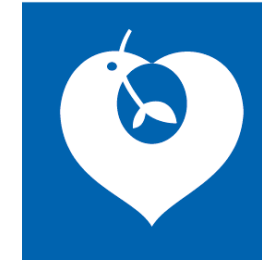




Laboratoire Mémoire



Cerveau & Cognition



**Hôpital  
Avicenne  
AP-HP**



# “Innovations” in cognitive assessment

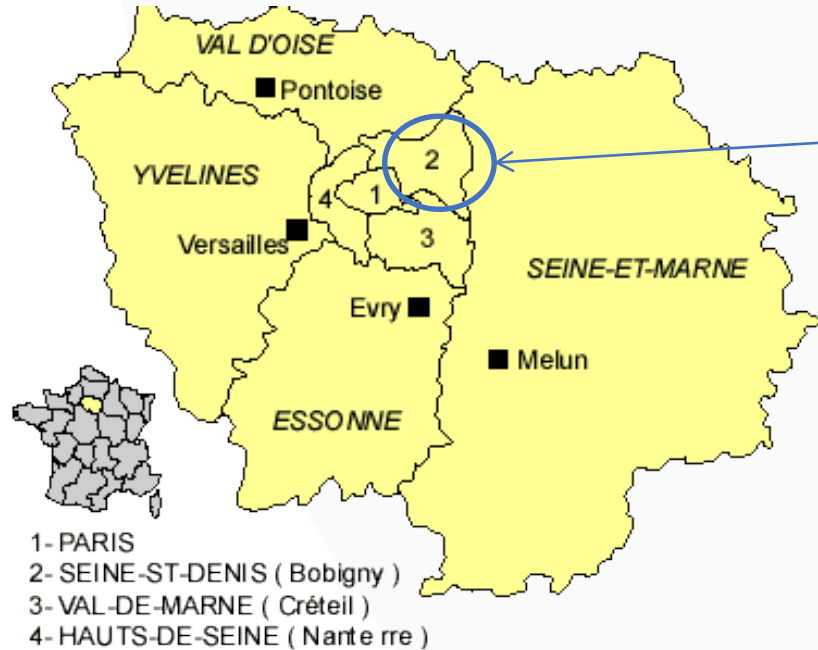
Pr. Pauline NARME

Laboratoire Mémoire Cerveau et Cognition

Université Paris Cité



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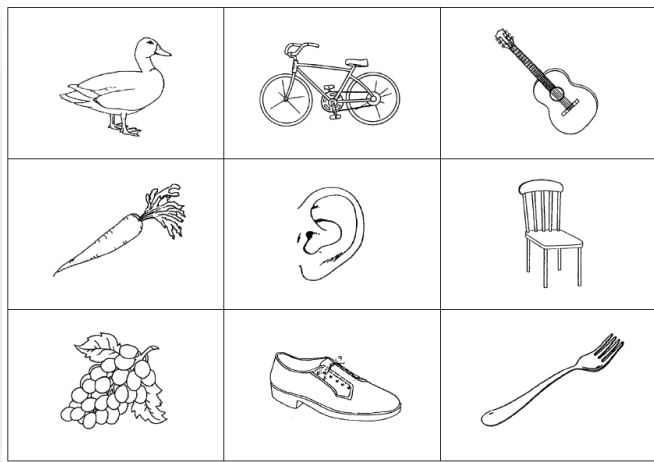
Catherine Belin



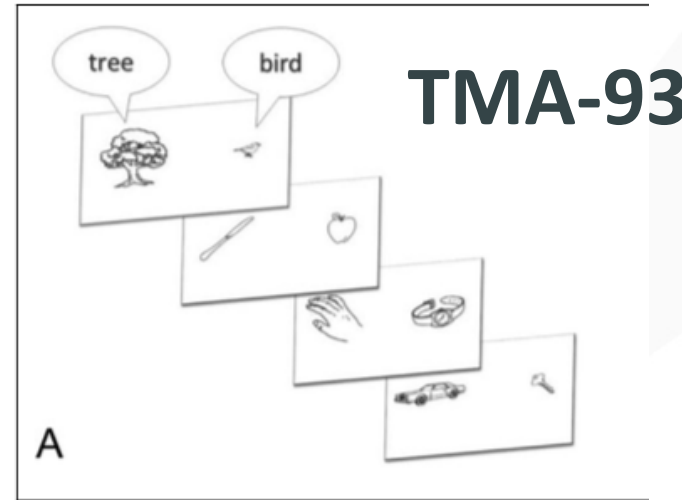
Didier Maillet

- Around 30% of people born outside of France
- High proportion of low-educated people
- Almost 30% of illiterates in French native older than 65

## Episodic memory

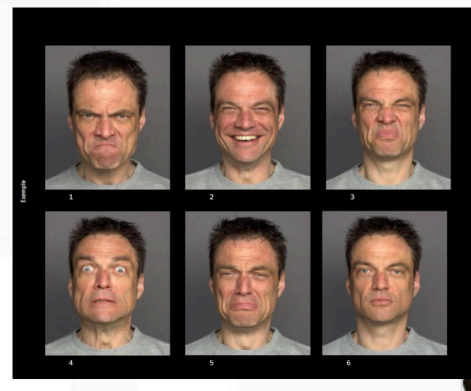


**TNI-93**



**TMA-93**

## Social cognition

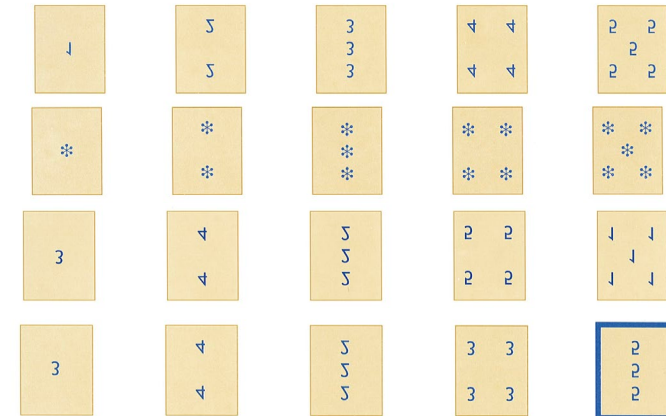


**TIE-93**

## Executive functions

Switching fluency task

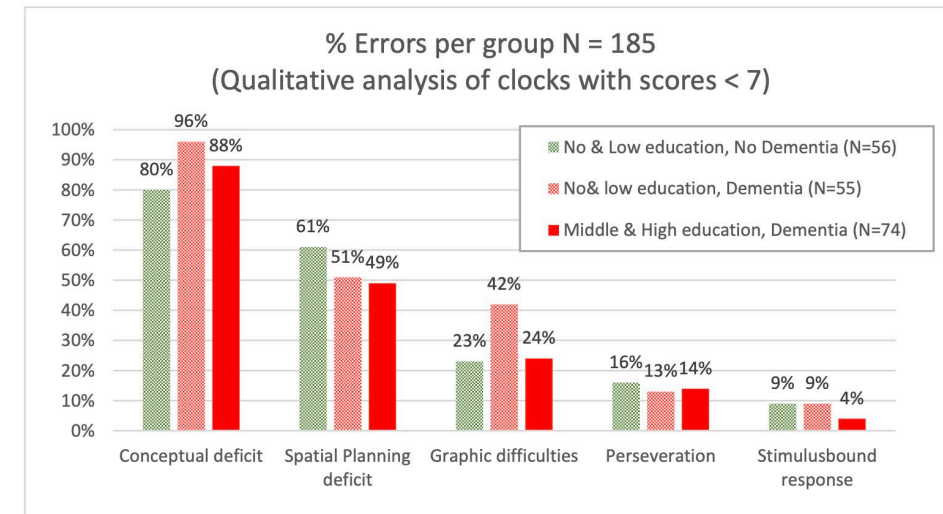
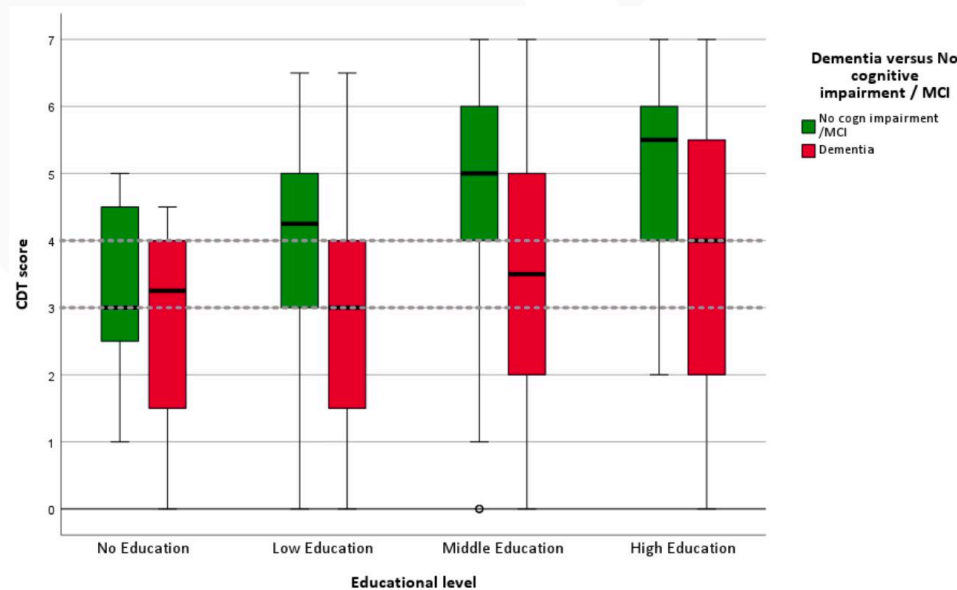
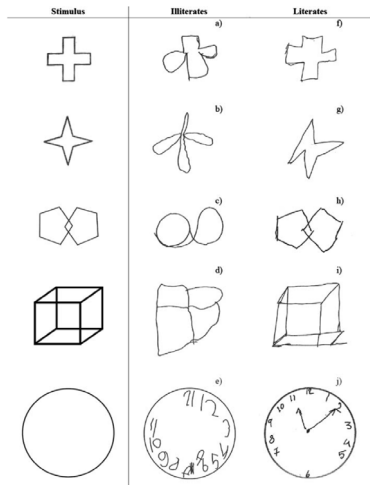
**TFA-93**



**5 Digit test**

## When looking at how these functions are assessed...

- Drawing copies (cubes) & the Clock Drawing Test are the most commonly used
- Yet, they are not so adequate for assessing diverse populations (Maestri et al., 2023 for a systematic review)



## Aim

→ To develop and pilot a battery to assess visuo-perceptive functions, language and praxis

## Development

- Selection of test and procedures (based on the memory clinic expertise)
- Adaptations following actual recommendations
  - Stimuli chosen / modified or created to be as culturally fair as possible
  - Stimuli created to be as quite natural as possible
  - Simple instructions and procedures that allow for the presence of an interpreter

## TFP-93 (*Test des Fonctions Postérieures*)

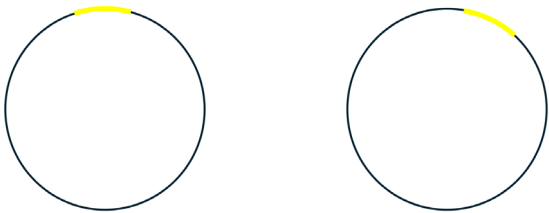
1st perceptual stages

Recognition stages and naming

Visual  
gnosis axis

### Matching figures task

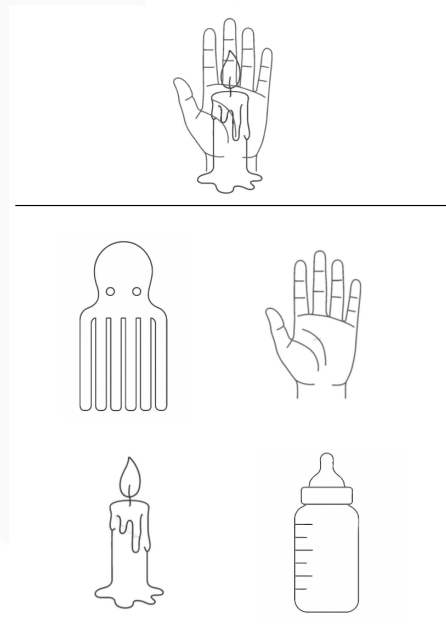
*Inspired from the BORB*



### Simplified overlapping figures

Trial with 2 + Trial with 3

*Inspired from the BORB*



### NAME-10 items

*Selected items based on discriminative power from the 60 items version (Franzen et al., 2023)*

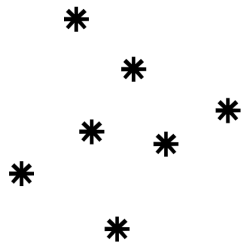


## TFP-93 (*Test des Fonctions Postérieures*)

Visuo-  
spatial/construction axis

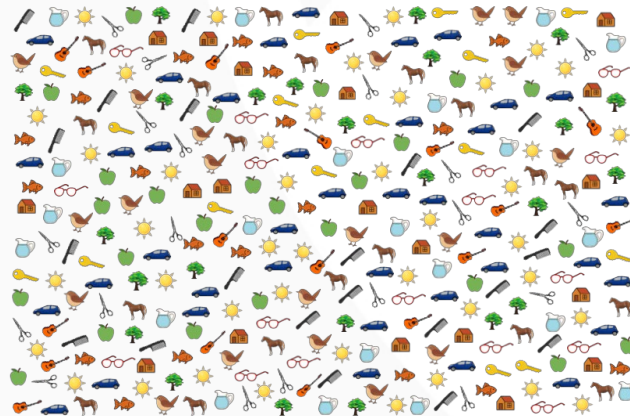
### Symbol counting task

*Inspired from the VOSP battery*



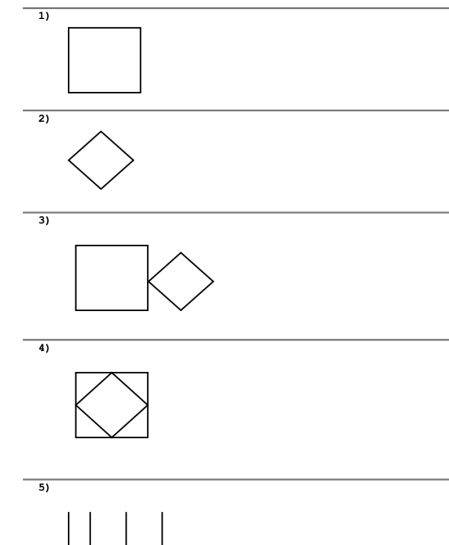
### Sun test

*Inspired from the Bells test*



### Simple drawings to copy

*From the French Version of the DRS*



## TFP-93 (*Test des Fonctions Postérieures*)

**Praxis : meaningless gestures to imitate**  
*Items selected from a French screening  
battery (BREP, Mahieux et al., 2009)*

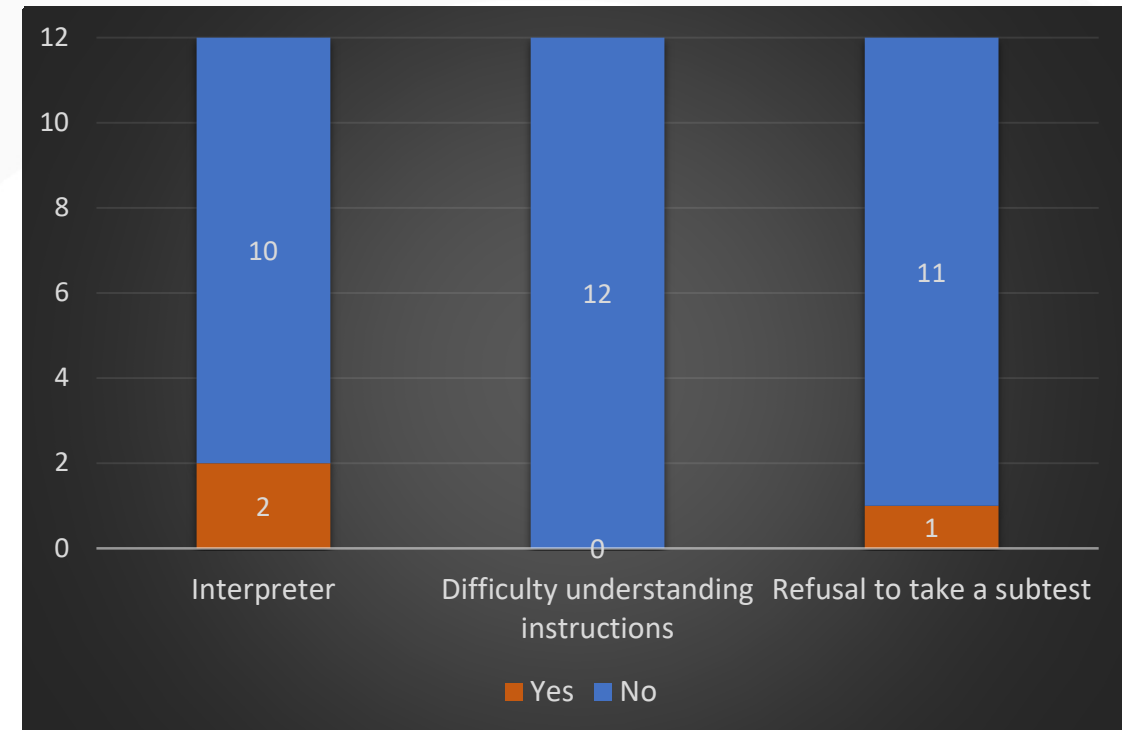


# Pilot – preliminary data

ID Patient	Age	Education	Country of Origin	Diagnostic
Patient 1	70	CEP / 7 years of educ	Maroc	Probable AD
Patient 2	34	without diploma	Africa	Normal Pressure Hydrocephalus
Patient 3	75	without diploma	China	Probable AD
Patient 4	65	without diploma	Maroc	Subjective cognitive decline
Patient 5	74	without diploma	Maroc	Subjective cognitive decline
Patient 6	68	without diploma	Algeria	Probable MCL
Patient 7	66	CEP / 7 years of educ	France	Probable AD + vascular
Patient 8	73	BEPC / 9 years of educ	Africa	Vascular dementia
Patient 9	73	without diploma	Tunisia	Probable MCL
Patient 10	81	without diploma	Portugal	Probable AD
Patient 11	75	without diploma	Turkey	Probable MCL
Patient 12	45	without diploma	Africa	PTSD



**!! POP-OUT !!**

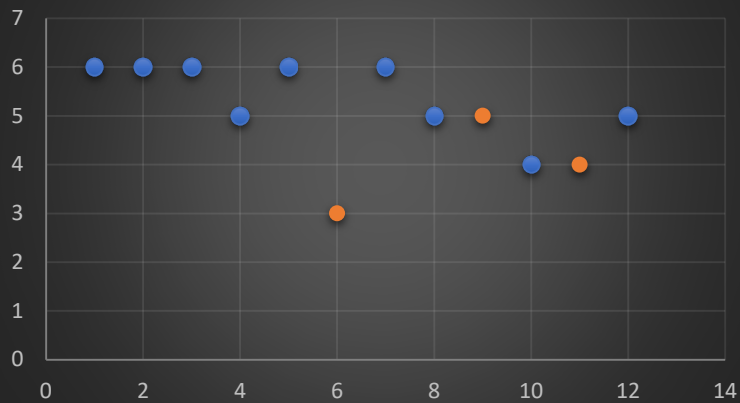


# Pilot – preliminary data

Visual  
gnosis axis

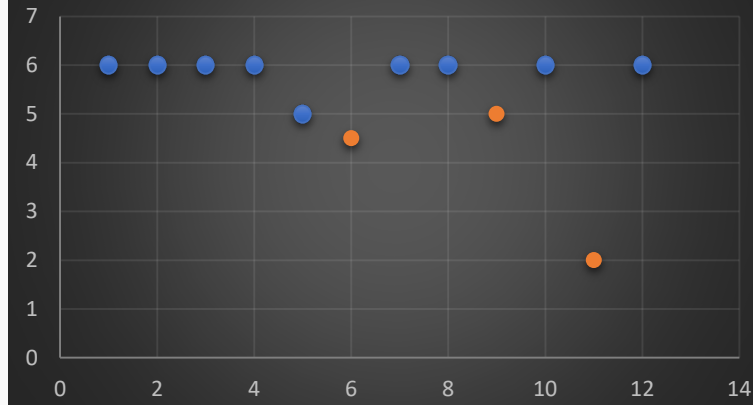


Matching figures



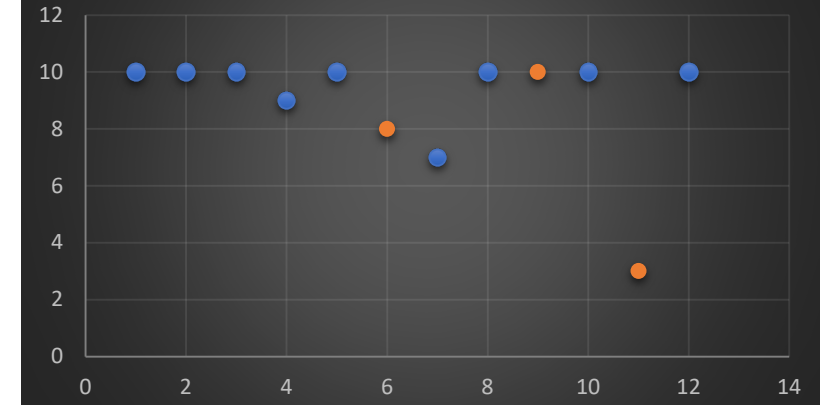
Max score out 6

Overlapping figures



Max score out 6

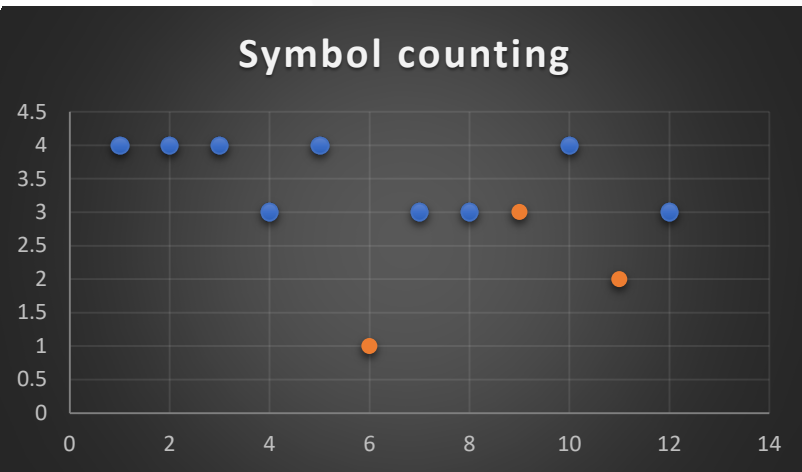
Naming



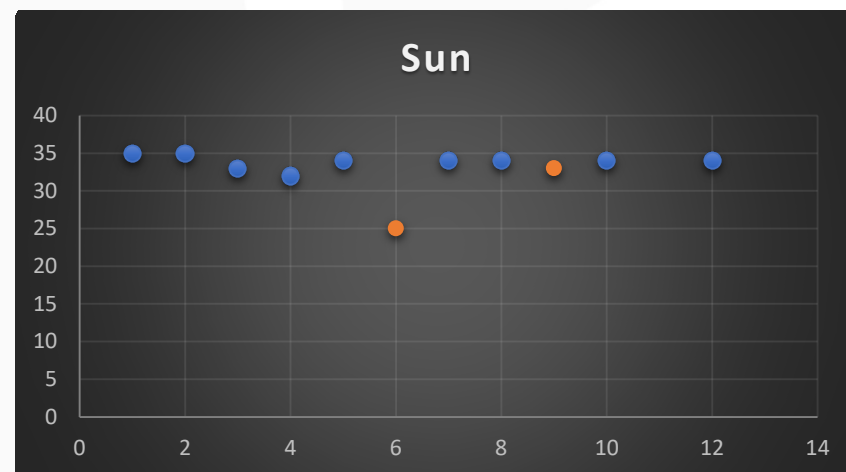
Max score out 10

# Pilot – preliminary data

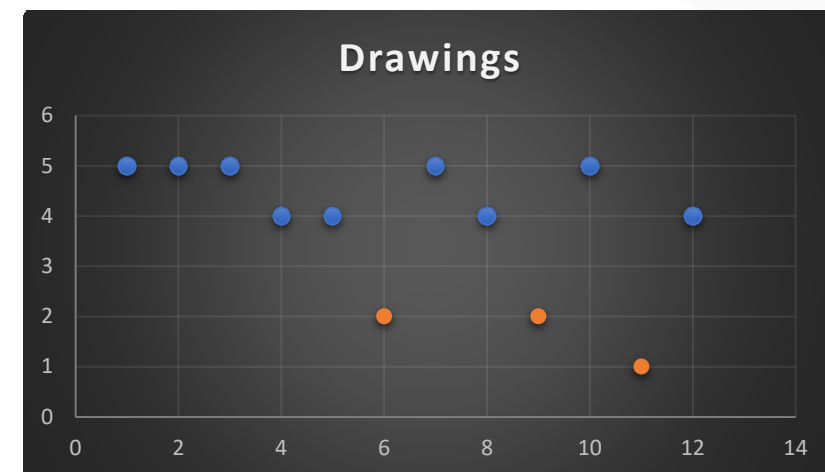
Visuo-spatial/construction axis



Max score out 4

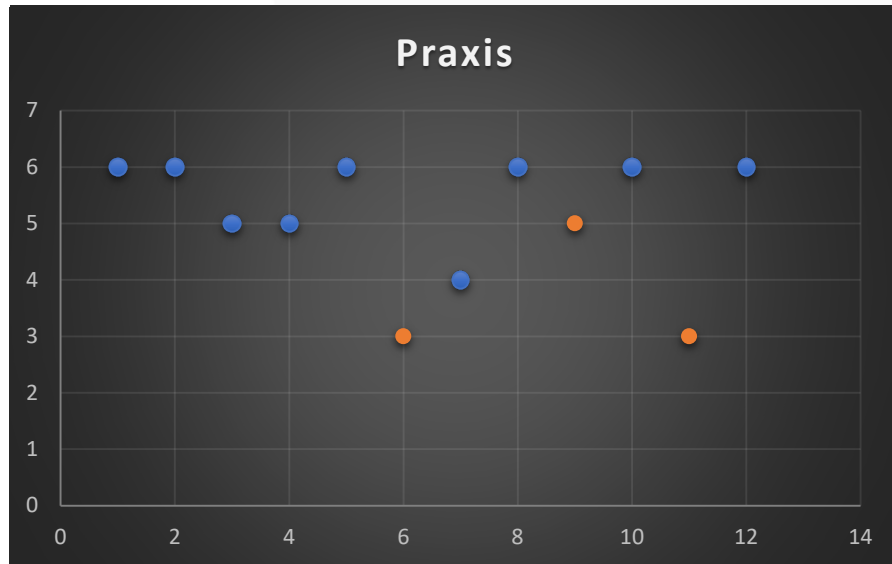


Max score out 35



Max score out 5

Praxis : meaningless gestures to imitate



Max score out 6

- **Encouraging pilot study**
  - Instructions are accessible to diverse populations
  - Difficulties encountered with the TFP-93 seems quite specific to the context of LBD
- **Future studies are needed**
  - To confirm its interest in patients with neurological disorders that may disrupt posterior and temporal functions
  - To study the linguistic, cultural and educational effects in healthy diverse populations

# Special thanks to



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Sanne Franzen



Marco Canevelli



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