

CENTER FOR AUTISM RESEARCH EXCELLENCE

Boston University

Eliciting Language Samples for Analysis-Adolescent

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ADMINISTRATION MANUAL

Eliciting Language Samples for Analysis- Adolescent

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Introduction: ELSA-A

The *Eliciting Language Samples for Analysis – Adolescent* version (ELSA-A) was developed at Boston University’s Center for Autism Research Excellence by Dr. Helen Tager-Flusberg and colleagues. This protocol was created to address the need for expressive language outcome measures in individuals with autism spectrum disorders (ASD). ELSA-A is intended for older children and adolescents ages 4-20 years who are minimally to low-verbal. The ELSA-A protocol contains 8 interactive activities used to collect and measure *expressive language* in older children and adolescents with a range of different developmental abilities. Utilizing engaging, age-appropriate activities that fall into the most commonly used language elicitation contexts: conversation, play, and narrative, ELSA-A provides multiple opportunities to produce language. The protocol is administered in a naturalistic and play-based setting that aims to maximize the participant’s opportunity to speak across a variety of fun and interactive activities. If interested in measuring expressive language in younger children, please review our ELSA-Toddler (ELSA-T) manual: <https://sites.bu.edu/elsa/elsa-t/manual-2/>.

Administration

ELSA-A should be administered within 15 to 25 minutes. The 8 activities can be completed in any order. The length of the activity will vary depending on the participant’s interest. A high fidelity ELSA-A administration requires administering all 8 activities and incorporating at least 5 open-ended questions across at least three different activities (please refer to p.12 for specific details about ELSA-A administration fidelity). ELSA-A can be administered by clinicians, researchers, caregivers, and teachers.

If necessary, behavioral support (caregiver, research staff, etc.) can be present in the testing room. The administrator should instruct the behavioral support to not participate in the activities or interact with the participant. Only language exchanged between administrator and participant will be measured. If the participant interacts with the behavioral support, the participant should be directed back to the activity. By directing the participant’s attention back to the administrator we can optimize language elicitation measured.

ELSA-A Materials

The ELSA-A materials kit includes the materials listed below (pg. 3). The materials were chosen based on their ability to facilitate play, elicit verbal comments, and to engage participants of a wide age range. The materials chosen are developmentally appropriate, engage and interactive, gender neutral, and readily accessible.



Cultural Adaptability of ELSA-A



ELSA-A is designed to be a naturalistic play-based set of activities. Having been developed in the Northeastern United States, some of the activities may not be well-suited for participants in different regions and countries. We encourage administrators to adapt the activities in the ELSA-A to make them culturally appropriate. By reviewing the description and purpose of each activity, you can adapt the activity to augment its cultural appropriateness. We encourage administrators to share their adapted activities. This will enable us to provide these adapted manuals to other administrators via our website: <https://sites.bu.edu/elsa/>. The ELSA-A team can be contacted at elsacare@bu.edu.

ELSA-A Protocol

8 Activities:

I. Leaf Falling

Description: *Leaf falling* is an activity intended to elicit turn-taking between the administrator and the participant. This is a joint gross motor activity that gives the participant an opportunity to interact with the administrator by labeling various parts of a tree.

Materials:

- Paper Tree
- Paper Leaves

Set up and Instructions:

1. Before beginning administration, hang your paper tree with leaves and leaves on a wall.
2. Hold the apples outward and in front of you.
3. Let the apples go after counting down.
4. Encourage the participant to play with the leaves and/or count along with you as you hang/remove leaves from the tree.

Suggested lines:

- Look, this is a (pause 3 seconds)...tree!
- Look, these are (pause 3 seconds)...leaves!
- What can we do with this/these?
- What happens to the leaves in the fall?
- How many leaves fell from the tree?

II. Planting an Acorn

Description: *Planting an Acorn* is a fine motor pretend-play task. The task is intended to give the participant an opportunity to narrate his/her actions while working together with the administrator.

Materials:

- Paper tree set up: Paper tree, leaves, and acorns

- This is the same tree used in the Leaf Falling Activity
- Shovel

Set Up and Instructions:

1. Return to the tree hanging on the wall.
 2. Place acorns under the tree.
 3. Direct the participant's attention to the acorns.
 4. The goal is to create a circumstance where the acorns can be planted and grow into the tree.
- You may have to model this for the participant.



Suggested lines:

- What's on the ground?
- What can we do with this/these?
- What else can we do?
- What else can we look for?
- Look, this is an (pause 3 seconds)...acorn, shovel, tree, etc.!

III. Hide and Seek Animals

Description: *Hide and Seek Animals* is a task intended to elicit descriptions of hidden animals. Together the administrator and the participant search for hidden paper animals using pictures of the animals displayed on a tablet. Using pictures on tablet may be beneficial for participants who may benefit from visual assistance in finding and identifying the animals. Animals chosen for this activity should be familiar to the participant.

Materials:

- Paper animals (i.e. bird, squirrel, raccoon)
- Tablet

Set Up and Instructions:

1. Hide paper animals around the room prior to administration of ELSA-A.
2. Use the tablet pictures as visual prompts to ask the participant to "find the match."
3. If the participant is having difficulty finding the paper animal, use the tablet pictures as a visual guide and move it closer to where you have hidden the animal.
4. If the participant is still unable to locate the paper animal, you may verbally prompt them to the location of the animal. Locating and identifying the animals is not based on accuracy (properly naming or needing to independently locate the animal), rather it provides opportunities to elicit more language in an interactive context. We want participants to enjoy these activities.

Suggested lines:

- We have some animal friends hiding in the room. Can you help me find them?
- Here is a (show photo) – what do you see?

- Where should we look?
- What would you name this animal?
- Where have you seen [type of animal] before?
- What sound does [type of animal] make?

IV. Discovering and Helping Animals

Description: *Discovering and Helping Animals* is a loosely-structured pretend play activity. The participant and administrator can engage in imaginative play by interacting with the toys and animals as if on a camping adventure. This gives the participant the opportunity to describe the toys, inquire about the materials, and express their thoughts about what is occurring during the camping adventure. The animals chosen for this activity are commonly found in zoos, media, and literature. The familiarity of materials allows for more opportunities for language elicitation.

Materials:

- Compass
- Lantern
- Water Bottle
- First Aid Kit
- Toy Animals

Set Up and Instructions:

1. Use the compass to find the animals/camp site.
2. Have the participant identify and explore the animals.
3. Talk about what to do if the animals get thirsty or get hurt.
 - a. This will allow the participant to discuss ways to solve the problems (i.e. give the animals water from the water bottle, or a bandage from the first aid kit).

Suggested lines:

- Can you tell what these are?
- What else do we have?
- What can we use this/these for?
- Wow look! It is a (pause 3 seconds)...lion/tiger/giraffe/elephant!
- Which one is your favorite?
- What should we do with them?
- I think he's hurt! What should we do?
- This is an [animal type]. I think he is thirsty! What should we do?

V. Snack - Making a S'more

Description: *Snack* is a highly reinforcing activity which contains many opportunities for requesting. This activity can be used as an extension of the Discovering and Helping Animals activity, continuing with the theme of a nature adventure, and may be rewarding to the participant.

Materials:

- Graham Crackers
- Chocolate
- Marshmallow
- Toy Pan
- Toy Stove

Set Up and Instructions:

1. Begin a discussion about what foods are typically eaten while camping, on a nature adventure, or around a campfire.
2. Present the S'mores materials to the participant. This is a good opportunity to label (name) the ingredients presented and inquire about what kinds of foods can be made with these ingredients (i.e. s'mores).
3. Make a S'more with the participant utilizing the toy stove and pan.

Suggested lines:

- Let's go camping! Have you ever been camping? What do we do now?
- How do we make a S'more?
- What is your favorite part of a S'more?
- How does the S'more taste?
- What should we do next?

VI. Arts and Crafts

Description: *Arts and Crafts* is an activity that gives the participant the opportunity to express their preferences for various creative materials. For this activity you should have two art materials (i.e. markers and colored pencils) along with different coloring pages for the participant to choose from. Providing options for the participant allows for more opportunities to elicit language. This activity allows for the participant to express themselves in a creative environment while talking about their creation with the administrator.

Materials:

- Coloring pages
- Markers
- Crayons
- Colored pencils

Set Up and Instruction:

1. Provide the choice of at least two types of art materials.
2. Provide the choice between different coloring page options.
3. Allow for the participant to freely engage with the materials while engaging with the participants in conversation about the materials, in order to elicit language.
 - a. We encourage administrators to also participate in the activity using their own coloring page, when appropriate.

Suggested lines:

- This is a (pause 3 seconds)...marker/crayon!

- Tell me about your picture!
- What are you drawing?
- What color would you like now?
- Look, I have a picture. Do you know what this is?
- What do you think I should draw/color?

Bean Bag Toss

Description: *Bean Bag Toss* is a gross motor activity that allows for opportunities for requesting and turn-taking. The administrator and participant are encouraged to label the various illustrative animals and number designs on the bean bag toss board. Depending on the participants' ability, administrators can keep score, position themselves further back when tossing the bean bag, or count and add up the points together.

Materials:

- Bean Bag Toss Board
- Bean bags (at least 2 different sets of colored bags)

Set Up and Instructions:

1. Take out the bean bag toss board and the bean bags.
2. Offer the participant the choice of different colored bean bags.
3. Take turns with the participant to throw the bean bags.
 - a. Talk about what animals you are aiming at, what bean bag colors you prefer, and/or which number your bean bag landed on.

Suggested lines:

- Where can we set up the game?
- Do you know what animal/number this is?
- How do we play the game?
- What color bean bag do you want?
- The bean bag landed on the (pause 3 seconds)...giraffe/zebra/tiger/lion/monkey!
- Who goes next?

VII. Movie Shorts

Descriptions: *Movie Shorts* is a highly reinforcing activity designed to elicit language about commonly enjoyed movie shorts. This activity is intended to replace classic narration activities typically used in elicitation procedures, such as telling stories through pictures, reading a book together, etc. The videos were chosen due to their captivating and engaging storylines and their familiarity to many participants. The videos range from 3-7 minutes. The specified duration was selected as the movie shorts are sufficient enough to provide the administrator and participant with multiple conversational topics, including discussion of the plot, characters, and setting, while also maintaining the attention of the participant.

Materials:

- Tablet (with downloaded movie shorts)
- Video Choice Board (selection of video)

Set Up and Instructions:

1. Present the video choice board to the participant and ask the participant to select a short movie to watch.
2. Watch the short movie in its entirety together.
 - a. We encourage administrators to ask questions periodically throughout the movie short.
3. Have a discussion with the participant about the movie short that was just watched.

Suggested lines:

- Which movie do you want to watch?
- What's that? Who's that?
- What happened here?
- What happened to them?
- What did they do?
- Did you like it? What was the best part?

Preparation, Transitions, and Clean Up

Preparing for ELSA-A Administration

Before Administration:

Administrators should review the ELSA-A Administration materials available on our website, <https://sites.bu.edu/elsa>. This includes, reading the ELSA-A Administration Manual in its entirety, viewing the ELSA-A instructional video, and reviewing the example videos of gold-standard ELSA-A administrations. Additionally, before administration, the administrator should check with the caregiver to ensure the participant does not have any dietary restrictions. If the participant does have allergies, the administrator should provide an appropriate snack.

Suggested Lines:

We encourage administrators to review the suggested lines before administration. It is important during ELSA-A to incorporate at least 5 open ended questions across at least 3 different activities during administration. Reviewing these lines will successfully prepare administrators to incorporate these suggested lines into their administration. This allows for high levels of administration fidelity. More information on suggested lines and fidelity can be found on pg. 11.

Setting:

ELSA-A can be administered on the floor or at a table. Optimum administration would be in a small enclosed room. If this is not possible, administrators should best use their environment to limit the participant's distractions. This can be done by creating a small area free of distractions (such as other toys, tablets, etc.) designated to completing the activities. This may be a corner of a classroom, living room, table, etc.

If necessary, caregivers may be present during the administration. If caregivers are present during administration, they should be instructed not to interact or speak with their child. If their child interacts with them, the caregiver should direct their child back to the activity.

Recording ELSA-A

ELSA-A administration should be video or audio recorded. Although both video and audio recordings are helpful, we prioritize video recording of the samples. We record our ELSA-A in order to analyze the language sample using real time coding. Additionally, recordings can be used to ensure quality of data and assessment administration. More information on real time coding can be found on our website: <https://sites.bu.edu/elsa/elan-coding/>.

Transitions and Clean Up:

Transitions and Clean Up:

Transitions and cleaning up between activities provide additional opportunities to interact and chat with the participant. These opportunities allow for the administrator to clean up and prepare for the next activity while simultaneously providing opportunities to engage the participant in a conversation about his/her interests and everyday activities.

ELSA-A is intended to be a fun and interactive set of activities. Administrators should be creative with their time and language and take the opportunity to get to know and enjoy playing with the participant!

Suggested lines:

- What did you like the most?
- Are you having fun?
- Can you help me?
- What are you doing today?
- What did you do before you came here?

Note: Other personalized questions based on the administrator's interactions with the participant can be used.

ELSA-A Administration Fidelity

Assessing ELSA-A administration fidelity should be completed after the administrator has studied the administration manual, watched the instructional video, practiced the protocol, and completed ELSA-A administration. Once the administrator has administered 3 consecutive ELSA-A's achieving a fidelity score of at least 90%, they can be considered reliable. It is recommended that fidelity be monitored over the course of ELSA-A administration. We recommend rating fidelity every 5th ELSA-A administration to ensure administrators remain at a high fidelity.

There are 8 activities in ELSA-A: Leaf Falling, Planting an Acorn, Hiding and Seek Animals, Discovering/Helping Animals, Making a S'more, Arts and Crafts, Bean Bag Toss, and Movie Shorts. Administration fidelity will be scored based on the administrator administering (or attempting to administer) each activity (8 points) and using a minimum of 5 open-ended utterances directed toward the participant across at least 3 different activities (10 points). Open-ended prompts asked within the same activity will not be marked after the first one. The maximum score is 18 points. ELSA-A administration should be between 15 to 25 minutes to administer (1 point deducted each minute outside 15-25 minute range). Fidelity of administration should be monitored at regular intervals.

Below is a form that you can use to keep track of administration fidelity scores.

Instructions: Give 1 point per administered activity. Give up to 5 points for at least 5-open ended administrator utterances across 3 different activities or conversation/clean up. Deduct 1 point for every minute outside of the 15-25 minute range. Fidelity of administration should be at least 90%.

ELSA-A Administration Fidelity

Assessing ELSA-A administration fidelity should be completed after the administrator has studied the administration manual, watched the instructional video, and practiced administering the protocol at least 3 times. Once the administrator has administered 3 consecutive ELSA-A's achieving a fidelity score of at least 90%, they can be considered reliable. However, fidelity will be checked and monitored by calculating it for every 5th ELSA-A (beyond the first 3) administered throughout the project to obtain overall fidelity for 20% of the total ELSA-A's administered by the same administrator.

There are **8 activities** in ELSA-A: Leaf Falling, Planting an Acorn, Hide and Seek Animals, Discovering and Helping Animals, Snack- Making a S'more, Crafts, Bean Bag Toss, and Movie Shorts. Administration fidelity will be scored based on the administrator administering (or attempting to administer) **each activity (8 points)** and using a **minimum of 5 open-ended utterances directed toward the participant across at least 3 different activities (10 points)**. Open-ended prompts asked within the same activity will not be marked after the first one. The maximum score is **18 points**. ELSA-A administration should be between **15 to 25 minutes to administer (1 point deducted each minute outside 15-25 minute range)**.

Date		Notes:			
Administrator					
Rater					
Tape					
ELSA-A Administration Fidelity Checklist					
Activity:	Completed ✓	Activity Duration	Examples of Open-ended Prompts	Open-ended Prompts Used (✓)	Comments
Leaf Falling Activity			• What can we do with these? • Where would you put these leaves on this tree? • What happens to the leaves in the fall? • What do you like doing during the fall? • What animals do you usually see hiding in trees? • Why is that animal hiding in the tree?		
Planting an Acorn			• What can we do with these? • What happens when we plant an acorn? • Why do squirrels like acorns? • How does a tree grow? • What kinds of things grow on trees? • What do you like about planting/gardening?		
Hiding and Seek Animals			• Where are the animals hiding? • Which animals are your favorite? • What kind of pets do you have at home? • Why was the animal hiding over there? • Where would you hide the animals?		
Discovering and Helping Animals			• The animals are hurt. What should we do? • We have the first aid kit for the animals. What do you do next? • How did the animals get hurt?		

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			• What happened to the animals? The animals are hungry. What should we do? • What kinds of foods do animals like to eat? • What is your favorite thing about playing with the animals? • What kinds of animals do you like to see at the zoo?			
Bean Bag Toss			• Where can we set up the game? • How do you think we play the game? • What do we need to play the game? • What do we do now? • What games do you like playing at home?			
Crafts			• What would you like to draw? • Tell me about your picture! • What do you think I should draw (make)? • What's happening with your picture now? • Why did you pick this picture? • What kinds of arts and crafts do you like doing?			
Movie Shorts			• What are your favorite kinds of movies to watch? • What's happening here? • What did you like the most about this movie? • Why was that your favorite part of the movie? • Which characters did you like? • Why were those your favorite characters?			
Snack-Making S'mores			• What are some other snacks you like to eat? • What are snacks you don't like to eat? • What did you have for breakfast today? • What's your favorite meal of the day (breakfast, lunch, or dinner)? Why is that one your favorite? • Can you guess what my favorite snacks are? • What types of things do you like drinking when you have a snack? • Where do you make s'mores? • What do you like about s'mores? • What foods (things) do you bring with you for camping?			
Total Activity Points:		Total Time		Total Open-ended Prompts:		Overall comments about fidelity of administration:
		Administration Time (Point Deduction):				
Add up the points from above:						
Fidelity percentage:						

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