

TBI Bank is a feasible assessment protocol to evaluate the cognitive communication skills of people with severe TBI during the subacute stage of recovery

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What is TBI Bank?

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Users:


- MrD.cha [icon] [+]
- bud.cha** [icon] [+]
- jen.cha [icon] [+]

Command line: TBIBank/Turkstra/

chains

Continuous playback: On: ☒ | Off: ☐

Dependent tiers: %mor: ☒



```

0  @Loc:  TBIBank/Turkstra/bud.cha
1  @Begin
2  @Languages:  eng
3  @Participants:  PAR Bud Participant
4  @ID:  eng|turkstra|PAR||||Participant|||
5  @Media:  bud, video
6  @Situation:  Lyn is off-camera asking questions and Bud is in a
7               recording studio at the hospital.
8  @Bck:  Bud is describing his accident.
9  @Comment:  The instructions said one or two tabs, and as one tab
10            didn't leave a noticeable space, I used two.
11  *PAR:  okay well . □
12  %mor:  co|okay co|well .
13  *PAR:  in a in about a month and a day it'll be two years . □
14  %mor:  prep|in det|a prep|in prep|about det|a n|month coord|and det|a n|day pro|it-mod|will
15            v:cop|be det:num|two n|year-PL .
16  *PAR:  it happened June second nineteen ninety five . □
17  %mor:  pro|it v|happen-PAST n:prop|June n|second det:num|nineteen det:num|ninety
18            det:num|five .
19  *PAR:  well okay I'll start from the beginning . □
20  %mor:  co|well co|okay pro:sub|I-mod|will v|start prep|from det|the n|beginning
21            .
22  *PAR:  I was it was my girl+friend's birthday . □
           Log in to add a comment
23  %mor:  pro:sub|I aux|be&PAST&13S pro|it v:cop|be&PAST&13S pro:poss:det|my n|n|girl+n|friend-poss|s
24            n|n|birth+n|day .
25  *PAR:  and I was I took her out to a party . □

```

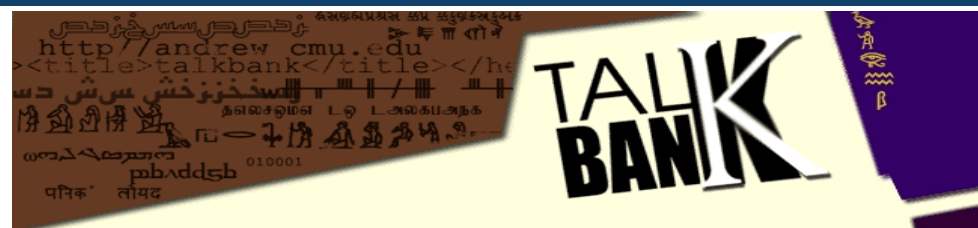
22 *PAR: I was it was my girl+friend's birthday . □

- › Originated from desire to capture real life interactions in systematic manner.
 - › Started in the area of child language with the CHILDES (Child Language Data Exchange System) Project
 - › Expanded to include study of adult language including in the area of Traumatic Brain Injury (TBI)
 - › Needed to determine a standard international protocol for capturing communication after TBI
 - › Expert consensus + Evidence =
 - › The first internationally ratified and evidence-based communication protocol for use with TBI population.
-

Communication after TBI

- › Discourse requires integrated cognitive, linguistic and social skills
- › Discourse analysis = Gold standard (Coelho 2007; Togher 2001)
- › Challenges:
 - Time consuming
 - Many choices for analysis
- › TBI Bank can help:
 - Transcribe faster and more accurately
 - Run multiple analyses with a click





The goal of TalkBank is to foster fundamental research in the study of human and animal communication. It will construct sample databases within each of the subfields studying communication. It will use these databases to advance the development of standards and tools for creating, sharing, searching, and commenting upon primary materials via networked computers.

Data	Focus Areas	Information
<u>Browsable Database</u>	<u>AphasiaBank</u>	<u>People</u>
<u>Downloadable Database</u>	<u>BilingBank</u>	<u>Digital Video</u>
<u>Database Manuals</u>	<u>CABank</u>	<u>Digital Audio</u>
<u>Ground Rules</u>	<u>CHILDES</u>	<u>Second Language</u>
<u>Software</u>	<u>Danish SamtaleBank</u>	<u>Research Usage</u>
<u>Contributing</u>	<u>DementiaBank</u>	<u>Plans and Dreams</u>
<u>Mailing Lists</u>	<u>PhonBank</u>	<u>CLAN Workshop</u>
<u>MetaMaker</u>	<u>SLABank</u>	
	<u>SocioBank</u>	
	<u>TBIBank</u>	

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TalkBank is coordinated by [Brian MacWhinney](#) (CMU).

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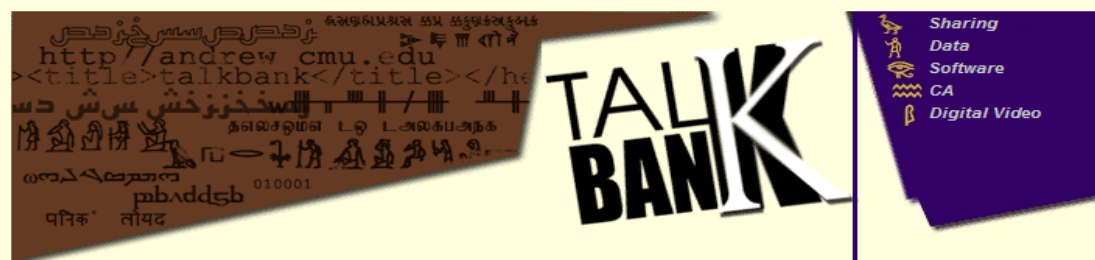


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	<u>TBIBank</u>



This page provides materials for collecting data from TBI subjects for the TBIBank Project.

Database

[Browsable Database](#)

[Transcript Database](#)

[Media Database](#)

Materials

[Articles on TBI](#)

Protocol

[Protocol List](#)

[Protocol Instructions](#)

[Full Protocol](#)

[Troubleshooting](#)

Protocol Results

[Coding Sheet for Investigator Administration](#)

[Coding Sheet for Self Administration](#)

[Coding Sheet to Supplement Self Administration](#)

[Excel Spreadsheet for Data](#)

[Excel Spreadsheet for Data \(blank\)](#)

[Test Results Spreadsheet](#)

[Test Results Spreadsheet \(blank\)](#)

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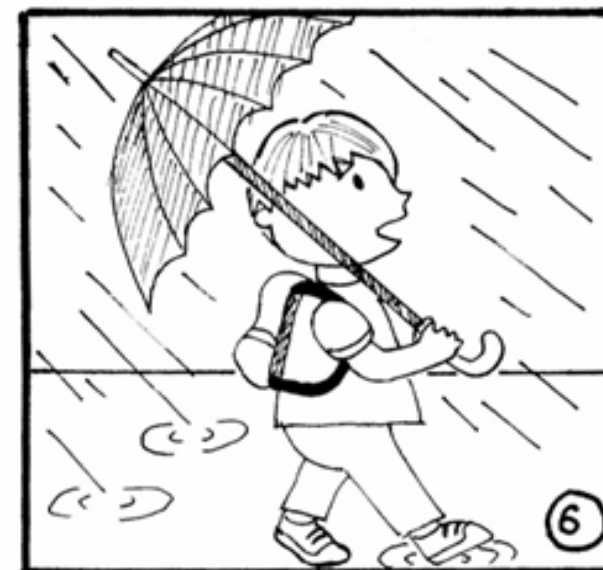
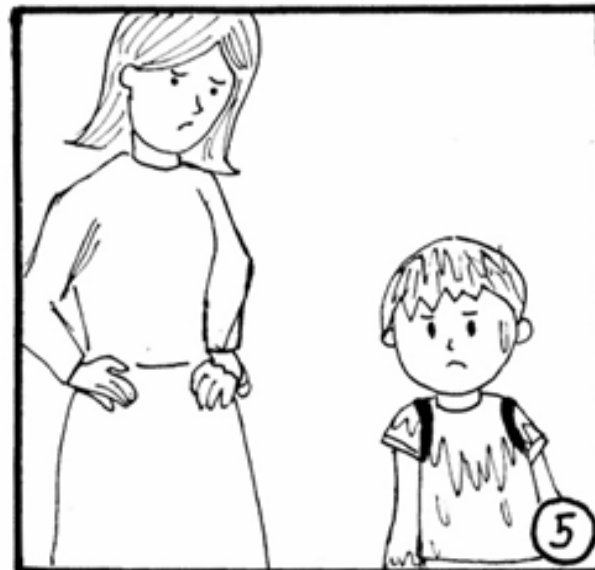
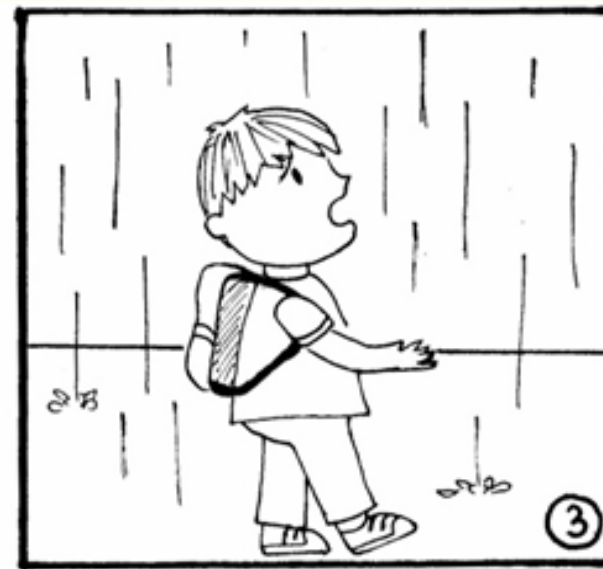
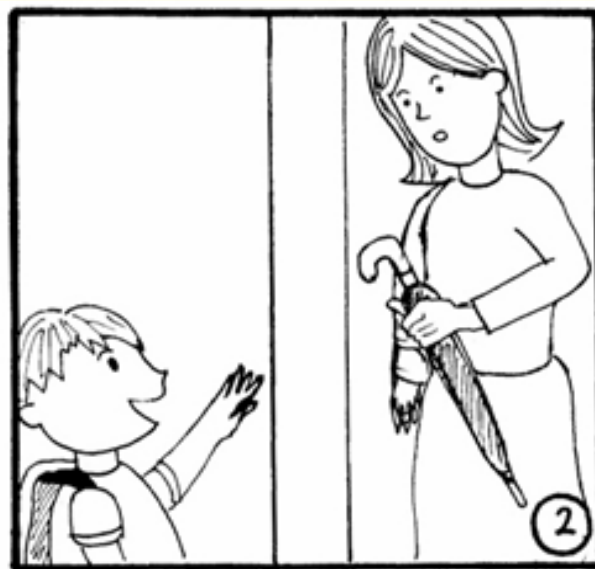
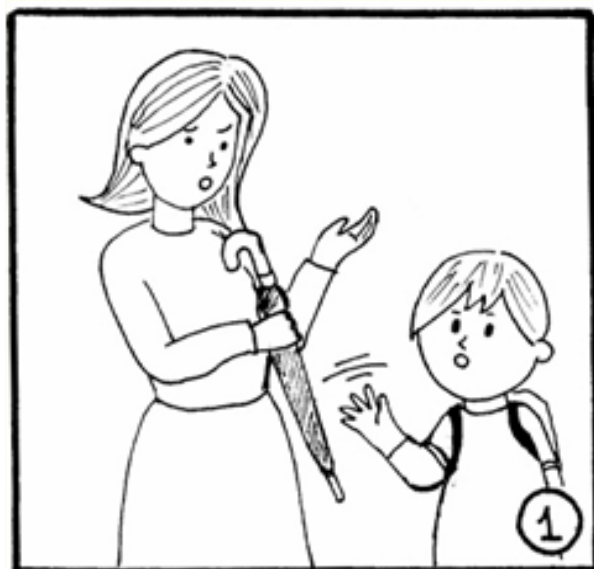
Monologic Discourse Tasks

- ›I. Free Speech Samples (Brain Injury Story & Important Event)
- ›II. Picture Descriptions (Broken Window; Refused Umbrella & Cat Rescue)
- ›III. Story Narrative (Cinderella)
- ›IV. Procedural Discourse (Peanut Butter & Jelly Sandwich or similar)



Example: Important event

- › Thinking back, can you tell me a story about something important that happened to you in your life? It could be happy or sad or from any time -- from when you were a kid or more recently.”
- › If no response in approximately 10 seconds, prompt:
- › "For instance, you could tell me about a trip you took or something about your family or your work -- anything."









- › Aphasia Bank Repetition Test (2007)
 - › Verb Naming Test (from the Northwestern Assessment of Verbs and Sentences-Revised, Field Test Version)
 - › Boston Naming Test, Second Edition, Short Form (2001)
 - › Western Aphasia Battery-Revised (2007) -- AQ only
 - › Optional - Verbal Fluency (F, A, S).
 - › Repeatable Battery for the Assessment of Neuropsychological Status (1998)
-

- 1 Is it feasible to conduct the TBI Bank protocol with TBI participants during the sub acute phases of recovery (i.e. at 3 months and 6 months post injury)?
- 2 What types of computerised language tools are available on the TBI Bank website to evaluate monologic discourse samples?

- › Longitudinal communication recovery study
- › N=48 participants with severe TBI were assessed using the TBI Bank protocol at 3 months
- › N=53 participants were assessed at 6 months

At 3 months

- › 45/48 completed the full protocol
- › 3/48 partially completed the protocol

At 6 months

- › 51/53 participants completed the full protocol
- › 2/53 partially completed the protocol

- Participants were **less likely** to complete:
 - ❖ The Aphasia Bank Repetition Test
 - ❖ Describing an important event

- **All participants completed:**
 - ✓ Cinderella Story
 - ✓ Recovery narrative
 - ✓ Procedural discourse task (making a Cheese and Vegemite sandwich)

@G: brain injury

*INV: &um to start with can you tell me &ah what you remember about when you had your brain injury ?

*PAR: when I had the brain injury ?

*INV: &mhm .

*PAR: and when or how I got it ?

*PAR: &ah .

*INV: &um either .

*PAR: either okay .

*PAR: as a diabetic .

*PAR: &um the day I actually got hit by the car I don't remember a thing for about the first six months .

*PAR: so it's got closer towards the end of the &s &oh six weeks .

*PAR: it's probably closer to sixth week .

*PAR: the start of the sixth week when the brain started functioning .

*PAR: and everything just started coming to .

*PAR: I [/] I remember like my daughter being there .

MLT for Speaker: *PAR

MLT (xxx, yyy and www are EXCLUDED from the word count)

Number of: utterances = 233, turns = 27, words = 1497

Ratio of words over turns = 55.444

Ratio of utterances over turns = 8.630

Ratio of words over utterances = 6.425

473 Total number of different item types used

1521 Total number of items (tokens)

0.311 Type/Token ratio

87 the
52 I
51 and
48 to
36 a
26 it
24 of
21 just
17 so
17 that
17 there
17 you
16 in
16 she
14 but

TBI Bank

- › Diagnostic tool
- › Feasible for use with participants in the subacute stages of recovery
- › Objective discourse measures from computerised analysis
- › Aims to reduce participant burden in long term
- › Shared international database to foster collaborative research activity
- › Interested parties can contribute discourse to the repository
- › Tool for students and researchers to study spoken discourse

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