

## Supplementary Material

### **Implementation of activities of daily living retraining for individuals in post-traumatic amnesia**

*Jessica Trevena-Peters*<sup>A,B,\*</sup>, *Jennie Ponsford*<sup>A,B,C</sup> and *Adam McKay*<sup>A,B,C</sup>

<sup>A</sup>Monash University School of Psychological Sciences, Clayton, Vic., Australia

<sup>B</sup>Monash Epworth Rehabilitation Research Centre, Richmond, Vic., Australia

<sup>C</sup>Epworth Rehabilitation, Epworth HealthCare, Richmond, Vic., Australia

\*Correspondence to: Email: [jessica.trevena-peters@monash.edu](mailto:jessica.trevena-peters@monash.edu)

## Good Reporting of a Mixed Methods Study (GRAMMS) checklist

Title: Implementation of Activities of Daily Living Retraining for Individuals in Posttraumatic Amnesia

Guideline	Section: page
Describe the justification for using a mixed methods approach to the research question	Method - Design and Materials opening sentence: page 4
Describe the design in terms of the purpose, priority and sequence of methods	Method - Design and Materials opening sentence: page 4
Describe each method in terms of sampling, data collection and analysis	Method (Participants, Design and Materials, Procedures and Data Analysis): pages 4-7
Describe where integration has occurred, how it has occurred and who has participated in it	Data Analysis: pages 6-7 and Discussion
Describe any limitation of one method associated with the present of the other method	NA
Describe any insights gained from mixing or integrating methods	Future Implementation: page 17

O'cathain, A., Murphy, E., & Nicholl, J. (2008). The quality of mixed methods studies in health services research. *Journal of health services research & policy*, 13(2), 92-98.

**Survey of experience and confidence completing activities of daily living skills retraining with individuals in posttraumatic amnesia**

1. Have you completed and graduated from an occupational therapy coursework degree?

Yes – bachelor degree

University: \_\_\_\_\_

Yes – master degree

University: \_\_\_\_\_

No

2. In which year did you graduate from your occupational therapy degree?

\_\_\_\_\_

3. Do you have postgraduate qualifications? (tick all that apply)

Master of \_\_\_\_\_

Doctor of \_\_\_\_\_

PhD in field of \_\_\_\_\_

Other: \_\_\_\_\_

4. What is your gender?

Male

Female

5. What is your age?

\_\_\_\_\_

6. For how many years have you practiced clinically? (It does not matter if the work was part-time or full-time; do not include years spent doing research work only or years spent on leave)

\_\_\_\_\_ years

7. Which of these categories would best describe the setting of your principal place of work?

Acute

Subacute

Rehabilitation (inpatient)

Rehabilitation (community / outpatient)

Academic

Other: \_\_\_\_\_

8. Which state do you work in?

\_\_\_\_\_

9. How often do you do activities of daily living (ADL) skills retraining in your clinical practice?

- Never
- Rarely
- Sometimes
- Often
- Almost always

10. What percentage of the clients with whom you do ADL skills retraining have an acquired brain injury (ABI)? (Write N/A if you do not currently do any ADL skills retraining with individuals with an ABI)

\_\_\_\_\_

11. What percentage of the clients with whom you do ADL skills retraining are in posttraumatic amnesia (PTA)? (Write N/A if you do not currently do any ADL skills retraining with individuals in PTA)

\_\_\_\_\_

12. On a scale of 0 (not at all confident) to 10 (extremely confident), how would you rate your level of confidence in completing ADL skills retraining with individuals in PTA?

Before this training: \_\_\_\_\_

After this training: \_\_\_\_\_

13. On a scale of 0 (very poor) to 10 (excellent), how would you rate the quality of the training in completing skills retraining with amnesic individuals, individuals with severe cognitive impairment, and/or individuals in PTA within your occupational therapy degree?

\_\_\_\_\_

14. Overall, how often did you undertake skills retraining with amnesic individuals, individuals with severe cognitive impairment, and/or individuals in PTA during the placements you completed as part of your occupational therapy degree?

- Never
- Rarely
- Sometimes
- Quite Often
- Very Often

15. Would you like to be doing more skills retraining with amnesic individuals, individuals with severe cognitive impairment, and/or individuals in PTA in your clinical work?

- No
- Maybe
- Yes

16. What are the barriers to doing more skills retraining with individuals in PTA in your clinical work?  
(Tick all that apply)

- Not enough time
- Not enough resources/funding
- Do not feel adequately trained
- Do not feel confident enough
- It is not part of my role
- Other: \_\_\_\_\_

17. On a scale of 1 (not at all useful) to 5 (very useful), please rate how useful these components of the training were in improving your **KNOWLEDGE** of ADL retraining during PTA:

Training component	Rating of usefulness (1-5)
Information regarding PTA	
Evidence on the efficacy of ADL retraining during PTA following TBI	
Descriptions of the underpinnings of the ADL retraining (neurofunctional approach, procedural and errorless learning)	
Strategies to enhance functional independence in ADL retraining	
Strategies to engage individuals in PTA	
Goal setting (session 2)	
Case descriptions and plans (session 2)	
Resources provided (session 2)	

18. On a scale of 1 (not at all useful) to 5 (very useful), please rate how useful these components of the training were in improving your **SKILLS** of ADL retraining during PTA:

Training component	Rating of usefulness (1-5)
Information regarding PTA	
Evidence on the efficacy of ADL retraining during PTA following TBI	
Descriptions of the underpinnings of the ADL retraining: the neurofunctional approach, procedural and errorless learning	
Strategies to enhance functional independence in ADL retraining	
Strategies to engage individuals in PTA	
Goal setting (session 2)	
Case descriptions and plans (session 2)	
Resources provided (session 2)	

18. On a scale of 1 (not at all useful) to 5 (very useful), please rate how useful these components of the training were in improving your **CONFIDENCE** of ADL retraining during PTA:

<b>Training component</b>	<b>Rating of usefulness (1-5)</b>
Information regarding PTA	
Evidence on the efficacy of ADL retraining during PTA following TBI	
Descriptions of the underpinnings of the ADL retraining: the neurofunctional approach, procedural and errorless learning	
Strategies to enhance functional independence in ADL retraining	
Strategies to engage individuals in PTA	
Goal setting (session 2)	
Case descriptions and plans (session 2)	
Resources provided (session 2)	

19. Please rate how useful you found the training overall:

1	2	3	4	5
Not at all	Slightly	Somewhat	Moderately	Very useful

a) What was the most useful aspect of the training?

b) What was the least useful aspect of the training?

20. Do you have any other comments or feedback about the training or about the process of learning to complete skills retraining with individuals in PTA?

<i>Please read each of the following statements regarding various areas of knowledge and skills relating to activities of daily living (ADL) retraining during posttraumatic amnesia (PTA), and rate your own level of competence for each item.</i>	Rate competency from 1-10 (1=do not have, 5=partly developed, 10=advanced)	
<b>PTA AND MEMORY SYSTEMS KNOWLEDGE</b>		
Knowledge of PTA: injury severity measure, how it is assessed, key symptomatology		
Knowledge of memory systems: implicit and explicit		
Knowledge of memory during PTA and application for rehabilitation		
Knowledge of previous intervention trials and outcomes during PTA		
Knowledge of recommended management strategies for individuals in PTA		
<b>ACTIVITIES OF DAILY LIVING SKILLS RETRAINING</b>		
<b>THE NEUROFUNCTIONAL APPROACH AND TASK ANALYSIS</b>		
Knowledge of basic principles of the neurofunctional approach to task-specific training		
Knowledge of functional assessment and task analysis		
Ability to complete a task analysis		
Ability to develop skills retraining program from task analysis		
Ability to implement extensive skills retraining program		
<b>PROCEDURAL AND ERRORLESS LEARNING IN SKILLS RETRAINING</b>		
Knowledge of procedural learning		
Ability to implement procedural learning in skills retraining program		
Knowledge of errorless learning		
Ability to implement errorless learning in skills retraining program		
<b>ADL SKILLS RETRAINING: THE PROCESS</b>		
Knowledge of key steps / stages of the retraining program		
Knowledge of using and developing visual cues in ADL retraining to promote independence		

Strategy Use: Ability to utilise strategies of physical support, guided movement, verbal prompts, visual cues and supervision to promote independence within a task		
Ability to utilise visual cues specifically in ADL retraining to promote independence		
<b>ENGAGEMENT IN ADL SKILLS RETRAINING AND AGITATED BEHAVIOUR</b>		
Knowledge of potential challenges in engaging individuals with agitated behaviour following brain injury		
Knowledge of agitated behaviour during PTA		
Ability to utilise strategies to promote engagement in ADL skills retraining		
<b>GOAL SETTING, EVALUATION AND ATTAINMENT SCALING</b>		
Knowledge of goal attainment scaling purpose		
Knowledge of goal attainment scaling structure		
Ability to utilise the process of goal attainment scaling in a clinical setting		
Ability to set goals using goal attainment scaling to measure outcomes of ADL retraining during PTA		



## Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

### Developed from:

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

**MANUSCRIPT TITLE:** Implementation of Activities of Daily Living Retraining for Individuals in Post Traumatic Amnesia

No. Item	Guide questions/description	Reported on Page #
<b>Domain 1: Research team and reflexivity</b>		
<i>Personal Characteristics</i>		
1. Inter viewer/facilitator	Which author/s conducted the interview or focus group?	6
2. Credentials	What were the researcher's credentials? (E.g. PhD, MD)	6, 7
3. Occupation	What was their occupation at the time of the study?	6, 7
4. Gender	Was the researcher male or female?	6, 7
5. Experience and training	What experience or training did the researcher have?	6, 7
<i>Relationship with participants</i>		
6. Relationship established	<i>Was a relationship established prior to study commencement?</i>	6
7. Participant knowledge of the interviewer	<i>What did the participants know about the researcher? (e.g. personal goals, reasons for doing the research).</i>	6
8. Interviewer characteristics	<i>What characteristics were reported about the interviewer/facilitator? (e.g. Bias, assumptions, reasons and interests in the research topic)</i>	6, 7
<b>Domain 2: Study design</b>		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	<i>What methodological orientation was stated to underpin the study? (e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis).</i>	6

<i>Participant selection</i>		
10. Sampling	<i>How were participants selected? (e.g. purposive, convenience, consecutive, snowball)</i>	4
11. Method of approach	<i>How were participants approached? (e.g. face-to-face, telephone, mail, email)</i>	6
12. Sample size	<i>How many participants were in the study?</i>	4 and Table 1
13. Non-participation	<i>How many people refused to participate or dropped out? Reasons?</i>	NA
<i>Setting</i>		
14. Setting of data collection	<i>Where was the data collected? (e.g. home, clinic, workplace)</i>	6
15. Presence of non-participants	<i>Was anyone else present besides the participants and researchers?</i>	6
16. Description of sample	<i>What are the important characteristics of the sample? (e.g. demographic data, date)</i>	Table 1
<i>Data collection</i>		
17. Interview guide	<i>Were questions, prompts, guides provided by the authors? Was it pilot tested?</i>	5
18. Repeat interviews	<i>Were repeat interviews carried out? If yes, how many?</i>	NA
19. Audio/visual recording	<i>Did the research use audio or visual recording to collect the data?</i>	6
20. Field notes	<i>Were field notes made during and/or after the interview or focus group?</i>	6
21. Duration	<i>What was the duration of the inter views or focus group?</i>	8
22. Data saturation	Was data saturation discussed?	7
23. Transcripts returned	<i>Were transcripts returned to participants for comment and/or correction?</i>	7
<b>Domain 3: analysis and findings</b>		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	7

25. Description of the coding tree	<i>Did authors provide a description of the coding tree?</i>	7
26. Derivation of themes	<i>Were themes identified in advance or derived from the data?</i>	6-7
27. Software	<i>What software, if applicable, was used to manage the data?</i>	7
28. Participant checking	<i>Did participants provide feedback on the findings?</i>	7
<i>Reporting</i>		
29. Quotations presented	<i>Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? (e.g. participant number)</i>	9-14
30. Data and findings consistent	<i>Was there consistency between the data presented and the findings?</i>	9-14
31. Clarity of major themes	<i>Were major themes clearly presented in the findings?</i>	9-14
32. Clarity of minor themes	<i>Is there a description of diverse cases or discussion of minor themes?</i>	9-14

### Supplementary Table 1

#### *Self-Rated ADL Retraining during PTA Competencies by Domain Pre versus Post-Workshop*

Competency domain	Pre-workshop		Post-workshop		<i>t</i> (39)	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
PTA and memory (knowledge-based only)	5.19	1.70	7.49	0.96	11.81	<.001
ADL skills retraining: neurofunctional approach and task analysis	6.29	1.65	7.83	0.97	9.11	<.001
ADL skills retraining: procedural and errorless learning	5.59	1.85	7.62	0.16	11.39	<.001
ADL skills retraining: the process	6.15	1.56	7.93	0.14	9.36	<.001
ADL skills retraining: engagement and agitated behaviour	5.97	1.85	7.58	0.20	8.35	<.001
ADL skills retraining: goal setting, evaluation and goal attainment scaling	4.84	2.29	7.11	1.29	9.63	<.001

*Note:* ADL = activities of daily living, PTA = posttraumatic amnesia

*Note:* Missing data was handled using pairwise deletion (*n*=2)