Adaptation of the Bilingual Aphasia Test to Lebanese Arabic
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Assessment of Bilingual Aphasia in Lebanon

- Lebanese Arabic (LA) is spoken in Lebanon along with other languages such as French (45%), English (40%), Kurdish (4.9%), Armenian (4.9)...
- In addition to diglossic context, bilingual education is mandatory: 55.8% for French vs. 21.6% for English as a second language of Lebanese schools.
- Due to bilingualism, codeswitching (CS) is frequent and practiced in different settings (media, classrooms, etc.).
- No aphasia test exists for the Lebanese linguistic context: diagnosis of aphasia is limited to qualitative assessment.
- This is why the short version of the Bilingual Aphasia Test was adapted to Lebanese Arabic (L-BAT).
- The BAT is composed of 3 parts: A (linguistic background questionnaire, B (subtests for oral and written language) & C (translation skills).

Standardization Process: Method & Results

1. STIMULI SELECTION FOR THE L-BAT
   Part A: 59 items. Add questions related to the use of standard Arabic and CS habits.
   Part B: 21 subtests
   - Auditory discrimination: consonant structure & pronunciation. E.g. [f]al & [f]el refer to the word "scarf".
   - Syntactic comprehension: non-standard sentence (inexistent passive structure) ➔ VSO sentence forms (e.g. llama la la → bit the cat the dog).

2. STANDARDIZATION PROCEDURE 1
   - 55 participants (43F)
   - Mean age=40.27; Mean level of education 15.45 years
   - 80% of participants CS frequently

3. RESULTS FROM 1ST STUDY
   - L-BAT success rate= 92.54%.
   - Score are correlated with age and education level.
   - Despite this relatively high success rate, multiple items needed re-evaluation, especially in auditory discrimination, syntactic comprehension, series.
   - Changes were made for L-BAT.
   - Stimuli for a French BAT (F-BAT) and Part C LA-French were chosen.

4. STANDARDIZATION PROCEDURE 2
   - 28 participants (21F)
   - Mean age=48.66; Mean level of education: 14.85 years
   - 89% of participants CS frequently

5. RESULTS FROM 2ND STUDY
   - Success rates: L-BAT (92.98%) > F-BAT (92.07%)
   - Effects of age and education level for the L-BAT only
   - Item analyses: low success rate for some items in the F-BAT, e.g. "goulot" (bottle neck) leading to major changes in the F-BAT.

Testing the L-BAT with a Lebanese-French Bilingual Patient With Aphasia

The patient
- Female, Right handed.
- Age 71, 14 years of education (accountant).
- Stroke in the LH (at 68).
- 3 years post onset at time of study
- LA-French Bilingual:
  - Native speaker of LA, acquired at home.
  - Early French bilingualism, acquired at school (education only in French)
  - Written language skills: French > LA.

Language assessment & intervention
- Initial assessment of LA: Qualitative approach.
- Non Fluent aphasia with anomia & phonological processing deficits,
- Compensation strategies: CS & phonological repair strategies,
- Language therapy for 2 years,
- Improvement in language skills; verbal deficits only increased with fatigue and stress.

The case study indicates effectiveness of the L-BAT in establishing aphasia diagnosis and stresses the necessity to describe CS behavior in Lebanese population.

Normative data for language assessment in Arabic-speaking countries is needed to allow speech-language practice improvement.

Summary & Discussion

- The BAT is adaptable to LA (high success rate of 92.98%) despite the dialectal variation.
- Age and education level effect only for LA suggest an heterogeneity in French proficiency among participants, regardless of their sociodemographic characteristics.

References

http://www.italydialogues.com/country/LB
http://www.ad.cafè/shamir/arabic/khan.htm
*Charts and diagrams are made with www.shmoopt.com

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