**Social Referencing and Uncertainty Experiment 3**

Setup:

****Arrange black tablecloth on large table with crayon marks in the correct locations (the center line should cross over the hole in the middle of the table)

Place large barbershop chair at one side of the table (facing away from door)

Arrange stimuli and label cards in segmented box according to condition, and place on stool next to Experimenter’s side of table

Arrange camera facing child at a 45 degree angle. Make sure entire table is in view.

Set up all chairs in back of child’s chair (make sure parent is in the camera shot)

Recruitment:

Hi! I’m a researcher from the Language and Cognition lab at Stanford, and we are doing some research here at the museum today to learn more about how toddlers learn new words. Would you like to hear more about it?

If yes: Okay, great! If you and your child participate, your child will play a game with me where I will show them different toys and objects that they may or may not be familiar with, and ask them to put one of them in a bucket. And we videotape the game so we can look back later to see how they respond. While they are doing that, you would fill out an online survey about their vocabulary. Would you and your child be interested?

If no: No problem, have a great day!

Timing:

Metronome (Blinky iPhone app; turn off auto-lock in General Settings) on 50bpm

Introduction:

Obtain consent from parent, and have parent fill out demographics form.

Tell parent, we are interested in how children perform without their parents’ help on this task, so we ask parents not to give any instruction or input during the game.

Have parent fill out card with their email address so we can follow up later about their vocabulary.

Web-CDI

Give the parent a tablet with the Web-CDI open. Let them know it will take about 25 minutes to complete. Tell them they can bring the tablet with them on the museum floor to finish.

Procedure:

To child: *Let me show you my game. I’m going to put two toys on the table, and I’m going to ask you to put one of the toys in the bucket. Remember, just put* ***one*** *of the toys in the bucket!*

***“I want you to try really hard to put the right toy in the bucket, but if you have to guess that’s ok.”***

Training trials (includes feedback)

If incorrect- “Oh no, this one was actually the \_\_\_\_”

1. (Banana and teddy bear) *“Can you put the* ***banana*** *in the bucket?*
2. (Silicone mitt and dumpling press) *“Can you put the* ***tupa*** *in the bucket?”*

*Demonstrate if child does not put object in bucket.*

*Correct child if they choose the wrong item, or put both items in bucket.*

All trials:

-Place objects simultaneously on the 2 crayon marks closest to Experimenter

* Gaze at the dot in the center of the table until saying, “Can you put the…”

-*Look, there’s a \_\_\_ here.*

*-*Wait 2 beats (based on peripheral view of metronome).

*-Can you put the \_\_\_ in the bucket?*

-Push both objects simultaneously to the 2 crayon marks closest to child (look at child after pushing)

*-Thank you!*

Rules for experimenter vocalization during trials:

* If the child is taking **excessively** long (e.g., longer than 10 seconds) to choose an object or put one in the bucket, or if the child is off-task or non-cooperative, prompt the child again with “Can you put the \_\_\_\_\_ in the bucket?”
* If the child asks which object you are referring to, respond with “Which one do you think is the \_\_\_\_\_” if necessary.
* **Otherwise, do not interrupt the child’s exploration of the items with speech.**
* **If the child seems distressed after a long period of time of not knowing which is the correct object, you can say “You can take a guess if you’re not sure.”**

End

Give child a sticker and certificate. If parent is still working on Web-CDI, you can offer the child to play with the toy of their choice, or provide coloring materials.

Debriefing

Thank you so much for participating! In this study, we are interested in the behaviors that toddlers exhibit when they are uncertain, so that’s why we gave them some easy words and some made-up words. And we are interested in whether their uncertainty behaviors are related to their vocabulary, so that’s why we asked you to fill out the vocabulary survey. We are also interested in tracking their vocabulary over the next 6 months, so with your permission we will follow-up in 3 months and 6 months with a link to complete the survey again.