

INTRODUCTION

BACKGROUND

- M-MAT is an intensive, multimodal aphasia treatment approach
- Primary focus on improving spoken production and oral communication (Rose et al., 2013; Rose et al., 2016).
- M-MAT uses gestural, visual, and orthographic cues
- M-MAT features the shaping of responses and use of social imperatives to produce speech
- M-MAT typically has an intensive schedule of delivery (30 hours over 10 days).

- People with aphasia (PWA) in long-term care settings would benefit from M-MAT
- Long-term care settings constraints: 1) treatment intensity; 2) patient stamina
- Questions remain about adapting M-MAT in long-term care settings

RESEARCH QUESTION

The purpose of this study is to examine: 1) the feasibility of adapting M-MAT to be delivered in a long term care setting; and 2) the impact of adapted M-MAT on language and communication outcomes of an individual with aphasia.

METHODS

PARTICIPANT

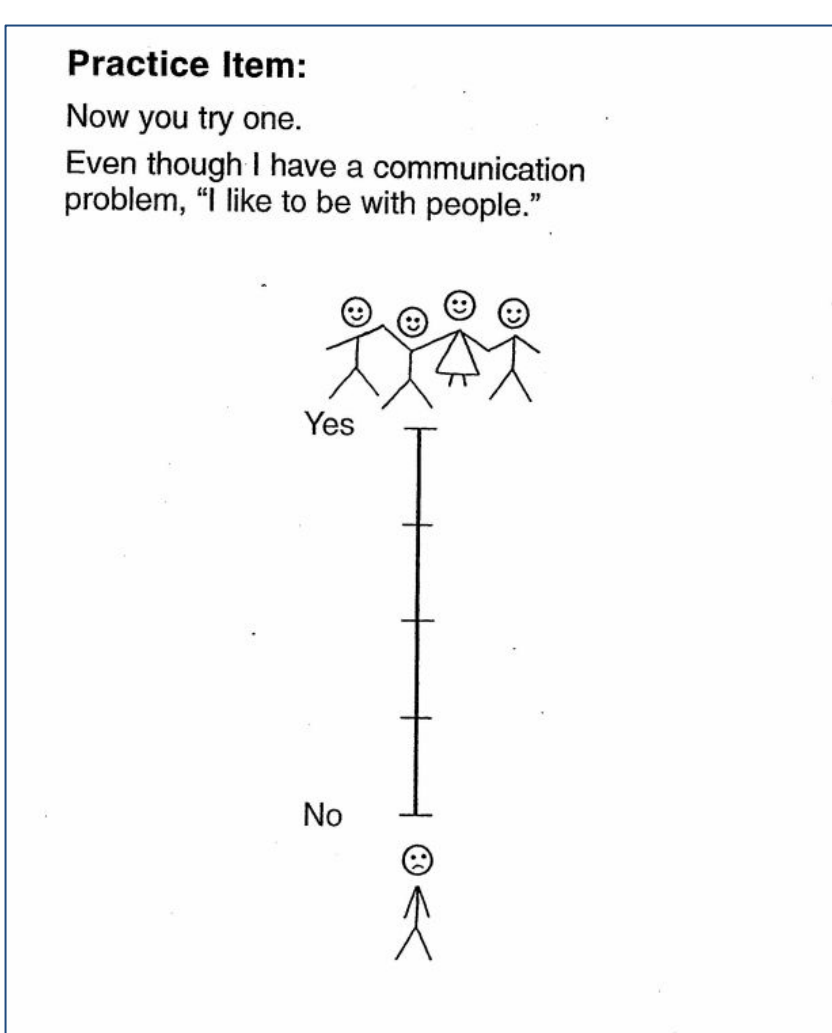
- Age: 82
- Female
- Mild-moderate non-fluent aphasia
- Five months post left-hemisphere CVA

TREATMENT TYPE AND INTENSITY

- M-MAT (Rose & Attard, 2011)
- 42 hours/ 41 sessions/ 11 weeks

PRE/POST-TREATMENT TASKS

- 3 discourse tasks:
 - Cinderella story retell
 - Peanut butter and jam sandwich description
 - Broken window picture description
- Quality of Life Communication Scale



Example from QoL Communication Scale

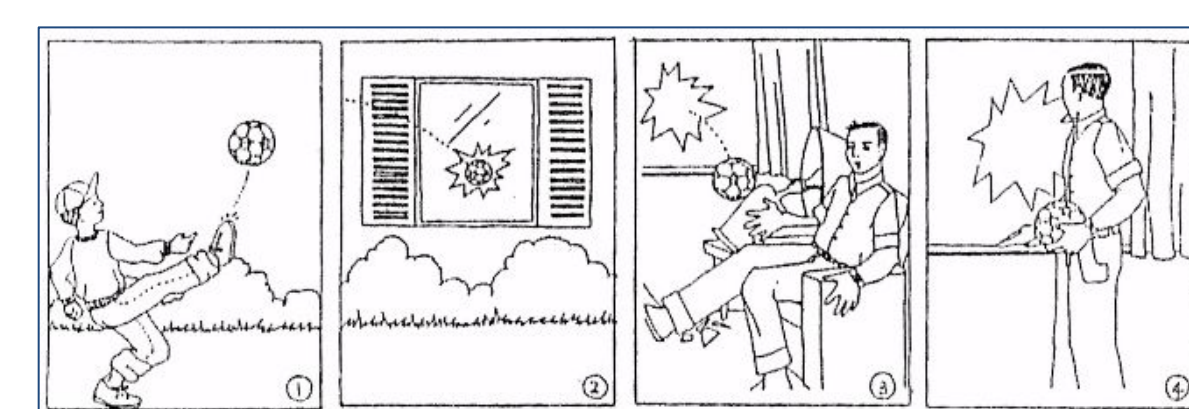
INTERVIEWS

The student clinicians were asked to discuss

- general perceptions of implementing M-MAT in a long-term care setting
- pros and cons of M-MAT in this setting
- candidacy for M-MAT
- challenges encountered
- client reactions
- what they would have done differently if the therapy wasn't part of research
- preferred size of therapy group



Picture provided during peanut butter and jam sandwich description task



Broken Window Picture

RESULTS

DISCOURSE MEASURES

Discourse tasks were scored according to the systems outlined in Nicholas and Brookshire (1993) and Richardson and Dalton (2016).

- Correct information unit (CIU): “words that are **intelligible** in context, **accurate** in relation to the picture(s) or topic, and **relevant** to and **informative** about the content of the picture(s) or the topic” (Nicholas & Brookshire, 1993, p.348).
- Main Concept (Score): “semantic elements considered to be essential, and a multilevel coding system is applied to determine the **accuracy** and **completeness** of concept production” (Richardson & Dalton, 2016, p. 47)

	Pre-treatment			Post-treatment			Control
	# of Words	# of CIU	Main Concept Score	# of Words	# of CIU	Main Concept Score	Main Concept Score
Broken Window	164	48	11	177	87	12	15
Cinderella	617	259	38	954	359	49	43
Peanut Butter and Jam	312	28	12	420	31	9	17

QUALITY OF LIFE MEASURE

	Pre-treatment	Post-treatment
Quality of Life	3.6/5	4.1/5

- Increased number of words and number of CIUs
- General trend for improvement in Main Concept score
- Improved self-ratings for quality of life measures (e.g., general communication ability and communication confidence)

FEEDBACK INTERVIEWS THEMES

Theme	Definition and Example
Client Enjoyability	Factors that impacted or would impact how much clients enjoyed M-MAT, and their physical and emotional reactions toward M-MAT. <i>“The latter client had a lot of difficulty and the M-MAT treatment sessions caused her a great deal of stress...”</i>
Program Logistics	Matters of recruitment, planning and organization of materials and sessions, and scope, administration, and data collection of M-MAT. <i>“...best for clients with mild to moderate challenges with confrontational naming.”</i>
Clinician Perception	Clinician emotions and attitudes toward M-MAT, and perceptions of effort and time expenditure. <i>“The prep work of having to learn the game and figure out how the game fits into the cueing hierarchy was a lot of leg work.”</i>

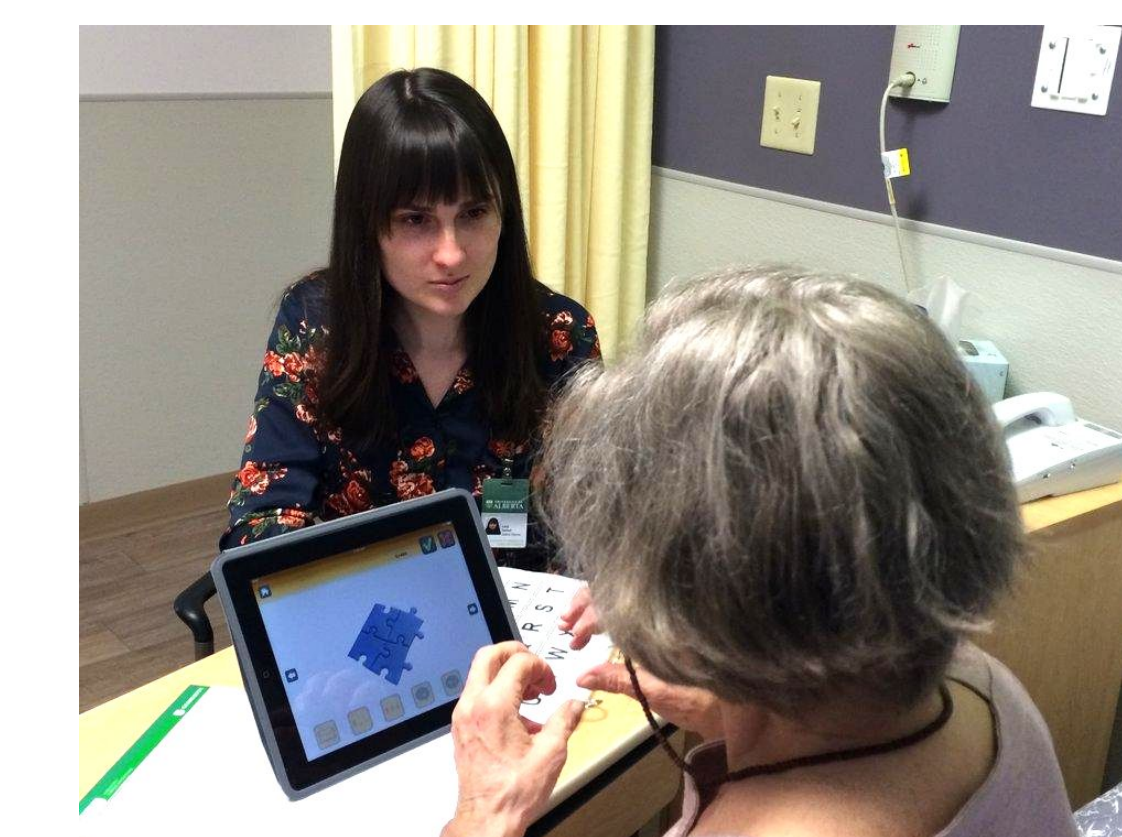
DISCUSSION

LIMITATIONS

- Fatigue effects on discourse tasks
- No comparison treatment
- Limited data and statistical power due to limited number of participants
- Problematic group composition

DIRECTIONS FOR FUTURE RESEARCH

- Optimize M-MAT procedures to address controllable logistical constraints, such as allowing for individualization of the cueing hierarchy
- Application of M-MAT in a larger group of individuals with similar aphasia presentations in a long-term care setting
- Investigate aphasia populations that would benefit most from M-MAT



CONCLUSION

- Current study explores M-MAT's utility in a long-term care setting
- Appears to increase the accuracy and number of relevant words, and complete semantic elements in discourse tasks
- Increases self-confidence in communication
- Unfavorable emotional reaction and participant performance due to constraints on program logistics:
 - limited program scope
 - rigidity in administration (e.g., lack of individualization)
 - unsuitable group composition due to recruitment difficulties
- Preparing M-MAT sessions in a long-term care setting was time-consuming for clinicians
- M-MAT may be a useful treatment protocol for use in long-term care settings; factors to consider:
 - client characteristics
 - potential negative affect toward rigid protocols
 - group composition

ACKNOWLEDGEMENTS

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