

EVIDENCE TO SUPPORT AUGMENTATIVE COMMUNICATION (AAC) TREATMENT FOR PRIMARY PROGRESSIVE APHASIA

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BACKGROUND

Communication treatment goals for PPA: To place the patient's residual lexicon visually in front of him to access needed vocabulary for daily expression as language skills decline. There are no empirical data showing that augmentative & alternative communication(AAC) helps with language compensation in PPA.

Research goal: To demonstrate that Ss with PPA retrieve words faster, with less effort during AAC-supported conversations compared to unsupported conversations. To demonstrate that AAC reduces the amount of lexical scaffolding needed by conversational partners.

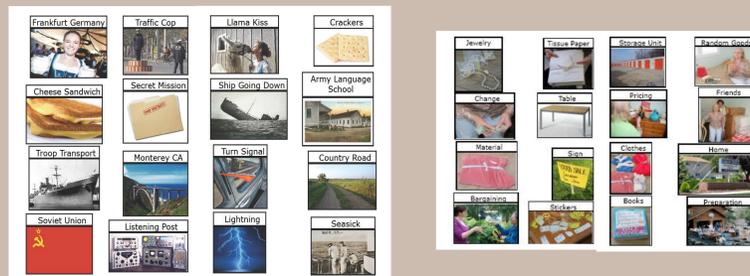
METHODS

1. Determine topic of conversation and choose 16 words/phrases with Ss and partners based on autobiographical memory.
2. Make personalized boards with 16 photos + labels on 17" X 11" cardboard.
3. Train Ss how to use boards during conversation in their residences.
4. Conduct 6 VERY controlled conversations between Ss and RAs with 10 scripted questions to elicit words/phrases; 3 with and 3 without boards.
5. Provide 3 prompts (downshift questions) to elicit target words if not produced. The same prompts are offered in identical order for conversations with and without AAC.
6. Measure outcome variables: #correct responses to questions + prompts in AAC-supported and unsupported conversations.

SUBJECTS

N = 17, diagnosed with PPA
Gender: 8 women; 9 men
Age range: 52-80 years; X = 69
Education: 12-24 years; X = 16.5
CDR: .94 – 1.08; X = 1
BNT: 2- 52; X =25
WAB: Word fluency: 0-12; X = 6.0
Oral naming: 1-58; X = 37.7
Repetition: 38-96; X = 64.7
Aud-Vrb Comp: 48-60; X = 55.1

PERSONALIZED COMMUNICATION BOARDS



RESULTS

Number of *correct responses to initial questions* was higher in the experimental condition (with AAC) than in the control condition (without AAC).
 Mean Control: 4.1
 Mean Experimental: 7.4
 $F(1,82) = 23.797, p = .000$



Participants with PPA retrieve the correct responses to questions more quickly, requiring less effort by caregivers (downshifting) with AAC support than without AAC support.

RESULTS

Number of *correct verbal responses to all questions* was higher in the experimental condition (with AAC) than in the control condition (without AAC).



Mean Control: 5.4
 Mean Experimental: 7.1
 $F(1,87) = 6.714, p = .011$

Participants with PPA retrieve the correct verbal responses to questions more frequently with AAC support than without AAC support.

Ss pointed to board pictures an average of 5 times/conversation, indicating that they are using boards for expression, not just cuing word retrieval.

CONCLUSION



- Experimental data prove that low tech AAC provides meaningful lexical support during structured conversations for people with PPA.
- Low tech AAC significantly reduces lexical scaffolding needed by the conversation partner.
- This approach should be part of a PPA treatment protocol.

ACKNOWLEDGEMENT

This work is supported by grants #H133G080162 and #H133E080011 from NIDRR, and NIH #P30 AG008017