CONVERSATION PARTNER TRAINING – ITS ROLE IN APHASIA

A review of the literature
Matthew Bradley and Jacinta Douglas

Conversation and conversation partner training is receiving increasing attention in aphasia research and clinical settings. To date, most aphasia research has focused on language impairment. Recently, however, there is increasing research addressing activity, participation and well-being in aphasia, including research undertaken in the area of conversation partner training. Many variables need to be considered when exploring conversation partner training, including the theoretical approach, types of recipient and amount of training. This article provides a review of 19 conversation partner training studies and also draws upon relevant supporting literature. Study designs are explored and their results and limitations discussed.

Keywords:
aphasia, dysphasia, conversation, supported conversation, partner training

A growing literature has focused on conversation between people with aphasia and others as a collaborative effort. It recognises communication as vital to relationships, psychosocial well-being, life participation and quality of life (Cranfill, Simmons-Mackie, and Kearns, 2005). Rather than being viewed in isolation, the person with aphasia is treated as a “social unit” with those people with whom s/he interacts (Kagan, 1998a). Lyon et al. (1997) add that “focusing solely on clinical repair of language in the adult having aphasia is not sufficient to remediate that totality of what aphasia is” (p. 694).

The increased appreciation of conversation within aphasiology is reflected in the growing practice of incorporating conversation partner training (CPT) within therapy. Conversing with a person with aphasia requires considerable skill and expertise (Kagan & Gailey, 1993). Parr and Byng (1998) comment that even highly experienced clinicians may have difficulty conversing with people with aphasia.

Although conversational skills can appear deceptively simple when used by an experienced partner, implementing strategies and resources and mainly targets communication partners of people with moderate–severe language impairment. A variety of applications exist within this framework with two examples being Supported conversation for adults with aphasia™ (SCA) (Kagan, 1998a) and John Lyon’s communication partners approach (Lyon et al., 1997).

Conversation partner training studies
Despite a growing interest in and use of conversation partner training within the aphasiology field, relatively few studies have addressed it directly. An article by Simmons, Kearns and Potechin in 1987 was one of the first to investigate spousal training. It was not until nearly a decade later that other conversation partner training studies emerged in the literature. A total of 19 studies are included in this review.

The studies could broadly be separated into three categories with respect to the model underpinning their intervention: 1) “multi-modality communication training” (term adapted from Hickey, Bourgeois, and Olswang, 2004), 2) conversation analysis and 3) experiential learning. Although an attempt was made to categorise the 19 studies into the three defined approaches, many of them drew on various approaches making classification difficult.

Multi-modality communication training
Multi-modality communication training is based on training a range of general transferable strategies and skills to break down the communication barrier. It incorporates non-verbal strategies and resources and mainly targets communication partners of people with moderate–severe language impairment. A variety of applications exist within this framework with two examples being Supported conversation for adults with aphasia™ (SCA) (Kagan, 1998a) and John Lyon’s communication partners approach (Lyon et al., 1997).

Conversation analysis
Conversation analysis (CA) is a “procedure for the study of interaction… which uses a naturalistic, observation-based approach to study actual verbal and non-verbal behaviour” (Lock & Wilkinson, 2006). It focuses on how people construct conversations collaboratively; turns and sequences, repair, topic; and use of both language and non-verbal behaviour.

CA is a multistage process involving: (a) data collection, (b) transcription of data (verbal and non-verbal data), (c) analysis. Additional steps in using CA in conversation partner training involve feedback to the participants and behaviour modification.

Experiential learning
The experiential learning model is based on learning through experience. In experiential learning, learning occurs with repetition, practice and incorporation of specific feedback from experienced persons. Learning is promoted through critical self-reflection on experiences (Purdy & Hindenlang, 2005).

Comparison of approaches
While these three approaches all address conversation training differently, the emphasis on the collaborative nature of conversation and the interdependency between the person with aphasia and the conversation partner unify them. Multi-
modality communication training appears more appropriate for people whose language is more severely impaired than the other two approaches. The generic skills as taught in the multi-modality communication approach lend themselves to being used with a variety of partners with aphasia. Thus, it may be more appropriate in training unfamiliar communication partners, such as volunteers and health professionals, who are likely to engage with multiple partners with aphasia. Experiential learning and conversation analysis are tailored to individual participants and less transferable, thus suiting familial partners.

Participants
Characterisation of the participants in the studies largely focused on those with aphasia rather than their conversation partners and generally there was more detailed information on the former. Nonetheless, studies varied in the information (amount and type) provided about the participants with aphasia.

There is a significant range in time post-onset of aphasia with predominance for people who had lived with aphasia for at least a year. Two studies worked with people who acquired their aphasia less than 6 weeks earlier (Lesser & Algar, 1995; Correll, van Steenbrugge, and Scholten, 2004). The age of people with aphasia varied widely, ranging from 36 to 80 years.

In 12 of the 19 studies, the conversation partners were family members and the majority were either a spouse or partner. Of the remaining 7 studies, one included a spouse and two volunteers (Lyon, 1996), one involved two friends who worked as a triad with their friend with aphasia (Lesser & Algar, 1995), and another involved training sixth-year medical students in taking case histories (Legg et al., 2005). Conversation partners in the final 4 studies were volunteers and in 3 of these the volunteers were described as inexperienced.

Intervention
There was much variability in the intervention undertaken within the studies reviewed. Studies were differentiated in terms of whether the intervention was conducted within individual dyads or within a group setting.

Eleven of the studies provided intervention individually/within the dyad. Six worked within a group setting and the remaining two provided a combined approach.

There was also substantial variability in the amount of intervention provided. The intervention ranged from one 4-hour training session in multi-modality training (Legg, Young, and Bryer, 2005) in a group setting through to 41 sessions of individual input in a criteria-based program (Simmons et al., 1987).

The location was commented on by several authors but many (10) did not state where the intervention took place. One study (Correll et al., 2004) took place in an inpatient rehabilitation setting; one took place in a nursing home setting (Hickey et al., 2004), while others were conducted in clinical settings, the participants’ homes and in the community.

Study design
As in other areas of aphasia therapy research, there is a predominance of single case design in the form of individual case studies and multiple single case studies. These two categories account for 16 of the 19 studies reviewed.

There were two randomised control trials (RCT). Kagan, Black, Duchan, Simmons-Mackie, and Square, (2001) compared the success of training 20 volunteers in SCA compared to 20 controls who received no training in SCA. The authors noted that their study technically applied quasi-randomisation as changes to group allocation were made because of transport issues. The other RCT was conducted by Legg et al. (2005) and involved comparing the success of 11 sixth-year medical students trained in SCA versus 10 controls who received traditional “medical education” about aphasia.

There were two quasi-experimental group designs within the studies reviewed. Rayner and Marshall (2005) included eight volunteers who received no training but completed the same questionnaires as the experimental group on two occasions. Lyon et al. (1997) included three participants who received no intervention compared with 7 who did. Table 1 provides information about the study designs and sample sizes of each of the reviewed studies.

<table>
<thead>
<tr>
<th>Table 1. Study designs and sample sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study design (No.)</td>
</tr>
<tr>
<td>RCT (2)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Quasi-experimental group (2)</td>
</tr>
<tr>
<td>Multiple single case study (9)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Single case study (6)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Results and limitations
Reflecting the diversity of approaches and interventions of the conversation partner training studies are similarly diverse approaches taken to measuring the outcomes. Measures were applied variously to either or both of the conversational partners (those with aphasia and those without). Outcome measures included: traditional impairment-based language measures; those addressing psychosocial consequences; measures looking at the application of conversational skills within interactions (both transactional and interactional);
Ethical Practice: Personal Choice or Moral Obligation?

As Turner and Whitworth (2006a) note in their review article, “That CPT interventions can be effective is not disputed. However, the measurement of such effectiveness needs scrutiny and for whom these interventions work remains largely unknown”.

Collectively, the studies demonstrated the effectiveness of conversation partner training. Seven of the studies incorporated statistical analyses. All studies involving statistical analysis resulted in clinically significant results, though several also included results on some outcome measures that did not reach significance. All other studies showed positive trends or changes.

The strength of the findings must also be considered within the context of the research quality of the studies. While all the studies demonstrate successful outcomes, there are several limitations relating to methodological rigour which need to be considered.

As Douglas, Brown, and Barry (2004) highlight, the limitations of randomised controlled trials for examining the effectiveness of aphasia therapy has been well documented and much discussed among aphasiologists. The heterogeneity of aphasia and the resulting individual variation supports the use of single case study methodology to establish an evidence base for aphasia therapy (p. 39).

Nevertheless, small sample sizes and heterogeneity of participants limit the generalisability of the findings of these studies (Hickey et al., 2004).

The lack of details about the intervention in some studies limits their potential to be replicated. All of the studies provide explicit detail about the amount of intervention undertaken; however, many fail to make the nature of the intervention explicit for the reader. Almost all studies compared treatment versus no treatment and it may have proven useful to compare treatment types. Only the Legg et al. (2005) study compared interventions; they compared training in supported conversation versus provision of theoretical information about aphasia as per the existing medical student training syllabus.

Attributing the outcomes to the interventions also needs to be done with caution. Failure to establish baseline controls prior to commencement of intervention was apparent across many of the studies. Only six studies provided multiple measures at baseline (Boles, 1997; Boles, 1998; Correll et al., 2004; Cunningham and Ward, 2003; Hickey et al., 2004; Simmons et al., 1987). Although changes were evident on outcome measures in all of the studies, the lack of control of, or indeed reference to, extraneous variables such as environmental and personal factors means concluding the change is solely as a result of a treatment effect is tenuous.

With respect to the evaluation of success, several issues arise. Many of the studies used informal measures or descriptive results only (Lyon, 1996; Correll et al., 2004). Purdy and Hindenlang (2005) acknowledge their crude scoring system was a concern. The variety of tools employed and areas evaluated render comparisons across studies difficult. Reliability and validity must also be questioned, with less than half of those studies reviewed (8 of 19) including a discussion about reliability and even fewer commenting on validity. Few studies included evaluations undertaken by blind assessors or considered the impact of “observers’ paradox” described by Booth and Swabey (1999) where performance is skewed by the act of videotaping (a recording method used by many of the studies).

Numerous authors who investigated conversation analysis commented on the time commitment required to transcribe and analyse the data (Boles, 1997; Booth and Swabey, 1999). It is not only the time commitment required but also the expertise required to apply it reliably. This phenomenon is not limited to CA but extends to all the approaches employed.

A limitation not peculiar to the study of aphasia, and one noted by numerous authors (Boles, 1997; Kagan et al., 2001) in their discussions, was the lack of follow-up and consideration to maintenance. Lyon et al. (1997) did evaluate outcomes 6 months post-intervention though this was completed using informal outcome measures only. Simmons et al. (1987) provided 1-month follow-up evaluation, while others provided no follow-up. Closely aligned with this issue is that of generalisation.

Partner training has primarily addressed intimate (familial) partners and volunteers. Given one’s social network is comprised of people in many other roles, it would be beneficial to consider the application of conversation partner training for other conversation partner groups such as friends.

Future directions

Although the evidence is limited, the research findings to date provide some support for the benefits of conversation partner training. A future aim should include developing a systematic approach to the study of conversation partner training accounting for the weaknesses in methodology that were discussed above. This aim mirrors that which is required in many other areas of speech and language research.

References


Matthew Bradley is a speech pathologist at the Bundoora Extended Care Centre, Northern Health in Melbourne working in the community therapy services. He has worked at numerous aged care and rehabilitation services over the past 10 years. Matthew is currently the National Deputy Chairperson of the Australian Aphasia Association. He is undertaking a Post Graduate Diploma in Health Research Methodology at La Trobe University investigating the impact of aphasia on friendships.

Jacinta Douglas is a speech pathologist with a Masters degree in clinical psychology and a PhD in clinical neuropsychology. Currently, she is associate professor in the School of Human Communication Sciences at La Trobe University. Jacinta has more than 20 years of clinical experience working in neurological rehabilitation and has published numerous research articles. She is also co-editor of Brain Impairment.

Correspondence to: Matthew Bradley
Speech Pathologist
Bundoora Extended Care Centre, Northern Health
1231 Plenty Rd, Bundoora, Vic. 3083
phone: 0414 640 061
email: matthew.bradley@nh.org.au

Would you like to contact more than 4,200 speech pathologists?

Advertising in ACQ and Speak Out is a great way to spread your message to speech pathologists in Australia and overseas.

We have different size advertising space available.

If you book in every issue for the whole year you’ll receive a 10% discount.

See www.speechpathologyaustralia.org.au for further information about advertising.