IJLCD Annual Lecture: Innovations in Digital Health for Cognitive Communication Disorders

Thursday 08 June 2023
09.00 - 11.00

#IJLCDAnnualLecture
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IJLCD: get involved....

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Editors Prize 2023

Camille Paynter, Susan Mathers, Heidi Gregory, Adam Vogel, Madeline Cruice:

The impact of communication on healthcare involvement for people living with motor neurone disease and their carers: A longitudinal qualitative study.

Data from 19 plwMND and 15 carers over a 26-month period to obtain their perspectives of the impact of communication on healthcare involvement

21 July 2022: https://doi.org/10.1111/1460-6984.12757
Student Prize Winners 2023:

Neehal Molu, Reading University:

Diversity Equity and Inclusion in Speech and Language Therapy

Winner of the research category: cash prize, letter of congratulations and support to prepare their paper for submission to the journal.

Christianne Pollock, from Plymouth Marjon University:

The Development of a Website to support Better Communication and Interaction in Learning Disability Services.

Winner of the alternative project category: cash prize & letter of congratulations.
Coming soon.......

Special issue of IJLCD:

Clinical Management of Cognitive Communication Disorders

Editors: Togher, Rietdijk, Brunner, Jayes, Conroy
Housekeeping

- RCSLT staff are on hand to help with any technical queries, you can get in touch with them via the chat button

- You can send in questions to our speakers today by using the Q&A button

- This event is being recorded and will be made available on the RCSLT website

- We would be very grateful if you would fill out the evaluation form that will pop up in a new window once the webinar window closes
Speakers

Professor Leanne Togher
@LeanneTogher

Dr Rachael Rietdijk
@RachaelReedake

Dr Melissa ‘Liss’ Brunner
@LissBEE_CPSP

ABI Communication Lab, The University of Sydney
@ABICommLab
Overview of recent evidence in the area of cognitive-communication disorders in traumatic brain injury (TBI)

Leanne Togher B.App.Sc (Speech Path)
PhD
on behalf of the INCOG 2.0 team

Professor of Allied Health
The University of Sydney and Western Sydney Local Health District

Director Acquired Brain Injury Communication Lab
The University of Sydney, Australia

• IJLCD Annual Lecture 2023
We acknowledge the tradition of custodianship and law of the Country on which the University of Sydney campuses stand. We pay our respects to those who have cared and continue to care for Country.
Consequences of severe traumatic brain injury (TBI) can be far reaching and lifelong

- Medical difficulties
- Changes in physical and sensory abilities
- Changes in the ability to think and learn
- Changes in behaviour and personality
- Communication difficulties
  - Dysarthria (6-60% of cases)
  - Aphasia (5-60% of cases) (anomic) (Elbourn et al. 2019)
  - Conversational skill difficulties – Cognitive communication disorders, disorders of social cognition, social communication difficulties (75% of cases) (MacDonald 2017)
Cognitive Communication Disorders

- Cognitive-communication disorders encompass difficulty with any aspect of communication that is affected by disruption of cognition. Communication may be verbal or nonverbal and includes listening, speaking, gesturing, reading, and writing in all domains of language (phonologic, morphologic, syntactic, semantic, and pragmatic). Cognition includes cognitive processes and systems (e.g., attention, perception, memory, organization, executive function). Areas of function affected by cognitive impairments include behavioral self-regulation, social interaction, activities of daily living, learning and academic performance, and vocational performance. (ASHA, 2005)

Guidance for managing cognitive communication disorders after TBI
Togher et al., 2014; ERABI (Canada)
Some questions to consider:

1. What is the current evidence supporting clinical practice in the field of cognitive communication and social cognition disorders? In other words, what has changed since INCOG 2014?

2. What treatment approaches are recommended for use to improve the cognitive communication disorders of people with moderate to severe TBI?

3. What tools are available to help with clinical decision making and to audit clinical practice?
INCOG 2.0 Guidelines for Cognitive Rehabilitation following Traumatic Brain Injury,
Part IV: Cognitive-Communication and Social Cognition Disorders

Wiseman-Hakes, C. (2023)
INCOG 2.0 International Expert Panel

**CANADA/USA**
- Dr. Mark Bayley, MD, FRCPC
- Dr. Robin Green, PhD, C.Psych
- Shannon Janzen, MSc
- Amber Harnett, MSc, BSc, BScN, RN (c)
- Dr. Eliyas Jeffay, PhD, C.Psych
- Professor Mary Kennedy, PhD, CCC-SLP
- Ailene Kua, MSc, PMP
- Lyn Turkstra, PhD, Reg-CASLPO
- Dr. Shawn Marshall, MD, MSc, FRCPC
- Amanda McIntyre, PhD (c), RN
- Eleni Patsakos, MSc, PhD (candidate)
- Dr. Robert Teasell, MD, FRCPC
- Dr. Diana Velikonja, PhD, MScCP
- Penny Welch-West, M.Cl.Sc, SLP Reg. CASLPO
- Dr. Catherine Wiseman-Hakes, PhD, Reg. CASLPO

**AUSTRALIA**
- Dr. Peter Bragge, PhD
- Professor Jacinta Douglas, MSc (Psych), PhD
- Dr. Adam McKay, MPsyCh (Clinical Neuropsychology), PhD
- Professor Jennie Ponsford, AO, MA (Clinical Neuropsychology), PhD
- Professor Leanne Togher, B.App.Sc (Speech Path), PhD
- Dr. Jessica Trevena-Peters, Dpsych
**INCOG 2.0 series of papers in Journal of Head Trauma Rehabilitation**  
January/February 2023 - Volume 38 - Issue 1 – ALL OPEN ACCESS!!

<table>
<thead>
<tr>
<th>Title</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCOG 2.0 Guidelines for Cognitive Rehabilitation Following Traumatic Brain Injury Part II: Attention and Information Processing Speed</td>
<td>The Future of INCOG (is Now)</td>
</tr>
</tbody>
</table>
1. Re-convene International expert panel in Cognitive Rehabilitation (CR).

2. Update literature search.


4. Map evidence and guidelines to the recommendation matrix.

5. Working group meetings to update INCOG recommendations.

6. Update clinical algorithms.

7. Update audit tools to assess adherence to recommendations.


9. Guideline users prioritize recommendations for implementation and auditing.

10. Use audit tools to determine current CR practice.

*INCOG added process steps

INCOG 2.0
Recommendations Adaptation and Development Cycle

Update in 2025

Update in 2025

INCOG 2.0 Recommendations Adaptation and Development Cycle
INCOG Level of evidence grading system

Level A: Recommendation supported by at least one meta-analysis, systematic review or randomized controlled trial of appropriate size with relevant control group.

Level B: Recommendation supported by cohort studies that at minimum have a comparison group (includes small randomized controlled trials) and well-designed single case experimental designs.

Level C: Recommendation supported primarily by expert opinion based on their experience through uncontrolled case studies or series may also be included here.
INCOG 2.0 Recommendations Breakdown

INCOG 2.0 Recommendations = 80  New = 27

- Cognitive-Communication: 9
- Executive Functions: 8
- Memory: 8
- Attention: 11
- Post Traumatic Amnesia: 6

Principles: 38
- Assessment
- Rehabilitation
- Pharmacology
- Telehealth

Level of Evidence:
- Level A: 25
- Level B: 15
- Level C: 40
INCOG 2.0 Guidelines for Cognitive Rehabilitation Following Traumatic Brain Injury, Part IV: Cognitive-Communication and Social Cognition Disorders

Leanne Togher, PhD, BAppSc(Speech Path); Jacinta Douglas, PhD, MSc(Psych); Lyn S. Turkstra, PhD, Reg-CASLPO; Penny Welch-West, MCIsc, SLP Reg CASLPO; Shannon Janzen, MSc; Amber Harnett, MSc, BSc, BScN; Mary Kennedy, PhD, CCC-SLP; Ailene Kua, MSc, PMP; Eleni Patsakos, MSc; Jennie Ponsford, AO, PhD, MA(Clinical Neuropsychology); Robert Teasell, MD, FRCPC; Mark Theodore Bayley, MD, FRCPC; Catherine Wiseman-Hakes, PhD, Reg CASLPO
26 new references related to cognitive communication (from 2014) and 12 new references for social cognition (from 2000 forward) were included in the nine recommendations, including 5 updated recommendations, and 4 new recommendations addressing cultural competence training, group interventions, telerehabilitation and management of social cognition disorders.

Cognitive communication has 8 recommendations (3 with Level A evidence, 2 at Level B and 3 at Level C).

Social cognition has 1 recommendation based on Level A evidence.
Levels of communication competence and characteristics may vary as a function of communication partners, the environment, and personal factors. These variables should be considered when devising CCD management.

INCOG 2.0 adds physical, sensory, and psychosocial variables as factors to consider.

a. Physical: dysarthria, balance disorders,
b. Sensory: visual disturbance, hearing deficits, sleep wake disorders and pain

c. Psychosocial: anxiety, depression PTSD and impact of other cognitive impairments in attention, working memory, information processing, executive functions and processing speed

No new references since 2014

Level B
Cognitive communication #2

- Ensure rehabilitation programs are culturally responsive, and consider the person’s premorbid variables, such as gender identity and cultural linguistic background including Native, first and preferred languages, literacy, and language proficiency.

➢ Since 2014, there has been increased recognition of the importance of diversity, equity, and inclusion (DEI) in the field of TBI rehabilitation.

➢ INCOG 2.0 adds specific mention of the importance of cultural awareness and culturally appropriate communication resources to assist healthcare interactions.

➢ Level C (MacDonald 2017)
Cognitive communication #3 NEW!!

➢ Staff should receive cultural competence training

➢ ASHA cultural competence resources are recommended here

➢ Level C
Intervention should focus on improving and restoring cognitive and social communication functions, with gradual reintegration to daily functions and productive activities which are dependent on cognitive-communication skills.

The person with TBI should be provided with individualised interventions which help them adjust to their cognitive-communication impairments and take the person’s context into account.
Cognitive communication #4 (Levels A-C)

• Includes new evidence for recommended cognitive communication interventions, including:

  • 4a. Communication partner training (A)
  • 4b. Communication strategy and metacognitive awareness training (A)
  • 4c. Reintegration to daily functions, productive activities, participation and competence, modification of the communication environment, assistance with adjustment to impairments (C)
  • 4d. Communication coping treatment (C)

  4e. Confidence, self-esteem and identity formation (C)

  4f. Provision of education and information regarding the nature of CCD for the patient, close others and communication partners (C)
CC4a Communication partner training evidence (Level A)

4a. Communication partner training: Level A evidence.

New work since 2014:

1. Systematic Reviews:
   a. Behn et al., 2021
   b. Wiseman-Hakes et al., 2020

2. RCTs:
   a. Rietdijk et al., JSLHR, 2020
   b. Rietdijk et al., JHTR, 2020
   c. Togher et al., 2016

https://abi-communication-lab.sydney.edu.au/courses/interact-abi-lichty
CC4b Communication strategy and metacognitive awareness training (Level A)

Reviews
a. Le et al, 2022;
b. MacDonald, 2017,
c. Meulenbroek et al., 2019

Pilot work
a. Copley et al., 2022
b. Finch et al., 2017

Cognitive communication #5

➢ Individualized, goal- and outcome-oriented treatment should be appropriate to the context of the person, including where they live, study, and work.

➢ While this recommendation is unchanged from INCOG 2014, goal-attainment scaling (GAS) has been added to measure personally relevant progress.

➢ Level A
Cognitive communication #6

➢ Recommends augmentative and alternative communication (AAC) for people with severe communication disability, in combination with training for family members, caregivers, and other communication partners.

➢ While there were no new RCTs since INCOG 2014, it was recommended that AAC should be routinely offered within the context of the person’s everyday environment.

➢ Level C
Consider group therapy for cognitive-communication training when social communication impairments exist, and where goals align.

Some example treatments:

- Group Interactive Structured Treatment (GIST) (Harrison-Felix et al., 2018) (RCT)
- Cognitive-pragmatic treatment (Gabbatore et al., 2015)
- INSIGHT (Keegan et al., 2020)
- Project based treatment (Behn et al., 2019 a,b)
- Level A
Cognitive communication #8 NEW!! – you’ll hear more later in this lecture!

➢ Telerehabilitation is efficacious, feasible, and acceptable for communication partner training

➢ Rietdijk 2020a, 2020b, 2022

➢ Level B
Clinicians should consider evaluating aspects of social cognition ability, including emotion perception, theory of mind (ToM) and emotional empathy.

Computerized social cognition treatments are not recommended given lack of evidence of generalization to real life activities (INCOG 2022).

Level A
Evidence for social cognition #1 (Level A)

Reviews | RCTs | Other
---|---|---
Cassel 2019 | Bornhofen 2008 | Cassel 2020
Henry 2016 | McDonald 2013 | Gabbatore 2015
McDonald 2017 | Neumann 2015 | Ownsworth 2000
Turkstra 2020 | Westerhof-Evers 2017 | Rodríguez-Rajo 2022
Vallat-Azouvi 2019

Interventions are recommended which aim at improving:

✓ emotion perception
✓ perspective taking
✓ Theory of mind
✓ social behavior
**INCOG 2.0**

**CCD/Social Cognition Algorithm**

**Togher et al 2023**

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**Algorithm**

Routine referral to Speech-Language Pathologist (SLP)

Evaluate Communication

- Consider physical and psychosocial variables (including gender identity), native, first and preferred languages, literacy and language proficiency, cognitive abilities, communication style (including communication standards and expectations in the person’s cultural linguistic background and tradition).

**Severe communication disability?**

- Yes
- No

Consider assistive technology for communication and cognition assessment and training by trained clinicians. *(This training should be ongoing as needs change and technology evolves.)*

If aphasia present, consider aphasia guideline.

Consider cognitive-communication rehabilitation: provide interventions and intervention materials that are grounded in the principles of cognitive-communication rehabilitation and principles of experience dependent neuroplasticity, that are individualized and contextualized to the individual, in order to achieve communication competence/success in personally relevant communication domains.

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**Cognitive-Communication Rehabilitation**

The primary goal of management is to facilitate communication competence for the maximum return to full life participation.

**Ingredients for all rehabilitation:**
- Consider communication partner, environment, communication demands (e.g., time pressure, need to follow multiple speakers).
- Communication priorities, fatigue, physical and psychosocial variables, and other personal factors.
- Hearing and vision screening as well as making accommodations for these foundational sensory input/output (e.g., hearing aids and glasses if available).
- Provide opportunity for practicing and using communication skills in situations appropriate to the context in which the person will live, work, study and socialize.
- Management approaches should be individualized, meaningful, goal- and outcome-oriented, person-centred, and grounded in the contexts of real life communications and cognitive demands.
- Consideration of client’s cultural, linguistic, and gender identity.

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**Individual, or, Group Therapy (where possible and appropriate)**

**Communication Partner Training (CPT)**

**Social Cognition Training (SCT)**

**Group-based therapy for remediation of cognitive-communication and social communication training (+/- individual treatment) with involvement of communication partners, as indicated; may include consultation, education and/or active participation in therapy.**

**Ingredients:**
- Client-centred goals
- Tailor therapy to client’s cognitive-communication profile

**Ingredients:**
- Teach partners to ask questions in a positive, non-demanding manner
- Teach partners to collaborate in conversation and facilitate communication competence

(Telehealth - efficacious, feasible and acceptable for CPT.)

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**Note:**

Intervention can be both direct and indirect at any impairment level, and can include:

- Improving and restoring cognitive communication function and competence
- Assisting with a reintegration to daily functions and productive activities that require cognitive communication skills
- Modification of the communication environment
- Training communication partners and modifying communication
- Environments and setting to improve communication competence
- Assisting with adjustment to impairments, coping strategies, confidence and self-esteem
- Communication strategy training
- Provision of education and information regarding the nature of acquired cognitive communication disorders to both patient and close other or communication partners.
Example from the INCOG 2.0 audit tool for cognitive communication and social cognition in everyday clinical practice

**TABLE 3** Audit guidelines for priority recommendations: Cognitive-communication (Continued)

<table>
<thead>
<tr>
<th>Intervention (guideline recommendation)</th>
<th>Specific activities, devices, or tools</th>
<th>Assessment of need and effectiveness</th>
<th>Patient characteristics</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing education and information regarding the nature of acquired cognitive-communication disorders to both patient and close other or communication partners</td>
<td>• Assessment for need conducted</td>
<td>• Severe communication impairment (i.e., unintelligible speech or lack of production of speech)</td>
<td>• SLP</td>
<td>Other</td>
</tr>
<tr>
<td>Prescription of augmentative and alternative communication devices</td>
<td>• Low-tech or high tech AAC systems are in place or have been trialed</td>
<td>• Unable to meet communication needs as per baseline</td>
<td>• OT</td>
<td></td>
</tr>
<tr>
<td>Individuals with severe communication disability following traumatic brain injury should be assessed by trained clinicians to determine appropriate augmentative and alternative communication intervention. The individual and close communication partners should be provided with training to effectively use augmentative and alternative communication aids. This training should be ongoing as needs change and technology evolves.</td>
<td>• Training provided</td>
<td></td>
<td>• PT</td>
<td></td>
</tr>
<tr>
<td>Communication participation in everyday social life should be measured</td>
<td></td>
<td></td>
<td>• MD</td>
<td></td>
</tr>
<tr>
<td>Clinicians should consider group therapy as an appropriate means of intervention for communication and social skills when the individual has social communication impairments and group therapy aligns with the individual’s communication goals.</td>
<td>• Results of assessment of participation in social life reported</td>
<td>• Cognitive-communication impairment</td>
<td>• MD</td>
<td>Neuro</td>
</tr>
<tr>
<td></td>
<td>• Patient-identified goals measured and reported group training</td>
<td>• Social cognition impairments</td>
<td>• Neuro</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>• Individual training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Messages about INCOG 2.0 Cognitive communication and social cognition management

1. The evidence base for communication partner training is continuing to strengthen, with new RCTs and systematic reviews since the 2014 INCOG guideline

2. There is Level A support for cognitive communication treatment including communication partner training, communication strategy and metacognitive awareness training, group treatment and aspects of social cognition

3. The INCOG 2.0 algorithm provides clinicians with guidance regarding which approaches to consider

4. The INCOG 2.0 audit tool provides a way for clinicians to audit their clinical practice
Thanks to Prof Paul Conroy and the RCSLT team

Leanne.togher@sydney.edu.au
Twitter: @LeanneTogher

INCOG 2.0 Series
Using telehealth to deliver evidence-based intervention for communication partner training after traumatic brain injury

Dr Rachael Rietdijk
Lecturer, The University of Sydney
Using telehealth to deliver evidence-based intervention for communication partner training after traumatic brain injury

Acknowledgment: Research funding support provided by icare NSW
We acknowledge the tradition of custodianship and law of the Country on which the University of Sydney campuses stand. We pay our respects to those who have cared and continue to care for Country.
Disclosure statement

Relevant Financial Relationships:

• Employee in the School of Health Sciences, Faculty of Medicine & Health at the University of Sydney

Relevant Non-Financial Relationships:

• I am one of the authors of TBI Express and TBIconneCT but do not receive any royalties from purchases of the programs.

• I am one of the authors of the convers-ABI-lity program and hold a share of the intellectual property underlying the content of the platform. I currently receive no income from the program but it may be commercialised in the future.
Objective of presentation

Be aware of *evidence-based options for providing communication partner training after traumatic brain injury*, including the use of telehealth and digital health.
Cognitive-communication disorders after TBI

After a traumatic brain injury, over 75% of people experience a cognitive-communication disorder (Macdonald, 2017).

Recommendations for management of cognitive-communication disorders (Togher et al., 2023) include training of communication partners.
The TBI Express Program (2013)

Joint training for the person with TBI and their communication partner

Aim: For people with TBI and their communication partners to have more positive conversations together

Clinical trial of TBI Express: After TBI Express program (joint training), participants had significantly better outcomes than controls in:

✔ Ratings of support and participation in conversations (Togher et al., 2013)
What happens if we change the ingredients?

<table>
<thead>
<tr>
<th>Dosage</th>
<th>• How much?</th>
</tr>
</thead>
</table>
| Format | • Individual or group?  
|        | • Face-to-face or telehealth? |
| Treatment Components | • Processes and tasks |

Meulenbroek et al., (2019)
Developing the TBIconneCT program (2020)

**TBI Express**
Togher et al., (2013)

- **Dosage**
  - 3.5 hrs weekly for 10 weeks
  - 35 hrs total

- **Format**
  - 2.5 hr *group session* weekly
  - 1 hr *individual session* weekly
  - All sessions attended by *both the person with TBI and their communication partner*

- **Treatment Components**
  - Repeated trials, clinical model, feedback, role-play, problem-solving / self-regulatory / self-monitoring strategy instruction, education, group process

**TBIconneCT**
Rietdijk et al., (2020)

- **Dosage**
  - 1.5 hrs weekly over 10 sessions
  - 15 hrs total

- **Format**
  - 1.5 hr *individual session* weekly
  - All sessions attended by *both the person with TBI and their communication partner*
  - In-person or telehealth delivery

- **Treatment Components**
  - Treatment components retained except for *no group process component*
Evaluating the outcomes of TBIconneCT

- 51 participants with TBI were recruited through brain injury services and support agencies.
- Each participant nominated a communication partner.
- 17 participants and their communication partners completed in-person TBIconneCT (home visits).
- 19 participants and their communication partners completed telehealth-based TBIconneCT (Skype).
- 15 participants and their communication partners in a historical control group (Togher et al., 2013).
TBIconneCT Clinical Trial

Participants < 2 hours drive from Sydney

3:1 ratio

n=17

IN-PERSON TRAINING

n=17

Participants > 2 hours drive from Sydney

n=6

TELEHEALTH TRAINING

n=19

n=13

HISTORICAL CONTROL

n=15

@RachaelReedake@twitter.com

#IILCDArtualLecture
Participant inclusion criteria

Moderate to severe TBI at least 6 months prior
18-70 years old
Significant social communication skills deficits
Have a home computer with Internet connection
Adequate English proficiency
What do we do in a TBIconneCT session?

Core processes:

✔ reflect on positive and/or negative communication experiences since last session
✔ discuss completion of home practice tasks
✔ replay at least one recorded conversation
✔ discuss aspects of the conversation
✔ learn new information
✔ set home practice tasks together
✔ provide a session summary page.
Outcome Measure: Adapted Kagan scales

Casual Conversation: “Have a chat…”

Purposeful Conversation: “Come up with a list…”

Adapted Measure of Participation in Conversation: Interaction and Transaction scales
Adapted Measure of Support in Conversation: Acknowledge Competence and Reveal Competence scales (Togher et al., 2010)

Primary outcome measure:
Adapted Measure of Support in Conversation (Reveal Competence) in casual conversation

- Conversation samples were evaluated by an independent rater blinded to allocation and time-point (pre-training, post-training, or follow-up).
- A second rater evaluated 10% samples. Good inter-rater reliability (ICC = 0.67-0.93).
Research questions and data analysis

Research Question 1
Did trained participants have better outcomes than the historical control group?

(Trained = In-Person + Telehealth)

Research Question 2
What was the magnitude of any differences between the in-person and telehealth participants?

Outcomes analyzed using planned orthogonal contrast ANOVAs.

@RachaelReedake@twitter.com
#IJLCDAnnualLecture
Results: Demographic data

<table>
<thead>
<tr>
<th></th>
<th>IN-PERSON $n=17$</th>
<th>TELEHEALTH $n=19$</th>
<th>CONTROL $n=15$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, yrs, median (range)</td>
<td>54 (20-68)</td>
<td>42 (19-66)</td>
<td>36 (19-68)</td>
<td>0.06</td>
</tr>
<tr>
<td>Education, yrs, mean (SD)</td>
<td>14.4 (2.7)</td>
<td>13.8 (3.2)</td>
<td>12.7 (3.2)</td>
<td>0.32</td>
</tr>
<tr>
<td>TPI*, mths, median (range)</td>
<td>12 (6-574)</td>
<td>53 (6-342)</td>
<td>91 (24-276)</td>
<td>0.03</td>
</tr>
<tr>
<td>PTA*, days, median (range)</td>
<td>42 (10-98)</td>
<td>46 (1-183)</td>
<td>40 (6-182)</td>
<td>0.81</td>
</tr>
<tr>
<td>CP* age, yrs, median (range)</td>
<td>43 (20-78)</td>
<td>57 (27-67)</td>
<td>57 (21-79)</td>
<td>0.62</td>
</tr>
<tr>
<td>CP* gender, M/F, n</td>
<td>2/15</td>
<td>3/16</td>
<td>3/12</td>
<td>0.89</td>
</tr>
<tr>
<td>TBI gender, M/F, n</td>
<td>13/4</td>
<td>17/2</td>
<td>13/2</td>
<td>0.63</td>
</tr>
<tr>
<td>FAVRES Accuracy, median</td>
<td>41 (1-106)</td>
<td>41 (1-106)</td>
<td>42 (1-106)</td>
<td>0.90</td>
</tr>
</tbody>
</table>

* TPI = Time post-injury, PTA = post-traumatic amnesia, CP = Communication partner, FAVRES = Functional Assessment of Verbal Reasoning and Executive Strategies

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Results: Outcome measures at baseline

<table>
<thead>
<tr>
<th></th>
<th>IN-PERSON n=17</th>
<th>TELEHEALTH n=19</th>
<th>CONTROL n=15</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADAPTED KAGAN SCALES: CASUAL CONVERSATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPC Interaction</td>
<td>2.09 (0.83)</td>
<td>2.34 (0.53)</td>
<td>2.37 (0.79)</td>
<td>.47</td>
</tr>
<tr>
<td>MPC Transaction</td>
<td>2.35 (0.84)</td>
<td>2.42 (0.73)</td>
<td>2.27 (0.59)</td>
<td>.83</td>
</tr>
<tr>
<td>MSC Acknowledge Competence*</td>
<td>2.0 (1.5-3.5)</td>
<td>2.5 (1.0-3.5)</td>
<td>2.0 (1.5-3.5)</td>
<td>.57</td>
</tr>
<tr>
<td>MSC Reveal Competence*</td>
<td>2.0 (1.3-3.3)</td>
<td>2.3 (1.3-3.3)</td>
<td>1.8 (1.0-3.2)</td>
<td>.06</td>
</tr>
<tr>
<td><strong>ADAPTED KAGAN SCALES: PURPOSEFUL CONVERSATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPC Interaction*</td>
<td>2.0 (0.0-3.0)</td>
<td>2.0 (1.0-3.0)</td>
<td>2.5 (1.0-3.0)</td>
<td>.20</td>
</tr>
<tr>
<td>MPC Transaction*</td>
<td>2.0 (0.5-3.0)</td>
<td>2.0 (1.0-3.0)</td>
<td>2.5 (1.0-3.0)</td>
<td>.09</td>
</tr>
<tr>
<td>MSC Acknowledge Competence</td>
<td>2.03 (0.60)</td>
<td>2.26 (0.84)</td>
<td>2.20 (0.77)</td>
<td>.63</td>
</tr>
<tr>
<td>MSC Reveal Competence</td>
<td>1.85 (0.60)</td>
<td>2.00 (0.68)</td>
<td>2.04 (0.74)</td>
<td>.70</td>
</tr>
</tbody>
</table>

MPC = Measure of Participation in Conversation, MSC = Measure of Support in Conversation. Scales range from 0 to 4, 0 = no participation / support, 4 = full participation/support. Data are means (SDs) except variables marked * which are medians (range)

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Adapted Kagan scales: Casual Conversations

**Aim 1: Trained versus Control**

- **MPC: Interaction (pwTBI)**
  - Trained vs Control: $p = .04$, $d = 0.70$
  - In-person vs Telehealth: $p = .87$, $d = 0.07$

- **MSC: Acknowledge Competence (CP)**
  - Trained vs Control: $p = .01$, $d = 0.88$
  - In-person vs Telehealth: $p = .78$, $d = 0.11$

**Aim 2: In-Person versus Telehealth**

- **MPC: Transaction (pwTBI)**
  - Trained vs Control: $p = .03$, $d = 0.76$
  - In-person vs Telehealth: $p = .90$, $d = 0.03$

- **MSC: Reveal Competence (CP)**
  - Trained vs Control: $p = .47$, $d = 0.26$
  - In-person vs Telehealth: $p = .47$, $d = 0.26$

$n = 14$ for In-Person and $n = 16$ for Telehealth
Adapted Kagan scales: Purposeful Conversations

**Aim 1: Trained versus Control**

- **MPC: Interaction (pwTBI)**
  - Trained vs Control: $p = .35$, $d = 0.26$
  - In-person versus Telehealth: $p = .64$, $d = 0.64$

- **MSC: Acknowledge Competence (CP)**
  - Trained vs Control: $p = .76$, $d = 0.11$
  - In-person versus Telehealth: $p = .51$, $d = 0.24$

**Aim 2: In-Person versus Telehealth**

- **MPC: Transaction (pwTBI)**
  - Trained vs Control: $p = .01^*$, $d = 0.80$
  - In-person versus Telehealth: $p = .03^*$, $d = 0.83$

- **MSC: Reveal Competence (CP)**
  - Trained vs Control: $p = .39$, $d = 0.27$
  - In-person versus Telehealth: $p = .59$, $d = 0.21$

$n = 13, 16, 14$
Aim 1: Trained versus Control
MPC: Interaction (pwTBI)

Aim 2: In-Person versus Telehealth
MPC: Transaction (pwTBI)

Aim 1: Trained versus Control
MSC: Acknowledge Competence (CP)

MPC: Interaction (pwTBI)
Trained vs Control
- $p = .05$
- $d = 0.82$

In-person vs Telehealth
- $p = .39$
- $d = 0.41$

In-person vs Telehealth
- $p = .49$
- $d = 0.33$

Aim 2: In-Person versus Telehealth
MSC: Reveal Competence (CP)

Trained vs Control
- $p = .01$
- $d = 1.05$

In-person vs Telehealth
- $p = .49$
- $d = 0.42$

In-person vs Telehealth
- $p = .08$
- $d = 0.77$

In-person vs Telehealth
- $p = .42$
- $d = 0.36$

n = 8
n = 11
n = 8
n = 11
n = 8
n = 11
n = 8
n = 11
n = 8
n = 11

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Aim 1: Trained versus Control

- MPC: Interaction (pwTBI)
  - Trained vs Control: p = .33, d = 0.42
  - In-person vs Telehealth: p = .27, d = 0.36

- MSC: Acknowledge Competence (CP)
  - Trained vs Control: p = .16, d = 0.53
  - In-person vs Telehealth: p = .36, d = 0.43

Aim 2: In-Person versus Telehealth

- MPC: Transaction (pwTBI)
  - Trained vs Control: p = .10, d = 0.71
  - In-person vs Telehealth: p = .38, d = 0.42

- MSC: Reveal Competence (CP)
  - Trained vs Control: p = .07, d = 0.68
  - In-person vs Telehealth: p = .64, d = 0.20

n = 8
n = 11
n = 11
n = 8
n = 11
n = 11

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### TBIconneCT compared to TBI Express: Treatment effects

<table>
<thead>
<tr>
<th>PwTBI</th>
<th>Casual: Interaction</th>
<th>TBIconneCT</th>
<th>TBI Express</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Casual: Transaction</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Purposeful: Interaction</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Purposeful: Transaction</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

| CP             | Casual: Acknowledge Competence | ✔ | ✔ |
|----------------| Casual: Reveal Competence | ✔ | ✔ |
|                | Purposeful: Acknowledge Competence | □ | □ |
|                | Purposeful: Reveal Competence | □ | □ |

The TBIconneCT program produced **similar improvements** to the original TBI Express program **at the end of the program**.

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TBIconneCT and TBI Express: Maintenance over time

<table>
<thead>
<tr>
<th>Maintenance of outcome</th>
<th>TBIconneCT</th>
<th>TBI Express</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual: Interaction</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Casual: Transaction</td>
<td>N/A</td>
<td>✔</td>
</tr>
<tr>
<td>Purposeful: Interaction</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Purposeful: Transaction</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Casual: Acknowledge Competence</td>
<td>N/A</td>
<td>✔</td>
</tr>
<tr>
<td>Casual: Reveal Competence</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Purposeful: Acknowledge Competence</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Purposeful: Reveal Competence</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Improvements were **not maintained as successfully** after TBIconneCT training, compared to TBI Express.
Limitations

• The trial was adequately powered for comparing the trained and control groups, but was not adequately powered for non-inferiority comparisons between in-person and telehealth training.

• Participants in the in-person group were from metropolitan Sydney. Participants in the telehealth group were distributed across metropolitan Sydney and regional and rural areas.
Key findings regarding the outcomes of TBlconneCT

- The Adapted MPC and Adapted MSC were sensitive to demonstrating effects of social communication skills training after TBI.

- TBlconneCT achieved commensurate outcomes to TBI Express:
  - with less training hours,
  - and without group delivery.

- Treatment effects were not maintained as successfully after TBlconneCT, compared to TBI Express.

- In-person and telehealth delivery had similar outcomes, indicating potential of telehealth delivery.
Telehealth: Other factors to consider

Acceptability of telehealth-delivered rehabilitation: Experiences and perspectives of people with traumatic brain injury and their carers

Acceptability of telehealth-delivered rehabilitation: Experiences and perspectives of people with traumatic brain injury and their carers

Weighing telehealth against in-person

Personal characteristics Experience

IN-PERSON
✓ Communication processes
✓ Relationship
✗ Burden

TELEHEALTH
✓ Access
✓ Fitting rehab into my life
✓ Boundaries
✗ Limited view

Acceptability Preferences
Future directions in digital health and CPT
Development of convers-ABi-ity

1. We all have some problems with conversation
2. We can keep improving our conversations
3. Match your conversation to the situation
4. Work together to get the message across
5. Talk like you are teammates
6. Keep your conversations going
7. Make your conversations organised

Focus of PhD research completed by Petra Avramovic

Online platform for delivery of communication partner training after ABI

Focus of PhD research completed by Petra Avramovic
Harnessing digital health for communication partner training

Self-guided online modules

Step 1 of 6: Let’s get started.
Recording 1: Have a chat together about any topic of your choice. Try to keep the conversation going for eight minutes.

Instructions
- Click on record yourself
- Click on the "microphone inside a camera" icon to turn on your camera
- Make sure you are both on camera
- Click the circle to start recording
- Once the timer is going – you are recording
- Start your conversation!
- When you are finished, click "stop recording" and it will upload
- Once you see the video uploaded confirmation, you can continue

Your video has been uploaded
Please continue to the next activity.

Step 8 of 9: Watch a conversation.
We will now watch the conversations between two people and practice your skills.
- Tap the left button when the woman with red hair starts talking,
- Tap the right button when the woman with blonde hair starts talking

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Harnessing digital health for communication partner training

Videoconferencing functions
Learn how to interact successfully with people who have a brain injury

A team of researchers and speech pathologists has developed interact-ABI-ility - a communication skills resource for anyone who interacts with a person with an acquired brain injury (ABI).

This free online tool is for family members, friends, support workers, and professionals working in brain injury.

- Hear from people with a brain injury and their family members
- Learn about communication changes
- Learn how to support people with their communication
- Gain a certificate of completion

Access the resource at:
bit.ly/interact-ABI-ility

Scan this QR code with your camera and follow the link to the resource.

When accessing the resource, you can choose whether to participate in a research study. This study is approved by University of Sydney Human Research Ethics Committee (HREC approval no: 2022/513) social-ABI-ility Advertisement Version 1, dated 27/6/22.
Evidence based options for communication partner training after traumatic brain injury

✔ Evidence from clinical trial
✔ Group-based, in-person program
✔ Available for purchase from ASSBI

✔ Evidence from clinical trial
✔ Individual, in-person or telehealth program
✔ Available for purchase from ASSBI

www.assbi.com.au
Evidence based options for communication partner training after traumatic brain injury

✔ Evidence from pilot studies

⋯ Not yet available to clinicians

⋯ Adaptation for dementia in progress
  (Naomi Folder, Uni of Technology Sydney)

✔ Evidence from pilot studies

✔ Ongoing research in progress

✔ Available to anyone, for free, internationally

bit.ly/social-brain-toolkit

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Cognitive-communication disorders after TBI and the use of social media

Dr Melissa (Liss) Brunner
Lecturer, University of Sydney
@LissBEE_CPSP
melissa.brunner@sydney.edu.au
We acknowledge the tradition of custodianship and law of the Country on which the University of Sydney campuses stand. We pay our respects to those who have cared and continue to care for Country.
Disclosure statement

Relevant Financial Relationships:
• Full time employee in the School of Health Sciences, Faculty of Medicine & Health at the University of Sydney

Relevant Non-Financial Relationships:
• I developed the social-ABI-lity program
• I receive no financial benefit from distribution/use of the social-ABI-lity program
• Board Member of speechBITE www.speechBITE.com
• Editorial Board (Social Media Editor) for the journal Brain Impairment
Learning outcomes

• Describe the benefits and risks of online social relationships and social media use after acquired brain injury

• Discuss the complexities of addressing social media use during brain injury rehabilitation, including the use of social media as a speech-language pathologist

• Explain where to find resources available to guide the incorporation of social media skills into collaborative social communication rehabilitation goals.
SOCIAL MEDIA USERS OVER TIME (YOY)

NUMBER OF SOCIAL MEDIA USERS (IN MILLIONS) AND YEAR-ON-YEAR CHANGE (NOTE: USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Users (in millions)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2013</td>
<td>1,720</td>
<td>+7.9%</td>
</tr>
<tr>
<td>Jan 2014</td>
<td>1,857</td>
<td>+11.9%</td>
</tr>
<tr>
<td>Jan 2015</td>
<td>2,078</td>
<td>+11.0%</td>
</tr>
<tr>
<td>Jan 2016</td>
<td>2,307</td>
<td>+20.9%</td>
</tr>
<tr>
<td>Jan 2017</td>
<td>2,789</td>
<td>+14.6%</td>
</tr>
<tr>
<td>Jan 2018</td>
<td>3,196</td>
<td>+8.3%</td>
</tr>
<tr>
<td>Jan 2019</td>
<td>3,461</td>
<td>+7.2%</td>
</tr>
<tr>
<td>Jan 2020</td>
<td>3,709</td>
<td>+13.2%</td>
</tr>
<tr>
<td>Jan 2021</td>
<td>4,199</td>
<td>+10.1%</td>
</tr>
<tr>
<td>Jan 2022</td>
<td>4,623</td>
<td>+3.0%</td>
</tr>
<tr>
<td>Jan 2023</td>
<td>4,760</td>
<td></td>
</tr>
</tbody>
</table>

SOURCES: KEDOS ANALYSIS, COMPANY ADVERTISING RESOURCES AND ANNOUNCEMENTS, CIMIC, BETA RESEARCH CENTER, MEDIASCORE, QCDM, ADVISORY. SOCIAL MEDIA USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS. COMPARABILITY: SOURCE CHANGES, BASE CHANGES, AND METHODOLOGY CHANGES. VALUES MAY NOT CORRELATE WITH THOSE PUBLISHED IN PREVIOUS REPORTS. SEE NOTES ON DATA FOR FURTHER DETAILS.
What is Social Media?

Internet-based applications/software that:

- allow the creation and exchange of **User Generated Content** (Kaplan & Haenlein, 2010)

- allow individuals, communities, and organizations to collaborate, connect, interact, and build community by enabling them to create, co-create, modifies, share, and engage with user-generated content that is easily accessible (McCay-Peet & Quan-Haase, 2017)

- enable users to create, share and view content in publicly networked one-to-one, one-to-many, and/or many-to-many communications (Hopkins, 2017)
What is social media?

- Blogs
- Virtual Social Worlds
- Social Networking
- Content Communities
- Virtual Game Worlds

(Kaplan & Haenlein 2010)
Advantage of Social Media

- Connectivity with the people
- News and Update
- Entertainment
- Education and Information
- Promotion
- Awareness
<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeping in touch with friends and family</td>
<td>47.1%</td>
</tr>
<tr>
<td>Filling spare time</td>
<td>36.2%</td>
</tr>
<tr>
<td>Reading news stories</td>
<td>34.2%</td>
</tr>
<tr>
<td>Finding content (e.g., articles, videos)</td>
<td>30.3%</td>
</tr>
<tr>
<td>Seeing what’s being talked about</td>
<td>28.8%</td>
</tr>
<tr>
<td>Finding inspiration for things to do and buy</td>
<td>27.3%</td>
</tr>
<tr>
<td>Finding products to purchase</td>
<td>25.9%</td>
</tr>
<tr>
<td>Watching live streams</td>
<td>23.7%</td>
</tr>
<tr>
<td>Sharing and discussing opinions with others</td>
<td>23.4%</td>
</tr>
<tr>
<td>Making new contacts</td>
<td>23.0%</td>
</tr>
<tr>
<td>Seeing content from your favourite brands</td>
<td>22.7%</td>
</tr>
<tr>
<td>Work-related networking or research</td>
<td>22.0%</td>
</tr>
<tr>
<td>Watching or following sports</td>
<td>21.8%</td>
</tr>
<tr>
<td>Finding like-minded communities and interest groups</td>
<td>21.4%</td>
</tr>
<tr>
<td>Posting about your life</td>
<td>21.3%</td>
</tr>
<tr>
<td>Following celebrities or influencers</td>
<td>20.8%</td>
</tr>
<tr>
<td>Avoiding missing out on things (FOMO)</td>
<td>20.3%</td>
</tr>
<tr>
<td>Supporting or connecting with good causes</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

**Source:** GWI | Q3 2022. Figures represent the findings of a broad global survey of internet users aged 16 to 64. See GWI.com for full details. **Note:** Figures represent the share of internet users aged 16 to 64 who report using at least one social media or messenger platform in the past month.
## Cognitive-communication functions & online interactions

<table>
<thead>
<tr>
<th>Functions</th>
<th>Examples that could influence online interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task initiation</td>
<td>Reduced output</td>
</tr>
<tr>
<td>Reasoning</td>
<td>Abstract concepts</td>
</tr>
<tr>
<td>Attention</td>
<td>Easily distracted</td>
</tr>
<tr>
<td>Flexible thinking</td>
<td>Adjusting to unexpected changes</td>
</tr>
<tr>
<td>Emotional control</td>
<td>Managing feelings</td>
</tr>
<tr>
<td>Working memory</td>
<td>Holding key information in mind</td>
</tr>
<tr>
<td>Self-monitoring</td>
<td>Awareness of performance</td>
</tr>
<tr>
<td>Impulse control</td>
<td>Stop before acting</td>
</tr>
<tr>
<td>Organisation</td>
<td>Keeping track of progress</td>
</tr>
</tbody>
</table>
# Brunner PhD: Mixed Methods Design exploring social media use after TBI

## Background
- Systematic Literature Reviews (Qualitative Evidence Synthesis)
  1. Social Media & TBI
  2. ICT & TBI rehabilitation

## Hashtag Study (Context)
- Twitter Hashtag Data Analysis
- Public tweets containing TBI-related hashtags

## Study 1
- Narrative Interviews
- People with TBI who use social media

## Study 2
- Narrative Interviews and Twitter Data Analysis
- People with TBI who use Twitter

## Study 3
- Focus Groups
- Health Professionals working in TBI Rehabilitation

## Meta-Synthesis
- Multi-Level Mixed Methods Research

---

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@LissBEE@mastodon.au
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#TwitterMind Research: Meta-Synthesis


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@LissBEE@mastodon.au
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Five Key Concepts

Support

Purpose

Knowledge and Experience

Networks

Caution

An evidence-based protocol for addressing social media during rehabilitation after TBI

<table>
<thead>
<tr>
<th>Concept</th>
<th>Facilitator of Social Media Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Identify digital communication systems that are personally meaningful</td>
</tr>
<tr>
<td>Knowledge and Experience</td>
<td>Identify barriers and/or challenges in using social media</td>
</tr>
<tr>
<td>Caution</td>
<td>Support cyber-safety and cyber-resilience</td>
</tr>
<tr>
<td>Networks</td>
<td>Support inclusion in online communities</td>
</tr>
<tr>
<td>Supports</td>
<td>Support access and participation in online communities</td>
</tr>
</tbody>
</table>

Research in the ABI Communication Lab

Scoping Review
Social media skills training
Online support groups

The Social Brain Toolkit
interact-ABI-ity
social-ABI-ity
convers-ABI-ity

Content Analysis
Instagram
YouTube

Survey
Rehabilitation Professionals experiences of social media use during ABI rehab

Online Self-Identity
People with ABI and Dementia

The University of Sydney

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#ASHA2022
An integrative scoping review was conducted to locate and synthesise:

a) research investigating training for developing social media skills and safety;
b) free online resources for social media skills training for the general public; and
c) online support groups for people with brain injury.

**Database search & other sources**
(n=2763)

**Google search & Snowball**
(n=310)

**Google & Facebook search**
(n=120)

**Included articles**
(n=47)

**Included websites**
(n=48)

**Included groups**
(n=120)
Scoping Review Results

Social media training for people with brain injury should:

- Be co-designed
- Be interactive
- Be safe
- Provide opportunities to practice
- Provide choices
- Support memory

Scoping Review Results

Key issues identified to address in social media training for people with brain injury

- Technology access
- Online safety access
- Developing relationships
- How to use technology
- Professional & Personal use
- Maintaining relationships
- How to use social media
- Wellbeing
- Support people

Scoping Review Results

The social-ABI-lity program

SBT Team Members:
Rachael Rietdijk, Melissa Brunner, Emma Power, Petra Avramovic,
Melissa Miao, Nick Rushworth, Renee Lim, Jarryd Daymond,
Steven Maguire, Sophie Brassel, Liza Maclean, Anne-Maree
Brookes, Rhys Ashpole, & Leanne Togher

The University of Sydney

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The collaborative design of social-ABI-ity

23 participants:
- 5 People with TBI
- 10 Professionals
- 3 Speech Pathologists
- 5 Everyday Communication Partners

2 interviews each

1st consultation
Focus on:
- Accessibility
- Content
- Format
- Key priorities for learning

2nd consultation
Focus on prototype development

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“I reckon to other people who had a brain injury like me, I really benefit so many things from it.”

Pilot study – 4 participants completed the course
- Acceptable, engaging, functional, & accessible
- No change in frequency of use
- Improved confidence & awareness
An online resource for people with brain injury to learn about using social media, connecting with other people, and staying safe.
The social-ABI-lity program

4 modules:

• What is social media?
• Staying safe in social media
• How do I use social media?
• Who can I connect with in social media?

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What if something bad happens online? (reading and video)

If you can, it's recommended that you ignore negative comments. Check in on people if they are being targeted by online hate. Block the trolls and negative people. Report abuse that you or anyone else receives.

The elders Commissioner helps Australians deal with online abuse. You can report abuse via their website here: https://www.elderabuse.com.au/report. If you are in another country, you can do a Google search for "elder abuse" and the name of your country to find the right resources for you.

TASK: Write this website address down on your WORKSHEET in this section here:


testing value in social media

I want my social media identity to be clear:

Think before you post.
Finding people or information that could help you use social media

- Information
- Videos
- Questions
- Printable worksheet
These days many of us spend a lot of time online. Time flies in social media, leading to brain fatigue and overload. You may not get other things done.

Tips to make social media work for you: turn off your notifications. Follow fun, positive people.
Look out for online drama (2 questions)

**QUESTION 2 OF 2**

It's not always easy to know how to respond.

One way you could calm down the situation in the previous question could be to comment on the post and let everyone know it wasn’t true.

In the picture below, a troll on Instagram has tagged someone they don’t know in a post. They share their profile photo and say "UGLY! Check out this one not sure why they have an insta account?!?"
TASK: Write this website address down on your WORKSHEET in this section here:

[Image of a circle around a worksheet]

• Work at their own pace
• Save their progress
• Get a certificate at the end
Pilot study of a multicomponent social media communication skills intervention

16 participants with ABI:
- 9 people in Group 1
- 7 people in Group 2

social-ABI-lity
program
2-3 hours

social-ABI-lity+
Facebook group
(BIA moderator)
12 weeks

https://doi.org/10.1111/1460-6984.12806
12-week private Facebook group for practice

- Conversation starters
- General discussion topics
- Tip sharing
- Polls
- Reminders
- Social media functions
- Social media safety

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Facebook Group 1 - 7 participants
Facebook Group 2 - 9 participants
- Moderated by Sydney Uni and Brain Injury Australia

Data collection:
- social media knowledge, use, and enjoyment, and quality of life
- pre-intervention, post-intervention, & 3 months post-intervention

Brunner & Rietdijk et al. (2022)
https://doi.org/10.1111/1460-6984.12806
For the 16 participants in Groups 1 and 2:

- 9 people increased their knowledge of romance cyberscams
- 11 people gave more specific advice in response to cyberscams

https://doi.org/10.1111/1460-6984.12806
For the 16 participants in Groups 1 and 2:

- 5 people increased their knowledge of hashtags
- 7 people generated more hashtag suggestions

https://doi.org/10.1111/1460-6984.12806
At their 3 month follow-up appointment:

15 people maintained their knowledge of cyberscams

13 people maintained their knowledge of hashtags

https://doi.org/10.1111/1460-6984.12806
No change in how often Facebook was used

social-ABI-lity Group 1  social-ABI-lity Group 2

https://doi.org/10.1111/1460-6984.12806
Improved confidence ($p = .002$) and enjoyment ($p = .013$)

social-ABI-lity Group 1

https://doi.org/10.1111/1460-6984.12806
"give it a go, 100 percent, give it a go"

social-ABI-lity Group 1
social-ABI-lity Group 2

https://doi.org/10.1111/1460-6984.12806
Facebook Group 3 – 9 participants

Peer moderated by 2 people with ABI
- Supported by Sydney Uni

Watch this space!
https://abi-communication-lab.sydney.edu.au/courses/social-abi-ity
Building online resources for ABI rehabilitation

- #TwitterMind Doctoral Research
- Scoping Review of Social Media Training
- social-ABI-lity Self-directed Program
- social-ABI-lity+ Self-directed Program + Facebook Group

- SMART social-ABI-lity Assessment Tool
- social-ABI-lity – clinician directed Intervention Program
- Future Possibilities…

@LissBEE_CPSP@twitter.com
@LissBEE@mastodon.au
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@LissBEE_CPSP@twitter.com
@LissBEE@mastodon.au
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Latest publications in this space (all #OpenAccess)


melissa.brunner@sydney.edu.au | @LissBEE_CPSP@twitter.com | @LissBEE@mastodon.au

#IJLCDAnnualLecture
Questions
Evaluation form
Thank you