zigzag

Catshead

2Doll/8

6Square

1circle

9 out of 12 : age average (verbal memory?) but...

Form Board Reitan



Fits 2: cross, diamond (6/7 yrs)

Auditory alone

- Working memory (ToMal letters forward): age level stsc 10
- Longterm memory (15 words): 11 by second offer and in recall agelevel↑
- Count! (TEA-CH)& double task: st sc 13 (mean 10)
- Very concentrated! Nothing moves.

Auditory+proprioception sitting

- Knock & Tap(Nepsy 5-12y): score 28 out of 30
- Auditory Attention & Response (Nepsy)
Colours replaced by texture blocks in baskets (wood, smooth, felt/soft, flat rubber) and text read out alive

If not too fast OK



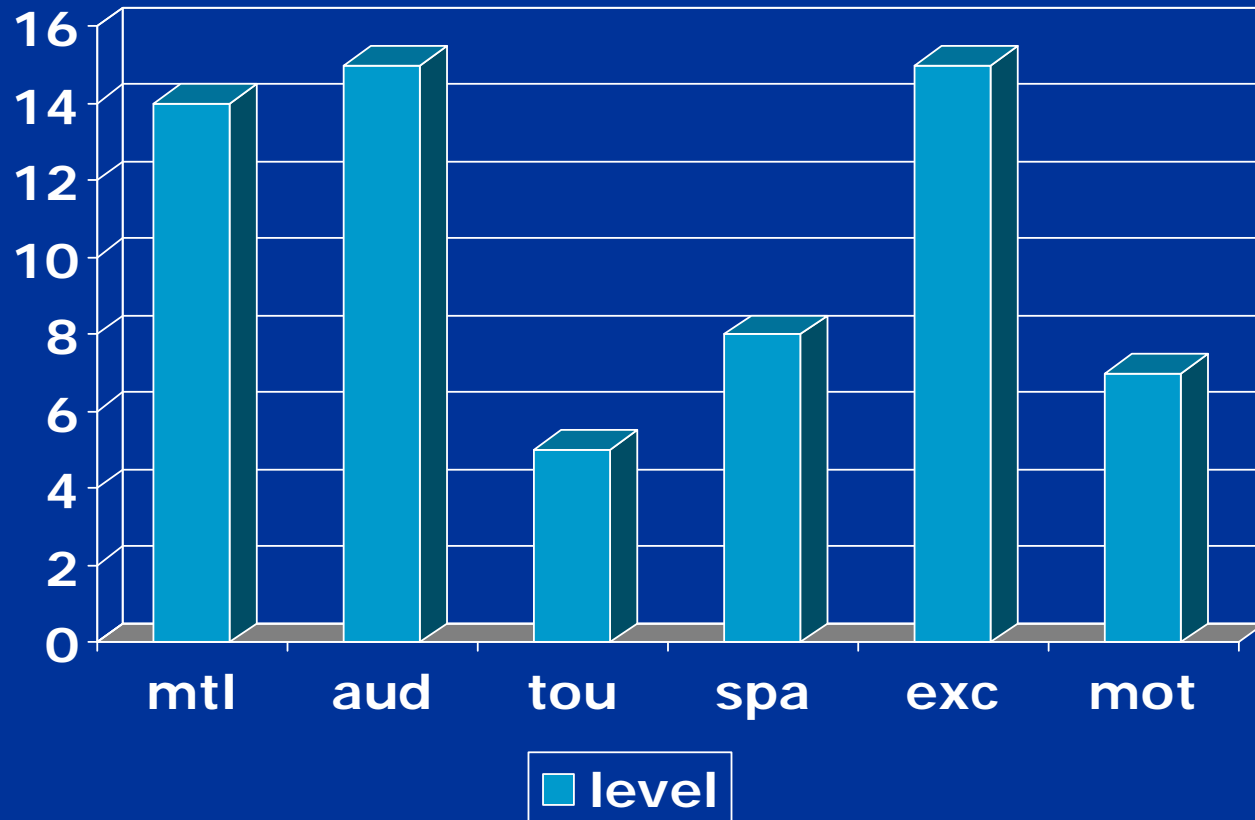
Auditory +propriocepsis+vestibular

- Walk, don't Walk (TEA-Ch 5-16y)
go,no-go task

Adjusted: not as paper/pencil but by
starting standing against wall and
doing it himself

Troublesome!

Function profile



Attentional field: misses a part in lower field

conclusion

In the prematurely born blind group there seems to be a subgroup with

- normal cognition
- and multiple sensory limitations
- mainly living in an auditory world

Asking us

- tell me how the world sounds
- for adjustments in school programs and exams

Thanks to X and his parents!

Mail friends?

Mail to
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