

Introduction

Treatments for aphasia in Spanish speakers are derived from those developed for, and tested on, English speakers with aphasia. However, little research has been conducted to evaluate the effectiveness of these techniques. Effectiveness across languages cannot be assumed given differences in linguistic and paralinguistic features between languages. Melodic Intonation The purpose of this research was to measure treatment outcomes for the use of MIT with a Spanish speaker with aphasia.

Method

Participant. SA is a 45 year old Hispanic male 3 months post onset of a single left temporal-frontal CVA. SA was born in Mexico has lived in the United States for 25 years. Spanish is his first and stronger language. He has conversational proficiency in English. He speaks Spanish with his wife, and both languages with his children and at work. He completed high school in Mexico and has worked in maintenance.

SA was assessed using the short versions of the *Boston Diagnostic Aphasia Examination-3* (BDAE-3) in Spanish and English, *The Boston Naming Test*, and informal speech measures (see Table 1). SA demonstrated a moderate-to-severe expressive aphasia, with a significant apraxia of speech. Expressive communication was characterized by short phrases, persistent phonological errors, reduced articulatory agility, and effortful initiation of speech.

Stimuli: SA and his family provided a list of functional names and phrases which were organized into sets based on syllable length: Set 1 (2-3 syllables) and Set 2 (4-6 syllables). An intonation pattern was established for each word/phrase based on the normal Spanish stress pattern. The primary stress for each word was identified as the high tone, the remaining syllables were marked as a low tone (see figure one). Independent production of each set was probed to establish a stable baseline. Both sets were probed 3 times before treatment began. Treatment was initiated with Set 1 once criterion was met for Set 1, treatment was initiated with set 2. Both sets were probed regularly at the start of each treatment session.

Melodic Intonation Therapy. The three levels MIT hierarchy proposed by Helms-Estabrooks et al (REF) was collapsed to a two level hierarchy: beginning/intermediate and advanced. Set 1 was trained at both levels, until the criteria (90% correct over five trials) for the final stage of the advanced level was reached. Set 2 was then trained at both levels until criterion was reached.

Results

The participant met criterion on both sets. Data will be analyzed for accuracy during each probe and a 6 week follow-up.

TABLE 1: Language Assessment Results

Test/Subtest	Spanish	English
BDAE-3 (Short Form)		
Conversational and Expository Speech		
A. Simple social responses	A. 7/7	A. 7/7
B. Free conversation	B. 1	B. 1
C. Picture description	C. 1	C. 1
Auditory Comprehension	19/32	25/32
Oral Expression	24/33	20/33
Reading	25/39	19/39
Writing	34/60	36/60
Boston Naming Test	1/15	0/15

Figure 1: Sample of Spanish words and phrases and corresponding intonation.

Sample Stimuli

2 syllable	3 syllable	5 syllable
 Mama	 Fernando	 Que te vaya bien
 Papa	 Tengo sed	 No hagan rido
 Javier	 No quiero	
 Clara		