NSW Speech Pathology Evidence Based Practice Network

Critically Appraised Paper: TREATMENT (CAP-T)

CLINICAL BOTTOM LINE:

SCA training improves the communication performance of both volunteers and people with aphasia.

IS CHANGE REQUIRED TO CURRENT CLINICAL PRACTICE? ❏ *Yes*   ❏ *No*   ❏ √*Undecided, more evidence needed*

Clinical Question [patient/problem, intervention, (comparison), outcome]:
Is it feasible to implement a volunteer communication partner scheme in Newcastle and what results could we expect?

Citation: Kagan A. Black SE. Duchan FJ. Simmons-Mackie N. Square P. (2001) Training volunteers as conversation partners using "Supported Conversation for Adults with Aphasia" (SCA): a controlled trial. Journal of Speech Language & Hearing Research. 44(3):624.38, Jun*.*

Method: Design and Procedure (e.g., note type of research design, comment on randomization, summarize treatment intensity as appropriate, such as dose (trials) per session, session length, frequency, total treatment duration, summarize general procedure, resources / materials required)

Design: Single blinded pre/post-test design. Randomised to control and experimental group. Randomisation method not discussed.

Treatment intensity: SCA instructional training conducted by investigator at a one-day workshop covering conceptual, motivational, technical, role play and evaluation. 1.5 hr. follow-up 2 weeks later for practice session with people with aphasia in a group setting.

Data Collection: 4 blocks of 10 dyads (20 experimental and 20 control groups). Pre-training semi-structured interviews with volunteers were recorded. Interview format was piloted and reviewed.
Video-recording of conversations pre and post training. Recordings were edited to remove personal information. The rater was blinded to whether the recording was pre/post and was required to indicate whether they thought it was pre/post and rate their degree of certainty

Outcome measures: Two subtests of the Measure of Skill in provided Supported Conversation for Adults with Aphasia (M)SCA: Acknowledging competence and revealing competence completed with volunteers. Two subtests of the Measure of the Aphasic Adult's Participation in Conversation (M)APC: Interaction and Transaction completed for people with aphasia. Both OM's developed specifically for the SCA program and completed pre and post training on the 80 video recordings.

Reliability: Inter-rater reliability tested for 20/80 recordings randomly selected balanced between control and experimental groups. Moderately high positive correlation on both outcome measures.

Method: Participants (where relevant note number of participants, inclusion/exclusionary criteria, characteristics of participants in experimental group and control group/s):
 40 people with aphasia and 40 volunteers recruited from the Pat Arato Aphasia centre.
Volunteers: 87% female 75% >30 70% students. Volunteers with experience in aphasia were excluded. Must be proficient in English. Volunteers applying at the centre were recruited.
Significant difference in age between experimental and control volunteers following randomisation p=0.038
People with aphasia: Moderate to severe aphasia according to the WAB-AQ. Minimum of 1 year post stroke (mean 59 mnths, range 12-178 mnths) Subjects with degenerative co-morbidities excluded. 63% male mean age 70.
Significant difference between experimental and control groups for aphasia severity p=0.018 with the experimental group having the higher degree of severity.

Results:

<u>Blinding of assessor:</u> Correct 31/40 77.5% with certainty of 70%

<u>Pre/post OMs:</u> analysed using ANCOVA due to the heterogeneity of the groups. Dependant variable post scores with the covariates being pre training scores and the WAB-AQ.

<u>Volunteers:</u> Significant difference in both areas of (M)SCA pre and post $p<0.001$

<u>People with Aphasia:</u> Significant difference in (M)PCA pre and post $p<0.001$

Correlation between changes in volunteer and the people with aphasia performance was moderately positive $p<0.01$

Strongest correlation found between the areas of revealing competence and transaction $r=0.64$

<u>Post-hoc analysis</u> of conversational interviews completed with volunteers looking at the impact of exposure to people with aphasia and the experience between the control and experimental groups. A Chi-square analysis found significant differences when volunteers rated performance in the 1st recorded interview compared to the second. A significantly larger proportion of control rated performance the same or worse compared to the experimental group.

Level of Evidence (NH&MRC, 2009) *Circle one*   I   II   III-1   **III-2**   III-3   <u>IV</u>

Quality of Evidence: ☐√Rated   ☐ Not Rated
   (i) rating system (e.g., PEDRo, RoBiN-T Scale from SpeechBITE) RoBiN-T Scale from SpeechBITE
   (ii) score 6/10

Nature of Evidence: ☐ **feasibility**   ☐**efficacy study**   ☐√**effectiveness study**

Relevance to practice (e.g., were the participants and/or treatment context similar/different to everyday clinical practice? Is replication possible in clinical practice? What barriers might prevent the results from be applied to everyday clinical practice? What could be done to address barriers? If barriers can't be modified, how could the procedure be modified to accommodation limitations in clinical practice?)

Study completed in an aphasia centre with a strong and well established recruitment process. No equivalent practice/establishment in Australia which represents a significant barrier. The centre had a large pool of aphasic subjects to recruit from.

The SCA training has an established protocol, is time limited, relevant and delivers significant results. Outcome measures designed specifically for the training and have good inter-rater reliability.

Additional comments

Negative impact noted in post-hoc interviews with untrained volunteers which suggests that first impressions count and that provided training prior to commencing a volunteer program is an essential ingredient.

No follow up to review whether behaviours and knowledge gained was maintained.

Appraised By: Kerrie Strong

Date: 22/10/12