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## The Effects of Unfamiliar Speaker Accent on Story Recall in Adults with Aphasia

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### Introduction

Increased migration and mobility of labour mean that there are increased numbers of bilingual and multilingual individuals working and receiving care within the healthcare services. Research shows that unfamiliar accents affect speech processing in healthy adults (Adank et al., 2009), with deficits greater for non-native-accented speech (Munro and Derwing, 1995). A growing body of evidence suggests that the effects of accent are more pronounced with individuals with aphasia (Dunton et al., in press; To, 2009): they make significantly more errors with unfamiliar-accented speech than with a familiar accent across a range of language tasks that do not require a verbal response, and that difficulties are more marked for individuals with aphasia than for listeners without aphasia. Further research is needed to increase our understanding of how these effects might manifest themselves in daily life and which individuals are likely to be affected.

The present study investigates a) how an unfamiliar accent affects the spoken response of individuals with aphasia, and b) whether individual factors affect unfamiliar accent processing.

### Methods

Thirty-nine participants, 20 individuals with aphasia and 19 without aphasia, were assessed on a story recall test (8 stories). Four stories were presented in a familiar accent (Southern Standard British English) and four in an unfamiliar non-native accent (Bengali). Responses were transcribed and scored for number of information units using the Rivermead Behavioural Memory Test schema (Wilson et al., 2003).

### Results

A series of repeated measures ANOVA revealed the following:

All participants recalled the stories more accurately in the familiar accent; the individuals with aphasia performed significantly worse than the individuals without aphasia. However, the participants with aphasia were not significantly more affected by accent than the control participants (i.e. there was a group effect and an accent effect but not an interaction effect).

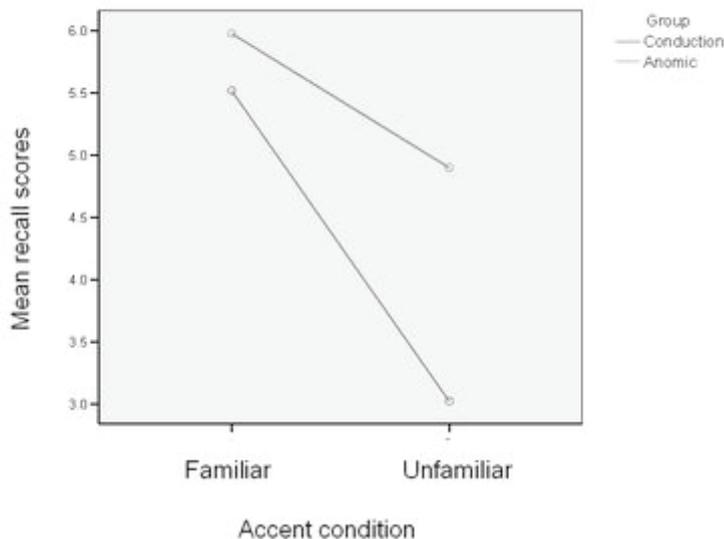
Analysis of individual factors indicated that age had an effect only on individuals with aphasia: older participants scored significantly lower in the unfamiliar condition than younger participants. In addition, individuals with conduction aphasia had significantly greater difficulty recalling stories presented in the unfamiliar accent than individuals with anomic aphasia (see Figure 1).

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**Figure 1.** Illustration of the mean story recall scores group-by-condition interaction for five conduction and five anomic aphasics.



## Conclusion

These findings pose a challenge for both health care services and speech and language therapists to consider more carefully the effects of unfamiliar accents on the assessment and management of individuals with aphasia.

## References

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