

# MLSEcz: Czech Adaptation of Primary Progressive Aphasia Screening

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## What is MLSE ?

### Mini Linguistic State Examination

Screening test for neurologists, speech therapists and other clinicians to diagnose Primary progressive aphasia (PPA) and its variants (nfvPPA, svPPA, lvPPA)

### Specifics of the Czech language accepted in the Czech version of MLSE.cz:

- A rich system of grammatical morphemes
- One morpheme often carries more than one meaning
- Relatively free order of verb arguments and their complements
- Much more complex system of conjugation of verbs
- The verb can carry various types of information: person, number, tense, aspect or the gender of the subject
- The spelling of words is very consistent (transparent orthography)
- Language with deep orthography

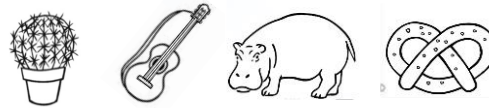
### Pre-norming phase

Demographic structure of healthy group in Pre-norming Phases :

	quantity	m/f	age	education
Pre-norming 1	42	29/13	72 (35-89)	14 (9-18)
Pre-norming 2	42	32/10	67 (44-87)	14 (9-19)

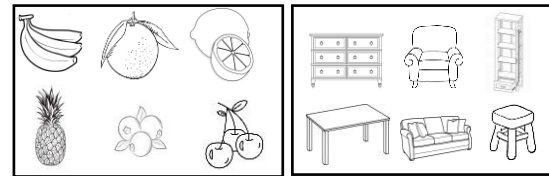
## Which items have been modified from the original?

- ❖ Picture naming – 4 pictures changed (currently cactus, giraffe, pineapple, guitar, hippo, pretzel)



- ❖ Syllabic repetition - the word caterpillar changed to catastrophe (katastrofa)

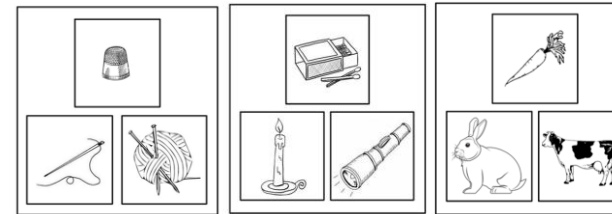
- ❖ Repetition and comprehension – now fruit and furniture instead of the flowers and medical instruments



- ❖ Pseudoword repetition - Frapák, Ševrosnyk, Brázděnčina

- ❖ Word and pseudoword reading – use of irregular word and assimilation

- ❖ Semantic association – reduced size of the thimble in the picture, replace donkey for rabbit, remove harpoon and insert candle with matches



- ❖ Sentence comprehension I. - change the names to typical name for Czechia

- ❖ Sentence comprehension II. - enlarged the pictures and change the order of the sentences according to their difficulty

- ❖ Sentence repetition – change of the sentence order of and two sentences replaced

## What hasn't changed compared to the original?

- ❖ Writing
- ❖ Picture description

## Suggestions for administration and interpretation of results based on our first clinical experience:

- Preliminary visual and auditory screening is required.
- Determine the specific reason for the patient's failure to complete the task (e.g., comprehension vs. memory).
- In the Sentence comprehension section, present images only when the individual is unable to respond verbally; otherwise, the visuals may be distracting.
- If there is an error in semantic association, request an explanation for the individual's choice.

### References:

Patel, N., Peterson, K. A., Ingram, R. U., Storey, I., Cappa, S. F., Catricala, E., Halai, A., Patterson, K. E., Lambon Ralph, M. A., Rowe, J. B., & Garrard, P. (2022). A 'Mini Linguistic State Examination' to classify primary progressive aphasia. *Brain Communications*, 4(2), 1 – 11.