Script Training in a Bilingual Person with Aphasia: A Case Study

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Introduction

Script training, a commonly used intervention for monolingual PWA, aims to improve the production of personally relevant information through intensive practice (Fridriksson et al., 2012; Goldberg, Haley, & Jacks, 2012; Lee, Kaye, & Cherney, 2009; Youmans, Holland, Muñoz, & Bourgeois, 2005). Little is known about script training with bilingual PWA. The authors are unaware of any studies that examine script training with bilingual PWA. This study presents data for one bilingual PWA who participated in script training at the Adler Aphasia Center. The goal was to determine if the use of script training is applicable to bilingual PWA.

Participant

• A.M., a right-handed male
• Normal hearing and vision
• Native Spanish speaker
• Born in El Salvador
• Exposed to and began learning English at age 33 after immigrating to the U.S.
• Suffered a CVA to the left middle cerebral artery at age 49
• Approximately 8.5 months post-CVA at start of the study
• Presented with Broca’s aphasia
• Demonstrated stronger auditory comprehension in Spanish but stronger verbal expression in English

Treatment

• Sessions
  • Twice weekly for 50 minutes
  • 79 total sessions
• Intervention
  • Customized scripts: 3 English, 1 Spanish
• Home practice: 1 hour/day with iPad for cues
• Mastery: Independent use of iPad to self-cue
• Dialectal differences and errors appropriate to context considered accurate

Outcome Measures

• Primary: Script analysis (See Figures 1-5)
• Two of three pre-treatment and two of three post-treatment audio/video recordings were randomly selected for analysis
  • Recordings were transcribed by one familiar listener and one unfamiliar listener using AphasiaBank’s conventional coding system (CHAT) (MacWhinney, 2014a)
  • Transcripts were compared to a transcribed target script using the SCRIPT program available on AphasiaBank’s CLAN program (MacWhinney, 2014b)
• Recognizable phonemic/lexical errors, semantic synonyms, and dialectal variations were accepted as accurate (MacWhinney, 2014b)
• Transcriptions were analyzed for:
  • Content: percent words correct, percent words omitted
  • Efficiency: words per minute
• Secondary: Test Battery (See Table 1)

Procedures

• Pre- and Post-1*: English
• Pre- and Post-2*: English
• Pre- and Post-1~: Spanish
• Pre- and Post-2~: English
• Pre- and Post-1^: English
• Pre- and Post-2^: English

Results

• Demonstrated stronger auditory production of personally relevant information regardless of the language of intervention.
• The findings suggest that script training, while specifically targeting verbal sentence production and/or discourse, may also enhance discrete receptive and expressive skills in both languages used in treatment.

Conclusion

Similar to studies conducted with monolingual speakers with aphasia (Fridriksson et al., 2012; Goldberg, Haley, & Jacks, 2012; Lee, Kaye, & Cherney, 2009; Youmans, Holland, Muñoz, & Bourgeois, 2005), evidence from this case study illustrates that script training can successfully improve a bilingual PWA’s production of personally relevant information.

References

Disclosure

Authors are employed by the Adler Aphasia Center where they use this therapy method.