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Comparing different **written and spoken cues** in single-word naming

**Why is this important?**

Cues are very often used by clinicians to treat word-finding difficulties.

Cues are commonly used spontaneously in daily conversation.

Yet, we do not fully understand how and why cues work.

**What people did**

5 people with aphasia took part. They were asked to name pictures as fast as possible.

They were given a **written cue** or **written + spoken cues**, if they could not name them.

**If unable to name:**

People improved significantly with ‘**written cues**’ only, but not with ‘**written + spoken cues**’. This is unexpected.

Effects from ‘**written cues**’ can last at least one week.
Brief communication partner training: does it help?

Nivetha Koculan

Introduction

People with aphasia often use total communication to get their message across. This means using any method, not just speech.

Communication partners may need training to help them support total communication. Training can be specific to an individual with aphasia or more general - about what helps most people.

We wanted to find out if one session of specific communication partner training helped communication between the partner and a person with aphasia.

What participants did

One person with aphasia took part. He watched cartoon clips, then described them to the partner using speech, gestures and drawing.

The partner then learned about 3 specific things that would help communication.

Two weeks later, they repeated the cartoon description task with different clips.

What we found

There was no difference in the amount of information exchanged after training.

There was no difference in the time or number of turns it took to communicate the messages.

The communication partner did change the way they supported the person with aphasia after the training.

They used better questions and they took more notice of the person with aphasia’s gestures and drawings.

This could make a difference to how people feel about their communication.
The effect of background noise on speech

Why is this important?

People without aphasia speak louder, slower, and with higher pitch in background noise. They also pause more.

Do people with aphasia do this?

- Researchers think yes
- However, people with aphasia cannot change their speech as much as people without aphasia

We wanted to explore this to learn more about aphasia.

What people did

We used old data from two years ago where people with aphasia spoke in three kinds of background noise (quiet, café, and single speaker). We recorded the same people with aphasia again with a new kind of background noise (two speaker noise).

The people with aphasia described a scene while listening to the noise through headphones.
What we found

Female people with aphasia spoke louder, faster and with less pausing than men.

People with aphasia made some changes with background noise:

- They spoke louder with single speaker background noise
- The spoke slower with café background noise

They did not change their pitch or their pausing.

Speech in the two speaker background noise was not different from speech in quiet.

How this helps

Showing where speech planning happens in the brain:

- Pausing takes planning
- It can be affected by brain injury

Raising awareness:

- Background noise can be difficult
- Everyone reacts differently

Helping people with aphasia:

- Practising helps you get better
- Practice speaking in background noise
  - It will help you speak more easily
  - Other people might understand you easier

Nadia spoke about her work at the UCL Communication Clinic Conference on 19th September 2019.

She was awarded ‘Best Presentation’ by the audience, who were mainly people with communication difficulties that have taken part in research.
**Awareness of language difficulties**

**What was this study about?**

Some people with aphasia do not have full awareness of their language difficulties. Having awareness is important to make progress in therapy.

There are different kinds of awareness:

1. **Knowledge** you have about your difficulties.
2. **Judging** how you are doing during a task.
3. **Correcting any errors** made during the task.

We used a naming task.

We wanted to find out if different types of awareness are related, and if **thinking skills** such as attention, planning, and problem solving are involved.

**What people did**

18 people with aphasia took part. They completed tests of the different types of awareness and of thinking skills.

**What we found**

- Knowledge of difficulties **was unrelated** to judgements during the naming task. This **supports previous research**.

- The **judgements** about how well people were doing during the naming task were **related** to how often they made **corrections**.

- Naming errors that involved the **wrong sounds** were **easier to judge** and were **corrected more** than errors of word meaning.

- All measures of thinking skills were **unrelated** to awareness. This **does not support** previous research.
Does hearing your own voice benefit sentence repetition?

**Why is this important?**

Previous research has shown that hearing your own voice when studying can benefit:

- Word recognition
- Reading single words

The studies so far have tested college students and children with learning disabilities.

We wanted to find out whether hearing your own voice could improve sentence repetition in people with aphasia.

**What people did**

13 people with aphasia and 14 people without aphasia took part in this study.

*Session 1:*
Participants were recorded saying a list of 52 sentences.

*Session 2:*
Participants heard a sentence and were asked to repeat it. The sentence was either a recording of their own voice or another person’s voice.

**What we found**

For most people with aphasia, there was no difference in sentence repetition when hearing their own voice compared to another person’s voice.

In fact, some participants with aphasia found their own voice distracting.

People without aphasia paused less when hearing their own voice.
The impact of hearing self-voice on memory for words in people with aphasia

Why is this important?

People with aphasia can have difficulties with speaking and understanding language.

Research shows we have better memory for things we hear in our own voice and when we read aloud than when we hear things in somebody else’s voice or read in our head.

Hearing one’s own voice may help adults with aphasia remember words better.

What people did

15 people with aphasia read a list of words aloud- their voice was recorded onto a computer.

They then studied a list of 80 words under 4 conditions.

They remembered as many words as possible for a memory test.

Press - Studied (I remember studying this word)

Press - New (I don’t remember studying this word)
What we found

Small but not significant differences overall between hearing your own voice, hearing somebody else’s voice and reading in your head.

A few people found hearing their own voice particularly helpful for memory.

Reading aloud was not helpful for memory.

Conclusion

Hearing your own voice has similar memory benefits to other methods, but for some adults with aphasia it can be really helpful for memory.

Reading aloud is not helpful for memory.

More research is needed in a larger and wider sample.
Investigating the relationship between language skills, number processing and calculation

Why is it important?

Research shows that adults with aphasia have different strengths and weaknesses with numbers and calculation.

Some researchers have reported an advantage in automatic speech, e.g. counting from 1-10, reciting days of the week compared to non-automatic speech, e.g. counting backwards.

Problems with numbers may be related to specific language difficulties, e.g., sound related versus meaning related. In this project, we wanted to find out whether this was the case.

What participants did

Six people with aphasia carried out tests of language skills, numeracy, and functional numeracy skills.

Examples from the functional numeracy task

- Who won the match between Chelsea and Crystal Palace?
- You go to the cinema with 5 friends. How many tickets do you buy?
- How long does it take to get from King’s Cross Station to Big Ben?

Main findings

There was no statistical difference between the automatic tasks and non-automatic tasks.

There was a relationship between meaning related tasks and non-automatic tasks. However sound related tasks did not significantly correlate with performance on automatic tasks.

Conclusion

In this small group everyone had some difficulties, but there was a lot of variation between people. Our results suggest there may be a link between language skills and numeracy but more research is needed with a larger group of people.
“Values” in speech and language therapy from the perspective of people with aphasia

Kirsty Ayers

Why is this important?

All healthcare organisations say people should be treated according to values like respect, dignity, compassion and kindness.

These words are hard to define and can mean different things to different people.

There is very little research looking at values in speech and language therapy.

Organisations sometimes use questionnaires to ask people about values in the care they have received. Questionnaires are not always easy for people with aphasia to answer.

What people did?

Nine people with aphasia took part in this study. Information was collected in two focus group sessions and one interview.

People were asked to talk about values in speech and language therapy and answer these questions:

- What values do you think are important in speech therapy?
- Which of these values is the most important? Why?
- How does a speech therapist demonstrate these values?

What we found

The people in the study outlined eight important values in their speech and language therapy:

- Patience, kindness, honesty, empathy, professionalism, respect, resourcefulness and knowledge.

Some of the values suggested are the same as those already used by healthcare organisations, but some are new.

The way services are delivered (things like the number of sessions people have or being able to see the same therapist) affects people’s experiences of values.
Speak Red

People from the UCL Communication Clinic took part in a project to develop an opera about aphasia.

The project was led by writer and director Finn Beames and composer Santa Bušs.

The opera tells the true story of Ruby McDonough, an American woman who has aphasia.

Ruby was involved in a court case, as a victim of crime.

The court did not allow any support to help her get her message across.

They said she was incompetent and could not testify.

Ruby changed the way the law works in the USA.

She appealed and won the right for people with disabilities to have support when giving testimony as witnesses.
The opera was developed through workshops.

People with aphasia worked together to plan the words, music and staging.

For many, this was the first time they had been involved in opera.

Creative activities allow people to express themselves in different ways.

Like Ruby, the people taking part were able to show their competence despite their language difficulties.

The opera was performed at the Cockpit Theatre in May 2019. The plan is to develop it further. Watch this space!

These photographs are from the performance and were taken by Claire Shovelton.
Therapy for sentence difficulties in aphasia

Why is it important?
Many people find sentences hard to understand or produce after a stroke.
We want to find out if a new therapy can help people with difficulties understanding and producing sentences.
We explore if brain stimulation boosts the effects of therapy.

What will it involve?
You will visit Chandler House at UCL over several weeks to meet a researcher.
You will participate in a new 4-week therapy for aphasia.
You have to come to UCL 3 times per week for 4 weeks (12 therapy sessions).

The therapy involves listening to words and sentences, and speaking. This is combined with brain stimulation. We will put one electrode on your head and one on your right wrist, and a very small electrical current is given to your brain.

We will measure your language and other abilities before and after therapy.
You will also have a brain scan after therapy.
We pay £10 towards your expenses for each session.

Interested in finding out more?
Please contact the researcher (Claudia Bruns) for more information:
utilise@ucl.ac.uk    020 7679 4292

You can watch our recruitment video here: https://youtu.be/hwLZLQFmrsY

This study is funded by the Stroke Association and has been approved by the UCL Research Ethics Committee (Project ID: 8123/001).
New project looking for volunteers

Naming therapy research for word-finding problems

Do you know anyone who had a stroke?
Do you know anyone who has problems finding or saying the right word?
Do you know anyone interested in receiving full naming therapy?

If you answered “YES” to the above questions we would like to invite you OR someone you know to take part in a therapy research project.

In this research, we run full therapy sessions to find out more about naming.

We will research the type of cues that can help people find words.

To find out more, contact the researcher

w.sze.17@ucl.ac.uk  07562 204 301

New project looking for volunteers

Research about health numeracy skills in people with aphasia

What is this about?
Health numeracy skills are important for taking care of your health. We want to find out how people with aphasia perform on numeracy tests related to a health context.

What will happen?
You will come to the clinic for one hour
Give some simple information about yourself
Complete some numeracy tests and questionnaires

Bonus – have the chance to win a £50 voucher!

Contact us or the clinic to take part:
celia.serna.17@ucl.ac.uk  joyce.luo.17@ucl.ac.uk  zainab.nabi.17@ucl.ac.uk
New project looking for volunteers

Research on language and wellbeing in aphasia

Cat Choate
Gergo Lakatos

Why is it important?

Wellbeing means your mood, thoughts and feelings. We want to learn whether taking part in an activity at a museum affects the wellbeing and language of people with aphasia.

What will it involve?

You will attend 4 appointments: 3 will be at Chandler House, the last one will be a visit to a UCL museum.

In each session you will create a visual image. Then, you will talk about your wellbeing with a researcher. There will be a short questionnaire and some rating scales.

Interested in taking part? Please contact Cat or Gergo directly:

catherine.choate.18@ucl.ac.uk  gergo.lakatos.18@ucl.ac.uk

Or use the clinic’s contact details below.

Getting in touch...

If you would like to take part in any of our research projects, please get in touch

Our contact details are:

Phone: 020 7679 4239

Email: communicationclinic@ucl.ac.uk

Post: UCL Communication Clinic, Chandler House, 2 Wakefield Street, London, WC1N 1PF