**Gestures and words retrieval in the proces of therapy of aphasia**

Given article describes that using gestures as a compensatory communication strategy may be challenging for people with severe aphasia, which means particularly for Broca’s aphasics, because their comprehension is intact so they are able to learn new things more than Wernicke’s aphasics and there is also a space to improve communication more than by e.g. transcortical-motor‘ aphasics, because T-M aphasics‘ speech is relatively fluent and intact in general.

This study presents a computer gesture therapy tool (GeST) and piloted it with nine people who have severe aphasia – as you can see, it is not so many, but is quite standard within pilot studies (or at least it was few years ago), I have only 6 aphasic participants in my research so far ☺

They performed 6 weeks practice with GeST, supplemented with pre and post therapy tests of gesture and word production –the question is: is it enough? You think that it looks good and I have to agree.

Then it is known that participants underwent an average of 64.4 practice sessions with GeST (average session length was just under 14 minutes).I think that is very good as well, maybe the number of practice sessions in average is surprisingly high.

It is also known that scores on the gesture test were evaluated by 36 independent raters. They conclude that on the one hand, recognition scores for gestures practised with the tool improved significantly after therapy – on the other hand, gains were small and only occurred on items that were practised with regular therapist support.

Well, 36 independent raters, I think that is too much! And still, results were not convincing – so one may think: was it worth it, this whole complicated procedure included training, performing tests and their evaluating?

In the main study (Marshall et al., 2013), fourteen people with severe aphasia received therapy aiming to train 20 gestures and 20 words. Gesture and naming therapy were conducted separately, but in parallel, using similar elicitation and cueing techniques.

Mabe it is a bit disappointing that treatment effects were (only) item specific; gains in gesture occurred largely on items that received gesture therapy and gains in naming occurred on items that received naming therapy. There was no evidence of cross modality cueing.

But the good news is, there was some proof of gestural and naming gains made by participants benefited their interactive communication, as there were improvements on tasks in which they had to convey messages to their partners.

What is a bit confusing for me is that it seems they did not expect so low rate of gestures learning, but it had to be obvious due to apraxia by several pacients. They also argue that gesture and naming represent very different learning techniques: gesture therapy requires to teach novel forms, while within naming therapy, they “only“ has to renovate verbal forms that they had known before. I think it is quite problematic to claim that they had to learn gestures as something completely new – it would be more precise to describe as learning of **intentional** using of gestures to reach something in communication, because it is presumable that everyone who does not live isolated has to know (at least basic) gestures in the same sense as spoken language. SEE ALSO ONE OF YOUR POINTS BELOW

What I find insufficient is that they do not mention if they explore Broca’s or Wernicke’s aphasics, they only mention people with severe aphasia – but I think it depends what is severe for you: is it non-fluent speech and using only pronouns and other synsemantic words? Or is it rather chaotic syntax and producing of meaningless (nonsensical) words?

**Summary of your important thoughts**

The effect on everyday communication for people with severe aphasia is not clear – it still has to be further explored.

This method is important – it is a new way of therapy – until now, all the computer therapy tools for people with aphasia were only focused on spoken or written language – this one focuses on gestures.

Presented therapy gesture tool is maybe quite complicated. The general naming therapy or gesture therapy as it was suggested in the slides is way more comprehensive and the obtained data way more easily processed.

You are also wondering what the results would be if we compared it to therapy without the GeST tool – in different conditions. In other words: this study didn’t really answer the question of its usefulness.

Results were presented a bit confusingly at times. E.g. they stated that the use decreased a bit in the phase 2, but later on, they stated that the difference disappears when we take away the time with therapist.

You also asked whether the participants were able to use the acquired gestures in their normal life. Your thought was, that they could see the GeST only as a game, which they learned how to play. But it seems that participants were able to preserve those gestures permanently. I would be still curious what the results of retesting would be if carried out after some time.

Based on the research you wondered “how to feel about” acquired gestures. I think it’s something on the way from gesture to language, but where to put it? From our view it would probably be labeled as symbols – that means we have to agree with patients on an arbitrary gesture form for expressing a concrete meaning.