Cultural adaptation and psychometric testing of the Scenario Test for people with aphasia

with insight on cognitive aspects of independent communication

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• In more severe aphasia, some people can become socially isolated as day-to-day tasks become challenging.

• Language recovery may not be a realistic option for some, and other methods of communication (i.e. drawing, writing, gesture, technological aids) may be adopted. This is called total communication (Rautakoski, 2012).

Background

• In more severe aphasia, some people can become socially isolated as day-to-day tasks become challenging.

• Language recovery may not be a realistic option for some, and other methods of communication (i.e. drawing, writing, gesture, technological aids) may be adopted. This is called total communication (Rautakoski, 2012).
The Scenario Test is a new assessment of total communication originally developed at the Rijndam Institute, The Netherlands (van der Meulen et al., 2010).

It has 6 real-life settings comprising of 20 individual ‘scenes’ where a certain message must be communicated, with the help of a communicative partner (the examiner). These consist of usually one, but sometimes two elements.

“You are in a shop, looking for a sweater. The woman asks, “Can I help you?” What do you do?”

(Examinee must communicate ‘sweater’).
Items are scored based on whether proposition(s) are correctly communicated, and the amount of help needed.

- Prompting to use another mode of communication
- Open questions to gain more/clarify information
- Yes/No questions as a last resort.

Test is video recorded to allow examiner to better focus on examinee and scored later.

Why is The Scenario Test important?

- Many existing aphasia tests focus on language only, ignoring full communicative ability (total communication), resulting in floor effects (van der Meulen et al., 2010).

- Many assessments do not capture the interactive nature of communication (monologues only) or are not sensitive to communicative abilities for all modalities in severe aphasia.
Various factors may contribute to total communicative effectiveness, potentially resulting in individual differences across people with similar language deficits.

Two central factors are:

- **Praxis** (skilled hand movement) mainly required for accurate, meaningful gestures (Koski et al., 2002).

- **Non-verbal cognition**, particularly **executive functions** (responsible for planned, goal-oriented behaviour), but also **working memory** and **attention** (Hester and Garavan, 2005).

- Preliminary studies have suggested a link between non-verbal cognition and the ability to more proficiently learn new communicative strategies in people with aphasia (Nicholas et al. 2005; Fridrikkson et al. 2006; van de Sandt-Koenderman et al. 2007)
Research Aims

In short, the aims of the present study are:

1. To evaluate the psychometric properties of an English version of The Scenario Test:
   - **Validity** (does it accurately test overall communication as it is supposed to?)
   - **Reliability** (does it give consistent scores from the same scorer and between different judges? Also, does the same individual achieve a similar score twice in a row?)
   - **Sensitivity to change** (does a person’s score differ over time according to changes in their condition?)

2. To investigate the contribution of praxis and non-verbal cognition to independent, effective total communication.
Participants

Main cohort and control participants

- ~65 in main cohort (9 pilot)
- 20 control participants (stroke but no aphasia)
- Recruited from community stroke groups
- Longer time (usually >6 months) post-onset

Sensitivity to change subgroup

- 20 participants
- Recruited from NHS rehabilitation centre* (?)
- Shorter time post-onset (3 months or less)
Main cohort and control participant procedure

- Lots and lots of assessments
- Two sessions of 1 ½ hours each

**Session 1**
- FAST (to screen for aphasia)
  - CAT (to screen for severe cognitive problems and for aphasia)

**Session 2**
- TEA Elevator with distraction test (selective attention)
  - The Scenario Test
  - Tower of London (cognition)
  - CLQT (cognition)
  - ARAT, BCUS praxis screen, Limb Apraxia Screen (praxis)

Additionally, a family member, friend or carer will be asked to complete the ASHA-FACS, a questionnaire on the participant’s communication skills.
Sensitivity to change subgroup procedure

• Will receive FAST, CAT cognitive screen, Scenario Test and partner-rated ASHA-FACS only

• Seen before 3 months post-onset because the most significant recovery from aphasia due to stroke occurs in the first few months.
Current progress

• Ethical approval obtained from City University

• Pilot of 9 participants (3 mild aphasia, 3 moderate-severe aphasia, 3 controls without aphasia) completed Summer 2013.

• Data collected from 26 participants with aphasia, and 5 controls. We aim for minimum 50 PWA but the more the better.

• Initial session with 1 sensitivity to change participant completed, who was recruited from the Stroke Association. Recruiting through the NHS is proving more difficult than anticipated.
Request for participants!

• As this is a psychometric study, the more participants we can recruit, the better.

• Most importantly, we are looking for sensitivity to change participants who are up to 3-months post stroke.

• Happy to share data if it is useful to you (i.e. as an outcome measure)

• We also welcome participants who are longer post-stroke for the main study group.

Thank you!! All help is greatly appreciated.
References


Any questions?

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