

ALIT Coding Manual
Project ImPACT

ALIT Coding Manual

What is the ALIT measuring?

The raw score collected from the ALIT represents the child's ability to spontaneously imitate very simple motor actions.

Select the Media

Consult the ImPACT Coding Log to determine which video to code. The Log is located at the following location:

Krupa → ImPACT Study → Assessment Team → Coding → ImPACT Coding Log.xlsx (ALIT Tab)

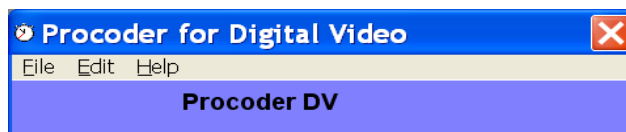
Procoder

Procoder will be used to playback the media and to time the coded tasks while you manually code the ALIT using a score sheet.

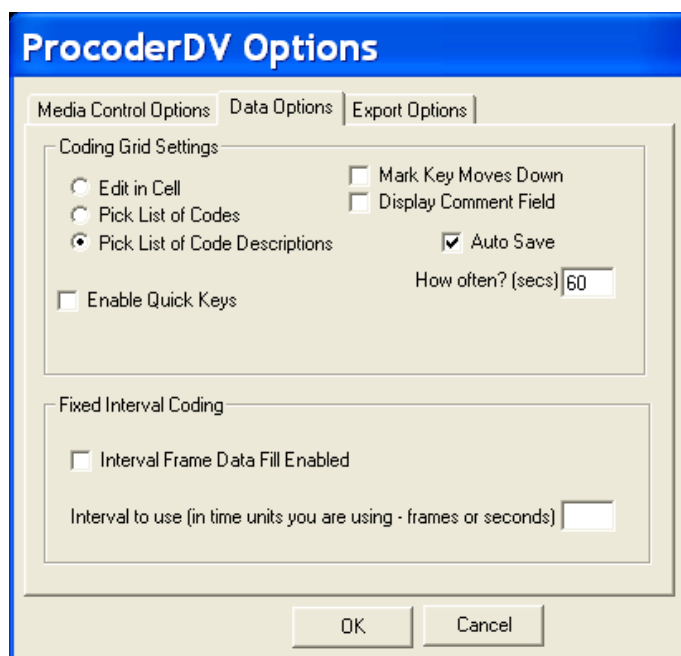
Please see the following information for setup, general use, and keyboard shortcuts.

A. Setting Options for Procoder

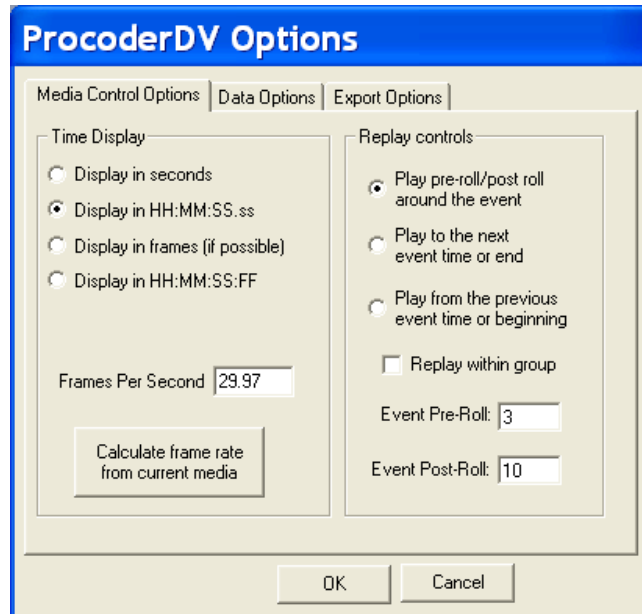
1. Open Procoder. The Procoder menu bar looks like the following:



2. Select 'Edit > Options' to get the following dialogue box:



3. Select the 'Media Control Options' tab and the settings:
 - a. 'Time Display' → 'Display in HH:MM:SS.ss'
 - b. 'Frames Per Second' → 29.97
 - c. 'Replay controls' → 'Play pre-roll/post roll around the event'
 - d. 'Event Pre-Roll' → 3
 - e. 'Event Post-Roll' → 10



4. Copy the media file that corresponds with the selected assessment from the media server (NAS-2) onto your hard drive
 - a. NEVER link a Procoder transcription file with a media file on the media server. Doing so can result in corrupting the media file.
 - b. Store the copied media file into a designated folder on your desktop
 - c. Remove the media from your desktop folder after you've completed coding by placing it in the Recycle Bin. The original media file will still be accessible on the network.

B. Using Procoder to code your media

1. Open Procoder
2. Open a new *transcription* data file by selecting 'File > New > Transcription Data File'
3. Name the transcription file using the following convention, separating each component with a hyphen.
 - a. Site initial + Research ID# (V101, U309)
 - b. Time of visit (T1, T2, T3, T4)
 - c. Procedure initials (ALIT)
 - d. Coder's initials, first and last

- e. End the file name with “-reliability” if this is a reliability check by a second coder.
 - f. Save the file to a designated folder on your computer.
 - a. “V101-T1-ALIT-mw “ for a primary coded file or “V107-T1-ALIT-ec-reliability” for a reliability coding file.
4. Fill out the information in the ‘File Info’ tab (illustrated below):
- a. ‘Subject Identifier’ → Site initial + Research ID# (Ex: V104, U304)
 - b. ‘Session Date’ → Date of Assessment (MM/DD/YY)
 - a. You may have to watch the beginning of the video to get the date from the assessor’s announcement, then go back and fill in this information.
 - c. ‘Session Time’ → The time-visit of the appointment
 - a. In the Impact Study, the ALIT occurs at each Time period (T1-T4).
 - d. ‘Location’ → The initials of the site where the assessment was recorded
 - a. Vanderbilt University = “VU”
 - b. University of Washington = “UW”
 - e. ‘Session Code’ → The initials of the assessment (ALIT)
 - f. ‘Observer/Coder’ → Your initials
 - g. ‘Date Started’ → Date you began coding this file
 - h. ‘Date Completed’ → Date you finish coding the file
 - a. While you *can* start coding a file and finish it at another time, be certain that the length of time between ‘Date Started’ and ‘Date Completed’ is no longer than two days. Never start coding a file on a Friday afternoon if you cannot finish coding it before the weekend.

V101-T2-ALIT-cb.pdv

File Media Control Data

Save Export Media Replay Seek Delete Insert Mark Add Row

File Info Data

Start Frame:

Subject Identifier: V101

Session Date: 6/4/15

Session Time: 2

Location: VU

Session Code: ALIT

Observer/Coder: cb

Start Time:

End Time:

Date Started: 1/11/16

Date Completed: 1/11/16

Notes:

Media File: C:\Users\bushct1\Desktop\ALIT coding Manual\V101-T2-ALIT.mp4

Source is DVD Player

Code File:

[Click here to calc length](#)

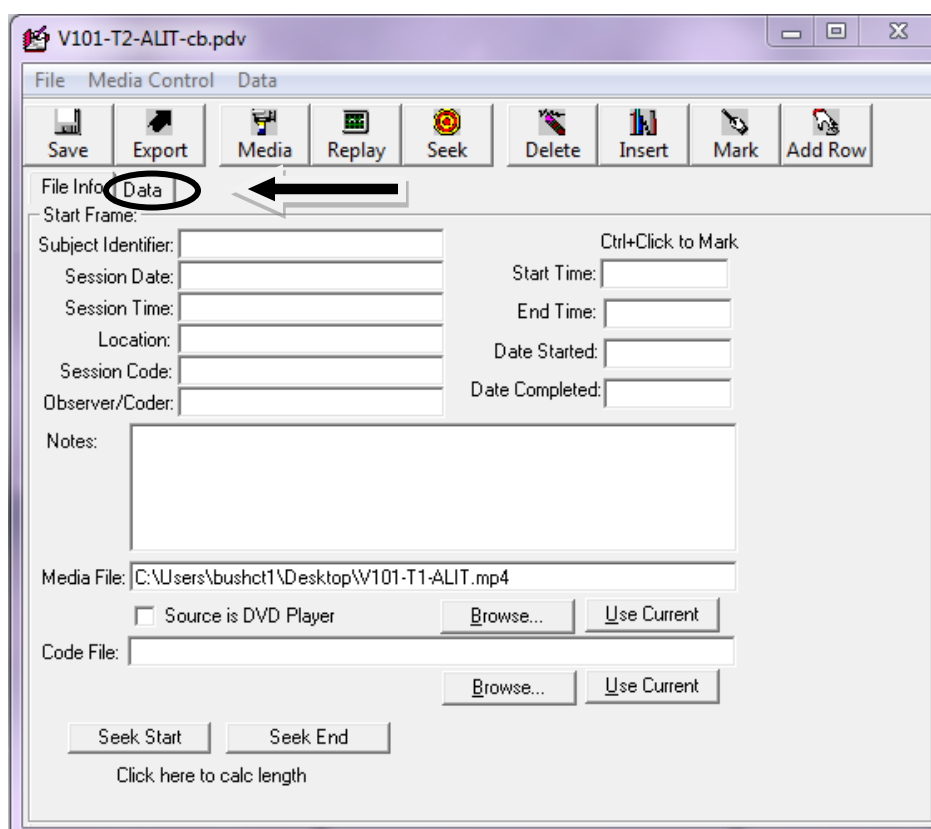
5. Link the media file

- a. Under 'Media File' in the 'File Info' tab, select the 'Browse' button.
- b. Browse to where you saved your copy of the media file and select the target video.

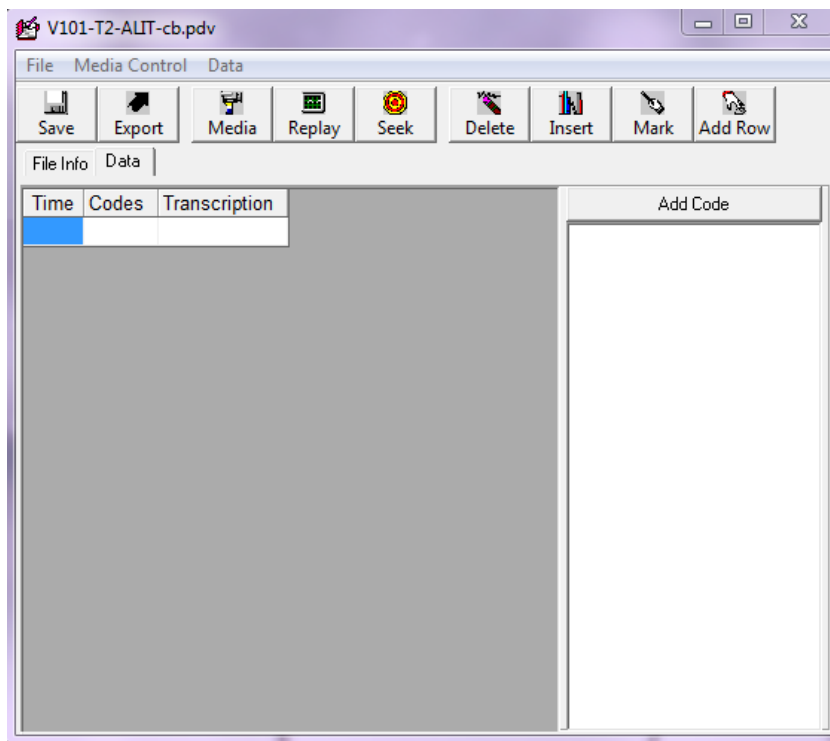
C. Procoder Controls and Keyboard Shortcuts

1. Getting Ready to Code

- a. Make the media file visible
 - a. Select the 'Media' button (it has an image of a hand holding a camcorder over the label 'Media') – this should make the media file open through Procoder.
- b. In order to play the video while you manually code the ALIT, you must click on the Data tab at the top of the Procoder File box:



- c. Now you will have a Video screen where your media is displayed and a Transcription screen that looks like this:



2. Controls while coding

a. To begin playing media

- Use the mouse and place your cursor in any cell of the Transcription screen (Time, Codes or Transcription). **In order to manipulate the video your cursor must always be in a cell in the Transcription screen or framing the cell with a bold border.**
- Press **Ctrl+D** on the keyboard.

b. To stop playing/pause media

- Make sure the cursor is in the 'Time,' 'Codes,' or 'Transcription,' cells in the transcription window.
- Press **Ctrl+F** on the keyboard.

c. To stop the media and make a note in ProCoder or to **time an event** make sure your cursor is in the correct position (not highlighting a cell blue, but rather framing it with a bold border).

- Press **Ctrl+X** on the keyboard.
- The video will stop at the time mark you've selected.
- The time will display in a newly created row at the bottom of the transcription rows.
- You may click in the cell and write an observation.
- This time also serves at the "pivot" for REPLAY and SEEK features in ProCoder.
- To use this feature to time an event, you will press **Ctrl+X** at the beginning of the event, press **Ctrl+D** to play the video, and then press **Ctrl+X** again to mark the end

of the event. This will allow you to calculate how long it took the child to complete the play action coded for this measure (if needed).

- d. To pre-roll the media in 3-second intervals.
 - Begin by pausing the media by pressing **Ctrl+F**, then press **Ctrl+B** to pre-roll the media in 3-second intervals. You may use **Ctrl+B** multiple times in a row to locate the event you would like to view.

3. List of keyboard controls to manipulate media playback

Ctrl+A = Pre-roll (3 sec.) & stop (at 10seconds)

Ctrl+B = Pre-roll & play (3 sec. pre-roll that continues to play until stopped)

Ctrl+D = Play

Ctrl+E = Mark (no stop)

Ctrl+F = Stop

Ctrl+G = Go to start

Ctrl+H = Hide or unhide selected columns

Ctrl+K = Delete current row

Ctrl+N = Insert a row

Ctrl+M = Add a row

Ctrl+R = Find/Seek

Ctrl+X = Stop & mark

F5 = $\frac{3}{4}$ speed

F12 = Sort Data Grid by Time

The Procedure

The ALIT consists of 8 items. Four “put in” tasks and four “take out” tasks. These tasks occur in a random order each time the ALIT is administered. The examiner demonstrates the task (put in or take out), and then hands the materials to the child. The child is encouraged to imitate the examiner’s demonstration exactly like the examiner performed the task.

You will know the procedure has begun when the examiner states, “start coding here.” If the examiner forgets to say “start coding here,” use the first “put in” or “take out” task to make a judgement of when the procedure begins.

During the ALIT there is a turn-taking, warm-up activity, which typically uses a drum, xylophone or squeaky toy. This warm-up activity is not scored. ALL scored tasks utilize clear plastic bowls and small toys.

The ALIT is complete after all 8 tasks (4 put in and 4 take out) have been completed or the examiner says “stop coding here.”

Coding: Also see Appendix A

For each task presented, child responses will be assigned a score ranging from 0 to 2, depending on the extent to which child responses resemble the target acts (e.g., putting an object into or taking it out of a container), as follows:

Score 2: Child performs the action completely within 5 seconds of touching the toys.

Child performs the action completely within 5 seconds of touching the toys.

Performing the act completely means the following:

- a. Put in: The child puts the toy in the bowl (the object passes the upper lip of the bowl completely) and the child releases the object completely into the bowl.
- b. Take out: The child removes the object from the bowl (the object passes the upper lip of the bowl completely), and places it on the table releasing the object completely on the table top.

Score 1:

1. Child shows a “delayed” response by performing the action completely (as defined above) **after 5 seconds, but within 20 seconds** of the child touching the items.

OR

2. Child shows an “incomplete” response. During a ‘Put In’ task, the child puts the toy in the bowl (i.e., the object passes the upper lip of the bowl completely), but does not release the object into the bowl. During a ‘Take Out’ task, the child removes the object from the bowl (i.e., the object passes the upper lip of the bowl completely), but does not release it onto the table. **Start timing the task, when the child touches the items.**

Score 0:

1. Child does not perform the action (“take out” or “put in”) within the 20 seconds allotted. For example, the child rejects the items, ignores the items, or plays with the items without performing the modeled task. **Start timing the task, when the child touches the items.**

2. If for some reason the child presents an unorganized response (picks up the items and waves them in the air or moves the items to the side of the table), the examiner may place the items in front of the child up to two more times before removing the toy and bowl to present the next task.

Coding Special Examples

- If the child dumps out the toy without touching it, the item is scored “0”.
- If the child throws the toy into the bowl, it can be scored a “1” or a “2” depending on the timing of the release of the toy into the bowl. <5 seconds = 2 and >5 seconds = 2.

Marking Time & Using the Score Sheet

When using Procoder, follow this procedure to accurately time each item and to make notes about the child's behavior. These notes will also aide in the manual scoring of the tasks on the score sheet.

1. Mark (using Ctrl+X) when:

The child touches the materials and label in the cell whether this is an "in" or an "out" item. Also note any behaviors that are relevant to coding the task, e.g. actions the child performs with the objects.

2. Mark (using Ctrl+X) again, when:

a. the child completes the action, releasing the toy into the bowl completely (even briefly) or setting the toy on the table, fully releasing it (even briefly). In this instance, make a comment regarding the child's action and how long it took to complete it.

OR

b. the child does not complete the action and the examiner touches the materials to *remove them*. Sometimes the examiner may touch the bowl to stabilize it in order for the child to complete the action. This does not constitute the end of an item. The examiner may also say "my turn", but mark the end of the item, using Ctrl+X **when the examiner touches the bowl**.

The timing between Step 1 and Step 2 will tell you how long it took the child to complete the item and will aide in determining what score is assigned to the item.

3. Once you have marked the timing for an item and made notes in Procoder, score the item on your score sheet.

Complete these three steps for all 8 items.

Your Procoder file will look like this:

Time	Codes	Transcription
00:00:44.93		out/takes out, shakes, puts back in, shows, shakes, gives to examiner
00:00:57.28		trial ends
00:01:08.22		in/taps block,
00:01:09.97		puts in and releases <5 sec (on purpose?) takes out and plays
00:01:35.43		in/picks up, shakes,
00:01:46.71		puts in and releases >5 sec
00:01:56.98		out/picks up, makes bunny hop "hop", "hi"
00:02:07.56		trial ends
00:02:18.36		out/takes out,
00:02:20.97		sets on table and releases <5 sec
00:02:37.15		in/picks up
00:02:39.04		puts in and releases <5 sec
00:02:52.28		in/picks up and drops "oops"
00:02:59.28		puts in and releases >5 sec
00:03:10.46		out/picks up, places on table - does not release, puts in - pretend play!
00:03:29.12		trial ends

And your score sheet will look like this:

Participant ID U301 Time Period T-2 Date 1/12/16ALIT Score Sheet

Task Presented	Score
Put In 1	2
Put In 2	1
Put In 3	2
Put In 4	1
Take Out 1	1
Take Out 2	1
Take Out 3	2
Take Out 4	1
Total	11

Highest Scored "In" Task: 2
 Highest Scored "Out" Task: 2
 Sum of Highest Tasks: 4

This number is entered
into REDCap

This number is entered into REDCap.

Scoring versus "Giving Credit"

This code is a good example of scoring behavior versus "giving credit" for child responses. It can be easy to feel like you are not "crediting" the child for an action, especially when a score of "1" is assigned to a child who picks up an item for an "out" task (even if they don't release it on the table), and yet a score of "0" is assigned to the same child who picks up an item for an "in" task (not releasing it into the bowl).

When coding any measure it is helpful to consider that we are not taking something away from a child's score in this kind of instance, we are actually assigning a score based on a description of the child's behavior, which is related to variables that are important to the study.

How to score an ALIT when an item(s) is missing

There may be occasions when an examiner administers more or less than 4 items of "Put In" or "Take Out." In these cases please follow the following guidelines.

When 1 item is missing:

One item is typically missing because only 7 items were administered OR because the examiner administered 5 of one condition (in or out) and 3 of the alternate condition. If the examiner only administered 7 items, the 8th un-administered item is automatically scored a zero, and then the remaining items are summed. See the example below:

Task Presented	Score
Put In 1	2
Put In 2	1
Put In 3	2
Put In 4	1
Take Out 1	1
Take Out 2	1
Take Out 3	2
Take Out 4	not administered = 0
Total	10



This number is entered into REDCap.

If the examiner administers 5 tasks of one condition and 3 of the alternate condition, score the first 4 tasks of one condition and discard the 5th one. Likewise the missing task in the alternate condition is scored a zero and then the “scored” tasks are summed. See example below:

Task Presented	Score
Put In 1	2
Put In 2	1
Put In 3	2
Put In 4	1
Take Out 1	1
Take Out 2	1
Take Out 3	2
Take Out 4	not administered = 0
Total	10

**Put In 5 administered
Score = 2 NOT included in Total**



This number is entered into REDCap.

When 2 items are missing:

If the examiner fails to administer 2 items, either in different tasks or the same task, the ALIT is not score-able. The **code 555** should be entered into the REDCap database. See below for an example:

If any of these scenarios arise when you are coding, please alert the examiner so that they can be mindful in the future of following the protocol.

Task Presented	Score
Put In 1	2
Put In 2	1
Put In 3	2
Put In 4	not administered
Take Out 1	1
Take Out 2	1
Take Out 3	2
Take Out 4	not administered
Total	555

This number is entered into REDCap.

Coder Protocols:

- A. Determine who will be the primary coder and who will perform reliability checks (or be the “reliability coder”).
1. The primary coder will do the majority of coding, but both primary and reliability coders should follow all “Coder Protocols.”
 2. It is possible for there to be more than one primary coder. The primary coders will then be responsible for completing regular reliability checks on one another.
- B. Code in a quiet place with the headphones pre-approved by your PI.
1. Use Sony Professional MDR-7506
 2. Never use earbuds or non-approved headphones to code a sample
 3. Limit distractions:
 - a. Turn cell phone on silent/off, minimize/close-out email, close door, and keep noises in office to a minimum.
 - b. Never code while listening to music
- C. Viewing Items
1. You may watch each item up to 3 times (if needed) in order to determine how the child responded to the examiner’s model of the “put in” or “take out” task, or to accurately time the event.
 2. Do not view each item more than 3 times because it may interfere with reliability. You should be able to make an informed decision after watching the media up to 3 times.
- D. Finishing a Primary coded file: Once a video file has been completely coded through ProCoderDV, take the following steps:
1. Save the primary .pdv to a specific folder designated on your computer.
 2. Place a copy of the completed .pdv file on the network:
 - Krupa → Impact Study → Assessment Team → Coding → ALIT Coded Files
 3. Delete the copy of the video from your computer (NOTE: the video **should still be saved on PRSA4!**).

4. Enter the following information into the Impact Coding Log:
 - a. Initials
 - b. Date coded
5. Ensure your ALIT Score Sheet is completed and placed in the appropriate location (to be determined by coding staff).

E. Reliability

1. In this project, 20% of all coded files will be coded for reliability; once a set of 5 video files has been collected, one of the 5 files will be selected randomly for reliability.
 - a. To be considered reliable, the ratio of the total scores from the primary and reliability samples must be greater than or equal to 0.85 (small/large).
 - b. All agreement checks during the first year of coding for the Impact Study need to be followed by a discrepancy discussion of items that are scored differently. Discrepancy discussions are to serve as a training context and an attempt to improve the coding manual. After the first year of coding (or staff hiring period), discrepancy discussions can be limited to sessions at which lower than .85 small/large ratio is derived.

F. Finishing a Reliability coded file: Once a reliability video file has been completely coded through Procoder DV, take the following steps:

1. Save the reliability .pdv to a specific folder designated on your computer.
2. Place a copy of the completed .pdv file on the network:
 - Krupa → Impact Study → Assessment Team → Coding → ALIT Coded Files
3. Delete the copy of the video from your computer (NOTE: the video **should still be saved on PRSA4!**).
4. Enter the following information into the Impact Coding Log:
 - a. Initials
 - b. Date coded
 - c. Reliability ratios

G. Data Entry

After reliability for the selected file is complete, the set of 5 files will be ready for data entry. You will enter the sum of all 8 items administered and you will enter the sum of the highest “in” trial and the highest “out” trial. See the REDCap data entry manual for further instructions.

H. Unreliable files

1. If the file is unreliable, each coder must stop coding samples until the two coders can meet to discuss all discrepancies between the files.
2. Together, the primary and reliability coders will discuss the coders’ discrepancy forms and review the video file side-by-side.
3. If the discrepancies are large, they may choose to code the video file side-by-side to create a consensus file.
 - Labeled: Project ID – Time period – Test name - Coders’ initials – consensus

- Ex: V103-T1-ALIT-mwec-consensus

4. If the two coders have three consecutive files that are unreliable, both coders must retrain and obtain three consecutive files at reliability before they can code again independently as primary coders.

Appendix A

Coding Definitions

Score 2: Child performs the action completely within 5 seconds of touching the toys.

Child performs the action completely within 5 seconds of touching the toys.

Performing the act completely means the following:

- a. Put in: The child puts the toy in the bowl (the object passes the upper lip of the bowl completely) and the child releases the object completely into the bowl.

- b. Take out: The child removes the object from the bowl (the object passes the upper lip of the bowl completely), and places it on the table releasing the object completely on the table top.

Score 1:

1. Child shows a “delayed” response by performing the action completely (as defined above) **after 5 seconds, but within 20 seconds** of the child touching the items.

OR

2. Child shows an “incomplete” response. During a ‘Put In’ task, the child puts the toy in the bowl (i.e., the object passes the upper lip of the bowl completely), but does not release the object into the bowl. During a ‘Take Out’ task, the child removes the object from the bowl (i.e., the object passes the upper lip of the bowl completely), but does not release it onto the table. **Start timing the task, when the child touches the items.**

Score 0:

1. Child does not perform the action (“take out” or “put in”) within the 20 seconds allotted. For example, the child rejects the items, ignores the items, or plays with the items without performing the modeled task. **Start timing the task, when the child touches the items.**

2. If for some reason the child presents an unorganized response (picks up the items and waves them in the air or moves the items to the side of the table), the examiner may place the items in front of the child up to two more times before removing the toy and bowl to present the next task.

3. Start timing the task each time the examiner places BOTH items (bowl and toy) in front of the child in the case of the “unorganized” response. If only the bowl is repositioned in front of the child, do not start timing the task again.

Coding Special Examples

- If the child dumps out the toy without touching it, the item is scored “0”.

- If the child throws the toy into the bowl, it can be scored a “1” or a “2” depending on the timing of the release of the toy into the bowl. <5 seconds = 1 and >5 seconds = 2.

Participant ID _____ Time Period _____ Date _____
 Coder's Initials: _____ P R

ALIT Score Sheet

Task Presented	Score
Put In 1	
Put In 2	
Put In 3	
Put In 4	
Take Out 1	
Take Out 2	
Take Out 3	
Take Out 4	
Total	

Highest Scored "In" Task: _____

Highest Scored "Out" Task: _____

Sum of Highest Tasks: _____

Participant ID _____ Time Period _____ Date _____
 Coder's Initials: _____ P R

ALIT Score Sheet

Task Presented	Score
Put In 1	
Put In 2	
Put In 3	
Put In 4	
Take Out 1	
Take Out 2	
Take Out 3	
Take Out 4	
Total	

Highest Scored "In" Task: _____

Highest Scored "Out" Task: _____

Sum of Highest Tasks: _____