

Video-based script training for aphasia over the Internet: An outcome study

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Background:

There has long been interest in using distance communication technologies to serve the rehabilitation needs of persons with neurogenic communication disorders such as aphasia [1]. The merits of an intensive computer-based speech and language training for people with long-term aphasia has been proven in different studies [2,3]. Our previous study has shown the effectiveness of the video-based script training on word-finding difficulties and impact on activity and participation levels of people with aphasia [4].

The research study used a case series design to investigate the effects of a supervised iPad-based home training combined with a weekly videoconferencing on word finding and conversation. Outcome measures included assessments of impairment (e.g. picture naming scores), measures of functional-pragmatic communication skills, and also measures of psychological wellbeing. Furthermore, we investigated the acceptance of speech and language therapy over the Internet.

Method: Thirteen adults with aphasia participated in the study. They all were at least one year post-stroke, had a single left CVA and moderate to severe word-finding difficulties. The script training contains structured video-sequences with an integrated cuing-hierarchy, which includes short sentence repetition, sentence completion and sentence production. The intervention was designed as a combination of a supervised intensive home training (2 hours a day, 5 days a week) and a weekly therapy delivered via videoconferencing.

Results:

Participants word-finding (trained and untrained words) improved significantly. Measures of functional communication skills showed significant improvements. The iPad-based home training and the weekly videoconferencing got overall high acceptance scores.

Discussion:

The findings suggest that a structured intensive iPad-based script training combined with speech and language therapy delivered via videoconferencing is a viable method to improve word-finding difficulties and increase speech production in people with aphasia.

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