A CRITIQUE OF REALIZE LANGUAGE: A HIGH-TECH AAC DATA LOGGING SERVICE

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INTRODUCTION TO THE PROJECT

Aim of the project:
1.) Provide an overview of the Realize Language program
2.) Analyze its utility with a new AAC user who still requires significant amounts of modeling
3.) Provide suggestions to clinicians considering using the program in the future
Augmentative and Alternative Communication (AAC) devices give individuals with elaborate communication needs the means to functional communication.

Learning process can be complex for all involved (e.g. client, parent, spouse, sibling).

Support from all involved is vital for the AAC user to develop communicative competence.
• Modeling from facilitators is often used when an individual is first learning the device
• This use of aided language stimulation helps the individual to start building connections between verbal output, graphical symbols, and their meanings (Biggs, Carter & Gilson, 2018)
• Data collection and progress monitoring with AAC use can be difficult
• AAC devices have a built-in “data logging” feature which tracks all keystrokes/selections
• A newly developed program that allows all members of an individual’s interdisciplinary team (e.g. caregivers, teachers, aids, speech-language pathologists) to monitor their use of the AAC device
• Data from the log is uploaded from the device into the online service
• Takes logged data and converts it into visual representations that are easy to interpret and understand
• The data is converted into graphical representations (i.e. “widgets”) on different “pages” within the service
  • Overview
  • Use
  • Words
  • Log
  • Analysis
CASE STUDY
STUDY PARTICIPANTS

- Two participants:
  - Client M.N.
  - Clinician R.L.
- Sessions were conducted at University of Delaware Speech Language and Hearing Clinic
OBSERVATIONS AND DATA COLLECTION

• Four observation sessions across a four-week period with data logging feature turned on client M.N.’s device
• Between 5 to 15-minute intervals of data collection were video recorded, for a total of 58 minutes of recording
• Videos were reviewed and every instance of clinician and client keystrokes was tallied
RESULTS

• During the observational windows, there was an overall increase in the amount of independent selections made by client M.N. and decrease in number of direct models provided by clinician R.L.

• M.N. appeared to become more proficient in his ability to use and navigate his device
• Utilizing Realize Language with the data collected from client M.N.’s device led to discovery of pros and cons with the program
• Program can take complex data from the data log and turn it into easy to understand graphical representations
• However, based on this study, the tool does not provide accurate information for new AAC users or those requiring high amounts of modeling
<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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<tr>
<td>• Provides simplification of data logged information collected from</td>
<td>• Aspects of the program are complex (i.e. “Log” page) and would be</td>
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<td>the AAC device</td>
<td>hard for those without AAC experience to understand</td>
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<td>• Tool can be utilized by all members of the multidisciplinary team</td>
<td>• Impossible to differentiate between who made selection on the device</td>
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<td>(e.g. caregivers, teachers, clinicians)</td>
<td>(e.g. client, clinician)</td>
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<td>• Can be used to track and measure progress for independent AAC</td>
<td>• Does not capture a new AAC user’s progress but instead captures all</td>
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<td>users not requiring significant amounts of modeling</td>
<td>the keystroke selections on the device, leading to skewed data</td>
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<td>• Information can be used to create treatment plans or serve to</td>
<td>• Misleading claim that program will depict any user’s overall progress</td>
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<td>create goals</td>
<td>• Subscription cost</td>
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<td>• Graphical representations from program can be beneficial when</td>
<td>• Can take a significant amount of time to learn to use the program</td>
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<td>presenting at IEP meetings or when describing progress to members</td>
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<td>of care team</td>
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CONCLUSION

- New AAC users are going to require considerable amounts of modeling and aided language input
- Realize Language incorporates all keystrokes (regardless of who made the selection) into the visually presented data
- Program did not provide accurate account on how client M.N. was making progress towards becoming an independent user
- Results from this study support that Realize Language should not be used with new AAC users or those who require consistent direct modeling
DIRECTIONS FOR FUTURE RESEARCH

• Additional studies including more participants and more diversity
• Studies completed with users who are more independent with their device to check accuracy of Realize Language
• Need for an improved method to track an individual’s progress towards independence with their device
• Creation of a checklist to complete prior to using Realize Language to help clinicians when determining if this program would be the right fit for a client
SAMPLE CHECKLIST

1. Modeling/aided language input provided by clinician before client selection?
   A. Often (71%-100%)
   B. Sometimes (31%-70%)
   C. Rarely (0%-30%)

2. Accuracy level of independent selections?
   A. 0%-30%
   B. 31%-70%
   C. 71%-100%

3. Type of modeling required by individual?
   A. Direct model on device
   B. Verbal or indirect prompt
   C. Infrequently requires model or prompt

4. Amount of non-functional or random selections made on the device by the individual?
   A. Often
   B. Sometimes
   C. Never

5. Amount others (caregiver, teacher, clinician) use the device?
   A. Often
   B. Sometimes
   C. Rarely

6. Interdisciplinary team buy-in for using Realize Language and SGD?
   A. No; only SLP is using device with the individual
   B. Yes; team members include caregivers, teachers, and clinicians
Mostly A Responses:
Individual would not be a candidate for the use of the Realize Language program to track their progress over time.

Mostly B Responses:
Individual could be a candidate for Realize Language program if it is understood not all data will be direct reflection of their selections of the device.

Mostly C Responses:
Individual would be a good candidate for use of the Realize Language program to track their progress over time.
RESOURCES FOR ADDITIONAL INFORMATION

• Videos for reference when using Realize Language
  • https://realizelanguage.com/info/support/videos

• Trainings
  • https://realizelanguage.com/info/training

• Answers to frequently asked questions
  • https://realizelanguage.com/info/faqs
REFERENCES


QUESTIONS