**SUPPLEMENTARY DIGITAL CONTENT: Description of the intervention using the Template for Intervention Description and Replication (TIDieR)1**

NOTE: A version of this table is also included as supplementary digital content for a report on the primary outcome of this clinical trial2.

|  |  |
| --- | --- |
| **Name** | TBIconneCT (people with Traumatic Brain Injury and their families CONNEcting to Conversation Training) |
| **Why** | Telehealth-based joint communication training of people with TBI and their everyday communication partners may improve the quality of conversations and daily interactions, through improving the social communication skills of people with TBI and the conversational support skills of their communication partners. |
| **What (material)** | Both intervention groups received the TBIconneCT social communication skills training program, based on the TBIconneCT clinician manual, which is available from [www.assbi.com.au](http://www.assbi.com.au). All participants received a hard-copy manual and email summaries of session content. Sessions involved screen-sharing of content via PowerPoint slides and review of conversation videos recorded in home practice or previous sessions. The program contains the following sessions: (1) Introductions, (2) TBI and Communication, (3) Playing Your Role, (4) Effective Speaking and Listening, (5) Collaboration – Working Together, (6) Elaboration – Extending Conversation, (7) Asking Questions, (8) Putting it all Together 1, (9) Putting it all Together 2, and (10) Putting it all Together 3. |
| **What (procedures)** | The core processes included in each session were: (a) reflect on positive and/or negative communication experiences since last session, (b) discuss completion of home practice tasks, (c) replay at least one recorded conversation, (d) discuss aspects of the conversation with the participants, (e) set home practice tasks in collaboration with participants, and (f) provide participants with a session summary page. Each session had different content based on the aims of the session. Activities related to core content included education about communication processes, identification of personally relevant strategies and practise within conversational tasks. Treatment ingredients used throughout sessions included repeated trials, clinical modelling, feedback, rehearsal and role-play, strategy instruction, self-monitoring, self-correction and education. |
| **Who provided** | The intervention was delivered by two qualified speech pathologists who both had experience working with adults with acquired neurogenic communication disorders. Clinician 1 delivered the intervention to 31 participants. She had experience with using the TBI Express training manual, was involved in development of the TBIconneCT manual, and had implemented the TBIconneCT program with one participant in a pilot study. Clinician 2 delivered the training to 5 participants. Prior to commencing delivering the intervention, she was trained in using the TBIconneCT manual via orientation sessions with Clinician 1. Clinician 1 and Clinician 2 had regular meetings throughout the study to discuss implementation of the intervention. |
| **How (mode of delivery; individual or group):** | The telehealth program was delivered over the Internet using Skype, and the in-person program was delivered via home visits. Sessions were attended by both the participant with TBI and their communication partner. |
| **Where:** | Telehealth sessions were conducted over Skype with the participants at their home, and the clinician in a quiet, private office space. Home visits were conducted by the clinician visiting the participants at their home. |
| **When and how much:** | The intervention involved 10 sessions, each of approximately 1.5 hours’ duration. Sessions were scheduled to occur weekly but could be rescheduled by either the participants or the clinician if needed. In between sessions, participants were asked to record two short conversations and complete a communication challenge task to practise their skills. |
| **Tailoring:** | There was tailoring of content to individual participants in each session as guided by the manual, such as setting of individual goals and developing lists of personally relevant strategies in relation to each module. For one participant who had aphasia, supportive communication strategies were used in sessions and handouts were simplified. |
| **Modification:** | There were no modifications to the intervention during the study. |
| **How well (planned):** | Participant adherence was measured by number of sessions attended and degree of home practice completed. Participants were required to attend at least eight of 10 sessions to be considered to have completed the intervention. In Sessions 2-10, participants' level of home practice was rated as 0 = not complete, 1 = partially complete, or 2 = complete. These scores were then added together to provide a total score. A total program score of 0-6 was classified as minimally complete, 7-12 as moderately complete and 13-18 as mostly complete. The TBIconneCT manual, and joint training sessions between Clinicians 1 and 2 supported clinician fidelity in delivering the intervention.  Treatment fidelity was evaluated using a checklist of process and content items considered to be essential to include in training sessions. The processes which were incorporated into the process item checklists for each session are listed in the “What (Procedures)” section above. The content item checklists for each session are available from the authors and will be published within the TBIconneCT clinician manual. An independent clinician who was not involved in delivering the program reviewed video-recordings and documentation from a random sample of 10% of sessions (*n* = 32), with samples selected so that there was no more than one sample per participant, and three to four samples represented for each of the ten sessions. This independent clinician used the checklist to mark *process* and *content* items as present or absent, with a coding system used to describe potential reasons for absent items. |
| **How well (actual):** | Participant adherence: A total of 94% of participants (*n* = 29) completed all 10 training sessions. 7% of participants (*n* = 2), both from the in-person training group, completed eight training sessions due to issues with their availability. In the in-person group, homework was minimally complete for 20% (*n* = 3) participants, moderately complete for 33% (*n* = 5) participants and mostly complete for 47% (*n* = 7) participants. In the telehealth group, homework was minimally complete for 6% (*n* = 1) participants, moderately complete for 25% (*n* = 4) participants and mostly complete for 69% (*n* = 11) participants. The proportions of rates of homework completion were similar across the two training groups (*p* = .25).  Treatment fidelity: Clinicians 1 and 2 demonstrated excellent levels of fidelity in implementing the intervention as per the checklists. The independent clinician rated all *process* items as present in 97% (*n* = 31/32) sessions. Two process items (relating to replaying and discussing a conversation recording) were absent in one session, with the independent clinician noting that conflict between the dyad may have contributed to the clinician not carrying out these tasks. The independent clinician rated all *content* items as present in 97% (*n* = 31/32) sessions. One content item was absent in one session, with the independent clinician noting the session was discontinued as the participant with TBI became fatigued. |

References

1. Hoffmann TC, Glasziou PP, Boutron I, et al. Better reporting of interventions: Template for Intervention Description and Replication (TIDieR) checklist and guide. *BMJ.* 2014;348:g1687.

2. Rietdijk R, Power E, Attard M, Heard R, Togher L. Improved conversation outcomes after social communication skills training for people with traumatic brain injury: A clinical trial investigating in-person and telehealth delivery. *Manuscript submitted for publication.* 2019.