

You will need:

- Android tablet¹ with AndroidBAT 2.0 application installed (http://play.google.com/store/apps/details?id=ca.ilanguage.bilingualaphasiatest)
- Administrator documents (BAT in your language version) (available from http://www.mcgill.ca/linguistics/research/bat/)
- Following items for testing (may vary for some languages).
- The participant (right of picture) faces the tablet. The tablet uses its front facing camera (if present) to record the participants lips and eyes for later analysis. The experimenter may sit across from the participant, if the participant is able to control the buttons on their own, or the experimenter may sit next to the participant if the participant needs assistance (as is usually the case with patients). Items should be placed in front of the participant, between the tablet and the participant.



Pointing *Ring*

Button Matches Glove Key Scissors Watch Envelop

Glass Brush

Simple and semi-complex commands

Ring Matches Glass Pencil Fork

Complex commands

3 pieces of paper (large, medium, small)

3 crayons (yellow, blue, red)

3 coins (large, medium, small)

3 pieces of wood (long, medium, short)

3 books

Naming
Book
Glasses
Key
Cup
Tie
Scissors
Spoon
Glove
Pencil

(playing) Card Thermometer

Button
Cigarette
Fork
Feather
Ring
Candle
Envelop
Toothbrush
Watch

A tablet equipped with a front facing camera should preferably be used (e.g., Motorola Xoom, Acer Iconia, etc.), one located in the front of the tablet (to record participants' eye gaze and lip movement). The AndroidBAT 2.0 application should work even with tablets with only one camera or none, in which case it will simply record only audio.

Instructions

- 1. Once the AndroidBAT 2.0 application is clicked, a settings page will appear. Enter needed information (language being tested, participant's information) then touch the Android's back arrow to go back to the main screen.
- 2. Touch 'load', in the top right corner of the screen to begin an AndroidBAT session.
- 3. You can perform each subtest individually by selecting it, or the full test in consecutive order, by pressing 'start'. The subtests are in clockwise order. Once a subtest is complete, its circle will appear in gray to indicate that it is completed.
- 4. At any given time, you may cancel a subtest by touching the video/audio will be automatically saved.

AndroidBAT 2.0 subtests

1. History of bilingalism

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

2. English Background

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

3. Spontaneous speech

Start timer to calculate the time required.

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

4. Pointing (Verbal Comprehension)

(For required items, please refer to the beginning of this guide.)

Place all items in front of the participant, between the tablet and the participant.

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

5. Simple and semi-complex commands (Verbal Comprehension)

(For required items, please refer to the beginning of this guide.)

Place all items in front of the participant, between the tablet and the participant.

Complete all items in this subtest, then touch to return to the main screen.

6. Complex commands (Verbal Comprehension)

(For required items, please refer to the beginning of this guide.)

Place all items in front of the participant, between the tablet and the participant.

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

7. Verbal auditory discrimination

Participant is required to touch the image that best matches the word produced (pages will change automatically once a test item is completed).

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

8. Syntactic comprehension

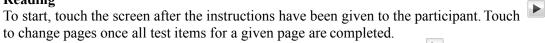
To begin, after the instructions have been given to the participant, touch the next arrow. Participant is required to touch the image that best matches the sentence produced (pages will change automatically once all test items for a given picture are completed).



Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 9. Semantic categories Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 10. Synonyms Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 12. Grammaticality judgment Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 13. Semantic acceptability Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 14. Lexical decision Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 15. Series Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 16. Verbal fluency Start timer to calculate the time required. Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 17. Naming (For required items, please refer to the beginning of this guide.) Place each item one at a time, between the tablet and the experimenter (remove item once named). Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 18. Sentence construction Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 19. Semantic opposites Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 20. Derivational morphology Complete all items in this subtest, and then touch to return to the main screen. 21. Morphological opposites Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 22. Description Complete this subtest, and then touc to return to the main screen of the application 23. Mental arithmetic Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application. 24. Listening comprehension

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

25. Reading



Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

26. Copying

Provide the participant a white paper and a pencil.

To start, touch the screen after the instructions have been given to the participant.

Touch the next arrow after the participant has finished writing.

Touch the 'Take a picture' button to take picture of copied words once finished.

Touch 'ok' to accept picture or take a new if needed.

And then touch to return to the main screen of the application.

27. Dictation (1-words and 2-phrases)

Provide the participant with paper and pencil. When it's complete, touch Touch the 'Take a picture' button to take picture of written words once finished. Touch 'ok' to accept picture or take a new one if needed.

And then touch to return to the main screen of the application

28. Reading comprehension for words

To start, touch the screen after the instructions have been given to the participant. Participant is required to touch the image that best matches the word presented (pages will change automatically once an image has been selected). Complete all items in this subtest. Once the subtest is completed, touch

to return to the main screen of the application.

29. Reading comprehension for sentences

To start, touch the screen after the instructions have been given to the participant. Participant is required to touch the image that best matches the sentence presented (pages will change automatically once an image has been selected).

Complete all items in this subtest. Once the subtest is completed, touch to return to the main screen of the application.

30. Writing

Provide the participant with a paper and pencil. When it's complete touch Touch the 'Take a picture' button to take picture of written words once finished. Touch 'ok' to accept picture or take a new one if needed.

And then touch to return to the main screen of the application