



# L-POST: A Screening Test for Assessing Perceptual Organization

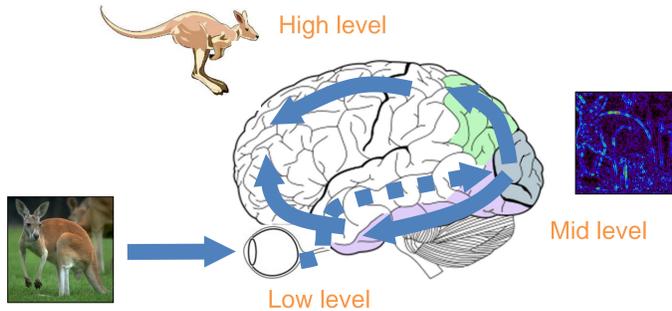
Kathleen Vancleef, Katrien Torfs, Christophe Lafosse, Johan Wagemans, Lee de-Wit

Laboratory of Experimental Psychology, University of Leuven, Belgium  
Neuropsychology, Rehabilitation Hospital RevArte, Belgium



## Introduction

In clinical practice we encounter patients with visual problems. However it is not always clear what exactly goes wrong and where in the visual processing stream the deficit is located.



Low-level vision is assessed with acuity tests, perimetry...  
High-level vision is assessed with object recognition tests ...  
Mid-level vision is assessed with ???

→ **Leuven Perceptual Organization Screening Test (L-POST):**  
an instrument to systematically test processes of perceptual organization in mid-level vision as independently as possible

### Perceptual Organization



## L-POST general description

Freely available at [www.gestaltrevision.be/tests](http://www.gestaltrevision.be/tests) (only in Dutch)

Easy to administer

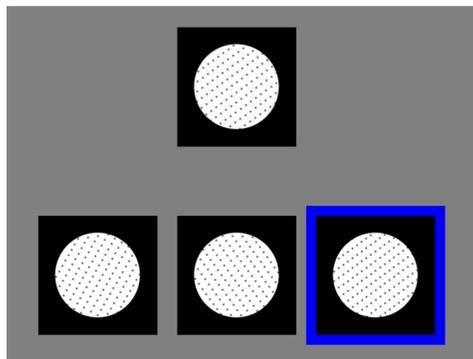
15-30 minutes

Matching-to-sample task:  
*'Which of the three pictures below is the most similar to the one at the top?'*

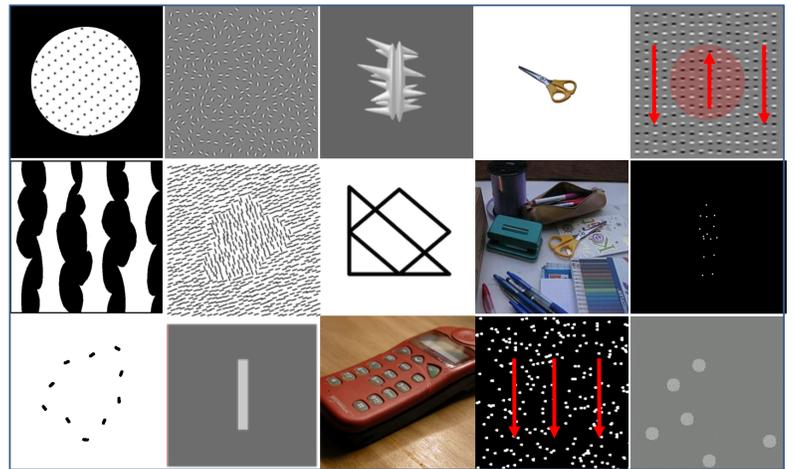
Neglect-friendly version

Automatic scoring

5 practice trials + 15 subtests of each 5 trials

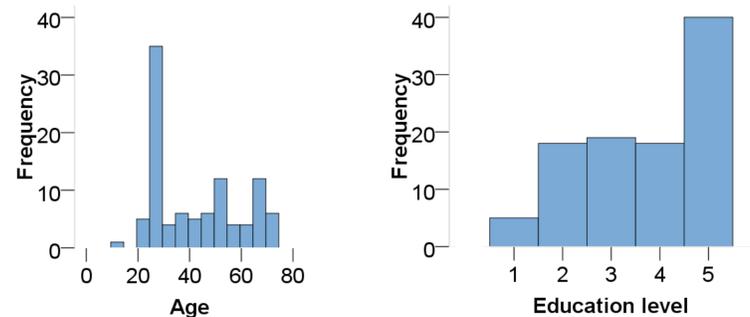


## L-POST subtests

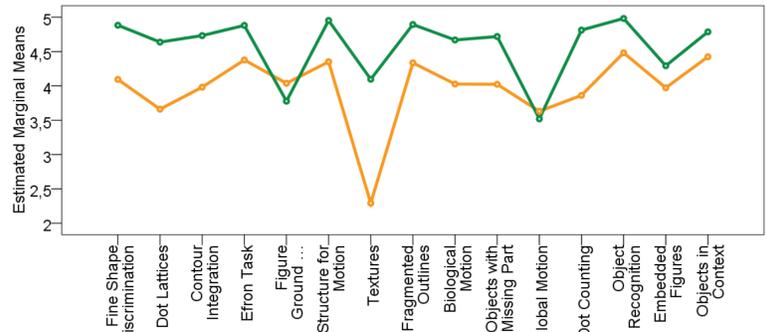


## Results

1. Norm group: 100 healthy controls; 40% men, 60% women

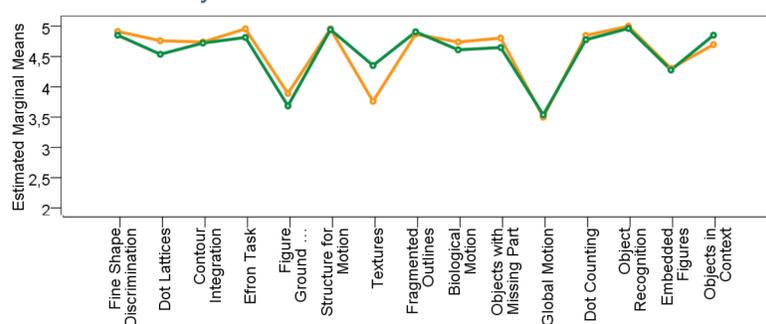


2. Validation (work in progress)



8 patients (including DF) versus 100 healthy controls show clear performance differences:  
 $F(1,105) = 16.52$ ,  $p < 0.001$

3. Reliability



No differences between online version and version with experimenter present:  
 $F(1,98) = 0.07$ ,  $p = 0.79$

No differences between first session and second session (n=24):  
Pearson correlation = 0.83,  $p < 0.001$

## Conclusion

The L-POST is a potentially valuable screening test for perceptual organization. In clinical practice the L-POST can test for problems in mid-level vision independent of potential high level problems like object recognition. In addition, it offers a useful tool for researchers in identifying patients for neuropsychological research.