Introduction

This is the first UCL Communication Clinic research update. Researchers from the Department of Language & Cognition at UCL describe their work. Our researchers come from different backgrounds. Some are speech and language therapists, others psychologists, linguists or neuroscientists. They are at different career stages. Some are undergraduate students; others Masters students; PhD students; lecturers and professors. They all aim to understand more about communication difficulties: discovering new ways to assess understanding, reading, speaking and writing, and finding new and better therapies.

Researchers work in partnership with people who have communication difficulties, their families and friends. We are very grateful to the people who volunteer for research studies. Without them, research would not happen. But the partnership goes beyond this. Researchers depend on people with communication difficulties for their insights and experiences: what helps; what hinders; what is difficult; how life can be lived to the full with communication difficulties. In partnership, we learn more and do better.

In this newsletter, researchers describe their work and what they hope to discover. I hope their stories are interesting and informative. Please let us know if things are clear and useful. It would be great to have some of your stories about being part of research. Was it interesting? Boring? Too demanding? Did you understand what the research was about? Did you get enough feedback at the end? Do you think we are asking the right questions about communication difficulties?

Thank you for being part of our research. We look forward to working together in the future.

Professor Rosemary Varley
Head of Department, Language & Cognition

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Communication partner training in total communication for people with aphasia

Why important?

People with aphasia often use total communication when they find it hard to talk.

Total communication is using range of ways to communicate, like writing, drawing and gesture.

We wanted to find out whether training partners in total communication helps people with aphasia to get messages across.

What participants did

1) A person with aphasia described cartoon clips to a partner.
2) The partner received training on how to support total communication use.
3) The person with aphasia described more cartoon clips to the partner.

Findings

Specific communication partner training can help partners to:

- get messages across more quickly
- get across more information
Inference in stroke-related aphasia

Why important?

Inference means understanding hidden meaning in a text.

It is important to know if people with aphasia can make inferences.

This will help us understand the nature of aphasia.

This may lead to new therapies for people with aphasia.

What participants did

Participants did some language tests.

Participants did a test of emotions.

Participants did a test of inference on a computer. Participants read stories and answered questions.

Findings

People with aphasia can make inferences about facts.

It is hard for people with aphasia to make inferences about emotions.
Contextual cueing in semantic ambiguity resolution in people with stroke aphasia

Lots of English **words** have **more than one meaning**. We call these **ambiguous words**. For example, the word ‘toast’ can mean grilled bread or a celebratory speech with a drink.

People with aphasia can have **difficulty understanding** these words, especially when the **correct** word meaning is a **less common meaning**.

Studies show that **sentences** which explain the **context** of the word can **help** people with aphasia understand less common word meanings.

This research looked at whether **pictures** are **better** than **sentences** at helping people with aphasia understand less common word meanings. The research is **important** because pictures are **often used** to support communication with people with aphasia. But we do not really know how useful this is.

In this research people with aphasia did some tasks on a **computer**.

First they saw a **picture** or a **sentence**

The woman used a microphone to make a speech

Next they read a **word**

**toast**

Then they saw 3 pictures appear under the word. One of the pictures was related to the meaning of the word. Their task was to **select the picture that is related to the word**.

The research suggested that **pictures** were **not more helpful** than sentences in helping people with aphasia understand the meaning of ambiguous words.
Investigating the effects of a new intervention using subtitles for auditory comprehension difficulties in aphasia

We wanted to find out whether watching videos with subtitles could improve the listening skills of people with aphasia.

This is important for people with comprehension difficulties, because it could mean that there is a treatment they can do at home, without a therapist. It could also show that reading and hearing sentences at the same time can improve comprehension of spoken language.

To do this, we gave three people with aphasia a therapy package to complete at home over two weeks.

Each day they watched a video with subtitles and answered questions about the video.

Before and after they completed the therapy, we tested their comprehension, attention, and memory skills to see if therapy made a difference.

We found that for all participants, therapy made a positive change in at least one of their skills. This showed that using videos with subtitles may be an effective way to improve auditory comprehension in people with aphasia.
The influence of emotional valence on word recognition in people with aphasia

Helena Thornley

Research question: Do more or less emotional words affect how well an adult with aphasia recognises them?

Why is this important? For adults without aphasia, written emotional words e.g. ‘victory’ are easier to recognise than unemotional words e.g. ‘table’. Emotional words are currently not considered in therapy or tested for in people with aphasia. This could lead to missed opportunities for accessing new words in therapy. This could improve everyday communication skills for people with aphasia.

What participants did: 40 people (20 people with aphasia and 20 people without) read single words on a computer. They choose whether they were real words or made up words. These words included positive and negative emotional words.

Main findings: People with aphasia recognised written emotional words better than unemotional words. Positively emotional words such as ‘peace’ were recognised particularly quickly and accurately.

Helena’s research was completed as part of a Master’s degree in Speech and Language Sciences

Her project won the Tavistock Trust for Aphasia University Student Prize 2016
Dysarthria and speech and language therapy

A research team is looking for people who have dysarthria as a result of a stroke to complete an online questionnaire.

Dysarthria is a medical term used for speech problems. If you have dysarthria, you may:
- sound different after your stroke
- find it hard to
  - move your tongue, jaw or lips
  - control your breathing when speaking
  - swallow

The UCL research team wants to know:
- how dysarthria has affected your communication
- what speech and language services you may, or may not have received
- how you feel about speech and language services

The online questionnaire will be available in February 2017. Please email Sam Nerminathan at sam.nerminathan.15@ucl.ac.uk if you are interested in completing the questionnaire.

Research about sentence processing

Why is it important?
Some people find sentences hard after a stroke
We want to find out about sentence difficulties in aphasia
It is important to know which sentences are easier to understand

What will it involve?
You will visit Chandler House at UCL several times to meet a researcher
During your visits you will complete several tasks
All the tasks involve listening to words and sentences, and speaking

Interested in taking part?
Contact the UCL Communication Clinic for more information about Claudia’s and Vanessa’s research.
communicationclinic@ucl.ac.uk 020 7679 4249
Research projects at the Communication Clinic: a volunteer’s perspective

I have volunteered to take part in numerous student projects over the years. The reason I do volunteer is that I am so grateful for the help that I have been given from the Speech and Language Therapists. Because of the skill and the dedication of the SLT staff, I have been able to improve my life and wellbeing to an extent that I can communicate pretty well in everyday situations both verbally and in writing.

When people who have acquired brain injuries attend the clinic and are asked if they would like to be involved in student projects, normally they have to sign an agreement that the study is not part of any therapy sessions. However, when I do volunteer in the projects, I do personally learn a lot about my capabilities in terms of my ability to retain my understanding and memory functions so that is a type of therapy to me.

The student projects are vital for the individual students in terms of their progress as professionals but also giving information of their results to other SLTs in the future.

Having spoken to other service users, maybe it would be good if, as part of the research register, the results of all the student project outcomes could be shown in an aphasia friendly or layman’s terms way for the clients and their relatives to understand.

Getting in touch

If you would like to take part in any of our research projects, or would like to join our research volunteer register to hear about future projects, please get in touch

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