

**Introduction**

## Rutgers Laboratory for Developmental Language Studies

### Acquisition, Development, and Representation of Linguistic Knowledge

#### **INFORMED CONSENT FORM – Adults, Subject Pool, Online**

You are invited to participate in a research study that is being conducted by Dr. Kristen Syrett, an Assistant Professor in the Department of Linguistics and the Center for Cognitive Science at Rutgers University – New Brunswick. The purpose of this research is to investigate what children and adults understand about aspects of meaning in their native language and how this knowledge is acquired.

In this study, we will ask you to read some words or sentences, or look at some images or videos. You will be asked to provide your judgment about these materials, make a selection given certain instructions, or follow the experimenter's directions to perform some action with the materials. Your reaction time may be monitored. You may provide your consent to be audio and/or video-recorded. Over the course of this particular study, approximately 20 to 100 participants will participate. The study lasts between 20 and 45 minutes.

You will receive course credit (extra credit or points towards the fulfillment of your experimental requirement) for your participation in this study, according to the guidelines of the subject pool and/or your instructor. If you choose not to participate, you will be offered other opportunities to earn experimental course credit and/or extra credit in your course, such as video viewing or a short report. These guidelines will be provided by your instructor and may be listed on your course syllabus.

Participation in this study is voluntary. You will not be compensated for your participation in this study. While your linguistic skills are not likely to improve from participation in this research, your responses may provide us with valuable data about the process of child language acquisition and development, and the nature of the adult grammar and language processor.

There are no foreseeable risks to participation in this study. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not entirely comfortable.

This research is confidential. *Confidential* means that we will collect information from you, including your gender, age, race and ethnicity, other expertise, and possibly your IP address, which will remain on file. This information will not be used to identify you in any way, and your IP address will not be used for any purposes other than to ensure that you do not participate in the same study twice. We use this information to understand more about our findings and the factors involved in language development and comprehension. Responses and demographic information are collected for all participants and analyzed to report trends across participants. This information will be stored in such a manner that some link between your identity and responses in the research will exist. You will be assigned an arbitrary code that will be associated with your data. Should an individual response be used as example, personal identifying information will be removed beforehand. Please note that we will keep this information confidential by limiting access to the research data and keeping it in a secure location in our lab. All electronic files are password-protected.

Our research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, no results that can be linked to an individual will be presented. All study data will be kept for the duration of the study and its publication for a finite period of time between three and ten years.

If you have any questions about the study procedures, you may contact Dr. Syrett at

Phone: 732-932-1234 | Email: [kristen.syrett@rutgers.edu](mailto:kristen.syrett@rutgers.edu)

Please fill out the following fields.

First name

Last name

4-digit SONA ID

## Training

In the following screens, you will read a series of short scenarios one by one.

Read each one carefully. At the end, someone will deliver an utterance. This will be followed by a question asking whether that person was right.

Your job is to respond YES or NO based on the corresponding scenario that you read.

You will ONLY get credit if you surpass the minimum threshold of correct responses and time spent. Surveys taking less than 10 minutes will not get credit.

We will now go through 2 examples.

Example story.

***The setting: decorating an apartment***

B and M went to the store to buy a lamp for their apartment.

When they got to the check-out, M realized that she forgot to bring her wallet.

B went to pull his out, but realized he also forgot it at the apartment.

The cashier reports, "B and M remembered to bring their wallets to the store."

*Is the cashier right?*

☐ Yes

☐ No

**Incorrect.**

They didn't remember to bring their wallets at all. Both B and M forgot their wallets at the apartment.

**Correct.**

Example story.

***The setting: a search for a book***

R is looking for a rare book on sperm whales.

He drove all over town, to three different libraries, without success.

Finally, he found the book in a used book store in a remote section of town.

His friend P calls to ask whether he finally found the book he was looking for.

R responds, "I did!"

P reports, "R found the book he was looking for."

*Is P right?*

☐ Yes

☐ No

**Incorrect.**

R did find the book he was looking for. It was in a used book store in a remote section of town.

**Correct.**

## Cyan

Sparky the dog buried his toys in the backyard last week. He hid them so well that now he cannot seem to find any. Mary and Sue, Sparky's owners, search for the toys in the yard. Their neighbors Jill and Jane are watching.

Jill asks Jane, "Where do you think they will find the toys?"

Jane says, "I think under the swing set."

After hours of searching, they find the toys behind the shed, next to the large tree, under the swing set, and under the deck. No toys were in the middle of the yard, on the side of the house, or near the mailbox.

Jill reports, "Jane predicted where they found the toys."

*Is Jill right?*

☐ Yes

☐ No

Jenna is in a sorority which is currently recruiting new members. This year, there are four pledges: Mary, Susan, Britney, and Shiela.

Jenna asks Sam, "Who do you think they will recruit?"  
Sam says, "I think Shiela."

It turns out that Susan, Britney and Shiela are really great, but Mary is a huge trouble maker and gives the sorority a bad reputation. So, Susan, Britney and Shiela are recruited, but Mary is not.

Jenna reports, "Sam predicted who they recruited for the sorority."

Is Jenna right?

- ☐ Yes  
☐ No

Davey eats too much chocolate. He went to Costco the other day and bought a bulk package of Ferrer Roche. He asks his friend Mackenzie to hide the chocolate for him.

Ruth asks Davey, "Where do you think she will hide the chocolate?"  
Davey says, "I think in the linen closet."

In fact, Mackenzie hid the chocolate in the dresser drawers, in the linen closet and inside Davey's suitcase, but not in the freezer.

Ruth reports, "Davey predicted where she hid the chocolate."

Is Ruth right?

- ☐ Yes  
☐ No

Ralph and Orcutt are gardeners. Their garden is festively decorated with garden gnomes, for which they have a particular predilection. One day, they notice that their gnomes have been vandalized. The police get involved, and are considering who to call.

Ralph asks Orcutt, "Who do you think they will call?".  
Orcutt says, "I think Gnomes Anonymous."

As it turns out, the police call the Society for Garden Well-Being, The National Gnome Association, and Gnomes Anonymous, but not other organizations.

Ralph reports, "Orcutt predicted who they called about the vandalism."

Is Ralph right?

- ☐ Yes  
☐ No

Mary has a special bucket list item she wishes to check off her list, and first on the list is to view the Northern Lights. She and her friend Abby are going on a road trip, from Maine to Alaska, and stopping in New York, and Ohio before going up to Minnesota and then Canada.

Mary's mom asks her dad, "Where do you think they will view the Northern Lights?"  
Her dad responds, "I think Alaska, Canada, and Minnesota."

In fact, they did view the Lights in Minnesota, Canada and Alaska, but not in New York and Ohio because it was too cloudy.

Mom reports, "Dad predicted where they viewed the Northern Lights."

Is Mom right?

- ☐ Yes  
☐ No

Dima and Masha are running from political turmoil in their home country. They first have to bury their most valuable possessions, to keep them safe from the government. They could bury them in the backyard of their house, in the stables down the street or in the local cemetery.

The chief of the secret police asks his lieutenant, "Where do you think they will bury their possessions?" The lieutenant says, "I think in the stables down the street and in the cemetery."

In fact, Masha buries their possessions in the stables and the cemetery, but not in the backyard.

The chief reports, "The lieutenant predicted where they buried their possessions."

Is the chief right?

- ☐ Yes  
☐ No

The psychologist at a local primary school is looking to hire an intern. The application process is competitive, so there is a need to conduct interviews. This year they have five candidates: John, Gwen, Greg, Sam, and Megan.

Sam asks Greg, "Who do you think they will interview?"

Greg says, "I think Megan, John and Gwen."

The psychologist does interview Megan, Gwen and John, but not Greg or Sam.

Sam reports, "Greg predicted who they interviewed for the internship."

Is Sam right?

- ☐ Yes  
☐ No

Julia and Peter are running a summer camp, and they need to hire counselors. They are considering hiring Vera, Kristen, Jess, Morgan and Stephen. Two campers, Sue and Jill, are discussing.

Sue asks Jill, "Who do you think they will hire?"

Jill says, "I think Vera, Kristen, Jess and Morgan."

Julia and Peter end up hiring everyone except Stephen because he's a trouble maker.

Sue reports, "Jill predicted who they hired as a camp counselor."

Is Jill right?

- ☐ Yes  
☐ No

It is almost Christmas time and the Santa's workshop is a mess. He needs to become more organized in order to get all the presents to the children in time. He is calling in all his elves into the workshop to help clean up. They have a surplus of wrapping paper that must be put away. The reindeer are discussing the situation.

Rudolf asks Prancer, "Where do you think they will store the paper?"

Prancer says, "I think in the cupboard."

When they finally get around to storing the paper, there is space under the bed and in the closet, but the cupboard is too full to fit any paper.

Rudolph reports, "Prancer predicted where they stored the wrapping paper."

Is Rudolph right?

☐ Yes

☐ No

Dante and Bea are trying to sell a collection of ugly Christmas sweaters. They are trying to get permits to sell at the mall, at the local boutique, at a pop-up in town, and online. Their friends, Felicia and Gabe are discussing whether they will be successful.

Gabe asks Felicia, "Where do you think they will sell the sweaters?"

Felicia says, "I think at the mall."

As it turns out, they are unable to get a permit to sell at the mall, but are able to get permits to sell at the other places.

Gabe reports, "Felicia predicted where they sold the sweaters."

Is Gabe right?

☐ Yes

☐ No



The Paris Hotel only accommodates seven people in a hotel room. The Vellucis have decided to go on vacation and stay in a fancy hotel. Mom and Dad allowed Amanda and Billy to invite three friends to come on vacation with them.

Mom asks dad, "Who do you think they will invite?"

Dad says, "I think Sally."

Actually, they end up inviting Jenny, Buster and Janice, but not Sally.

Mom reports, "Dad predicted who they invited on vacation."

Is Mom right?

☐ Yes

☐ No

Christina and Gabe are deciding who they're going to select for office party planning committee this year. They ask Bill, Jimmy, Cate, Veronica and Ezra to be on the committee. Now they are wondering which of these people will be good party planners.

Veronica asks Cate, "Who do you think they will select?"

Cate says, "I think Billy and Jimmy."

As it turns out, Cate, Veronica and Ezra are all selected, but Billy and Jimmy are not.

Veronica reports, "Cate predicted who they selected to be on the committee."

Is Veronica right?

☐ Yes

☐ No

Jim and Mary have general admission tickets to see the popular EDC group, Ultra. There was an all-time high of attendees this year: almost 20,000 people. There aren't a ton of places to easily get a good view of the stage. Two bouncers, Spike and Angel are watching.

Spike asks Angel, "Where do you think they will locate a good spot?"

Angel says, "I think either side of the stage, farther away on the hill in back, and the orchestra pit."

As it turns out, they found good spots on either side of the stage, and farther away on the hill in back. The orchestra pit and right at the front of the stage were bad because there were too many people.

Angel reports, "Spike predicted where they located a good spot."

Is Angel right?

☐ Yes

☐ No

Preschoolers always make cards for their parents on Valentine's Day, and parents are expected to hang these cards up somewhere in their houses. Michelle gave three cards to her parents.

Michelle's sister Maddie asks, "Where do you think they will display your cards?"

Michelle says, "I think the bedroom wall, the kitchen wall, and the refrigerator."

Actually, their parents put two cards on the kitchen wall and one on the bedroom. No card is displayed on other walls.

Maddie reports, "Michelle predicted where they displayed the cards."

Is Maddie right?

☐ Yes

☐ No

There are six sales associates working at Nordstroms on Black Friday. A notoriously difficult but regular customer has come into the store today. The manager and assistant manager, who usually help this customer, are very busy. They observe the new employees discussing amongst themselves who will go help the customer.

The manager asks her assistant, "Who do you think they will ask?"  
The assistant says, "I think Dana, Crystal, Morgan and Sue."

As it turns out, Dana, Crystal and Morgan are asked by the others to help the customer, but Sue, Parker, and Taylor are not asked.

The manager reports, "The assistant manager predicted who they asked to care for the customer."

Is the manager right?

- ☐ Yes  
☐ No

Mitch and Lucy need to get hold of their kids, who are at the movies. Grandma and Grandpa are visiting, cooking dinner.

Grandma asks Grandpa, "Who do you think they will contact?"  
Grandpa says, "I think Dan, Chris, Jim and Melissa."

As it turns out, Dan, Chris and Jim were contacted, but Melissa was not.

Grandma reports, "Grandpa predicted who they contacted during the movie."

Is Grandma right?

- ☐ Yes  
☐ No

For a summer trip, two friends Meg and Xavier are traveling to Petra in Jordan. Petra, an ancient city, has walls surrounding the city, so you can only enter at certain places. The city administrators just had to move the entrances because the old ones caused trouble where they were.

Xavier asks Meg, "Where do you think they located the new entrances?"

Meg says, "I think at the Western point."

It turns out that the new entrances are actually at the Southeast, East and Northwest points, but there are no entrances at the other points.

Xavier reports, "Meg knows where they located the new entrances."

Is Xavier right?

☐ Yes

☐ No

The Center Hall of Art is a very prestigious hall where only the most high quality art is displayed. Dan is excited because he has worked very hard on his paintings and is extremely excited to be told that they have been chosen to be displayed in the Center Hall of Art.

Dan asks his dad, "Where do you think they will display the paintings?"

Dan's dad says, "I think the downstairs lobby and the back room."

It turns out, the curators display Dan's paintings in the front foyer, the velvet curtain room and the blue room, but not the downstairs lobby or the back room.

Dan reports, "Dad knows where they displayed the paintings."

Is Dan right?

☐ Yes

☐ No

Tim and Jen needs some advice about what they should do after high school because they're not sure about going to college just yet. They has several friends who like to give advice: Jim, Kate, Fran, Jess, and Connie.

Kate and Fran are discussing this. Kate asks Fran, "Who do you think they will ask?"  
Fran says, "I think Connie and Jess."

It turns out that Tim and Jen ask Jim, Kate and Fran, but not Jess or Connie.

Kate reports, "Fran knows who they asked for advice."

Is Kate right?

- ☐ Yes  
☐ No

Jafari and Marjane are planning a surprise party for their mother. They want to ask several of her friends to help out. They are considering: Susan, Anita, Simone, and Hazel. Simone and Anita are discussing.

Anita asks Simone, "Who do you think they will contact for the party?"  
Simone responds, "I think Hazel."

In fact, they ask Susan, Anita and Simone, but not Hazel.

Anita reports, "Simone knows who they contacted about the party."

Is Anita right?

- ☐ Yes  
☐ No

Billy and his neighbors are playing hide and seek in the park. It is his turn to close his eyes and count to ten. After he is finished counting, he sees his classmate Jimmy, and asks Jimmy to help him find his friends.

Mom and Dad are watching, and Dad asks, "Where do you think they will find the kids hiding?"  
Mom says, "I think under the slide, in the tunnel, behind the swings, and in the tree."

Actually, Jimmy's friends are hidden under the slide, in the tunnel, and behind the swings, but not in the tree.

Dad reports, "Mom knows where they found the people hiding."

Is Dad right?

- ☐ Yes  
☐ No

Chris is always taking Alice's snacks so she wants to hide it from him. Alice and Barbara conspire to hide her food.

Chris asks Geoff, "Where do you think they will hide the snacks?"

Geoff says, "I think in the mattress, in the couch and in the shoebox in the closet."

Actually, they hide the snacks in the mattress, and in the couch, but not in the shoebox in the closet.

Chris reports, "Geoff knows where they hid the snacks."

Is Chris right?

☐ Yes

☐ No

The coaches of the soccer team have decided to recruit new players for this upcoming season. Sue, Dany, Abby and Jen are all trying out.

Annie the manager asks Maggy, the water girl, "Who do you think they will recruit for the team?"

Maggy says, "I think Dany, Abby, Jen and Sue."

In fact, the coach recruits Dany, Abby, and Jen, but not Sue.

Annie reports, "Maggy knows who they recruited for the team."

Is Annie right?

☐ Yes

☐ No

Chris is a new telemarketer trying to sell life insurance. He and his coworker Cindy are working together to expand their reach. The managers Jinny and Ezra are discussing this.

Ezra asks Jinny, "Who do you think they will call?"

Jinny says, "I think people between 30 and 60, people over 60, and people under 30."

Actually, they called people over 60, and people under 30, but not people between 30 and 60.

Ezra reports, "Jinny knows who they called for life insurance."

Is Ezra right?

☐ Yes

☐ No

Zack and Joe are going on vacation to California and want to see the Hollywood sign.

Zack's mom asks his dad, "Where do you think they will view the sign?"  
His dad responds, "I think Beachwood Canyon."

Actually, they go to Beachwood Canyon, Lake Hollywood Park, and the Griffith Observatory, but not Downtown or Runyon Canyon Park.

Mom reports, "Dad knows where they viewed the Hollywood Sign."

Is Mom right?

- ☐ Yes  
☐ No

FBI Special Agents Mulder and Scully are looking for evidence that the government is trying to cover-up the existence of aliens. They have collected several key pieces proving the existence of a government cover-up. Now they must bury the evidence so that government agents cannot find and destroy it.

Assistant Director Skinner's assistant asks him, "Where do you think they will bury the evidence?"  
Skinner says, "I think in Rock Creek Park."

Actually, Mulder and Scully bury the evidence in Rock Creek Park and in the bushes outside the FBI office, but not in the woods behind Mulder's apartment or in Scully's garden.

The assistant reports, "Skinner knows where they buried the evidence."

Is the assistant right?

- ☐ Yes  
☐ No

Lisette just started working at a newspaper. She's researching a story on nuclear waste, and has to figure out who to interview. She and her mentor are considering Dawn, Jeff, Valentine, Colin, and Ellen.

The editor's assistant asks her, "Who do you think they will interview?"  
The editor says, "I think Jeff."

Actually, they interview Jeff, Valentine, and Ellen, but not Dawn.

The assistant reports, "The editor knows who they interviewed for the story."

Is the assistant right?

- ☐ Yes  
☐ No

Martha and Eileen are painting a mural in the cafe they own together. They're going to hire some of their friends to do the job. The head waiter and the hostess are discussing this.

The waiter asks the hostess, "Who do you think they will hire?"

The hostess says, "I think Butch."

Actually, Martha and Eileen hire Butch, Jeff and Kat, but not Jules.

The waiter reports, "The hostess knows who they hired for painting the mural."

Is the waiter right?

☐ Yes

☐ No

The holiday shoe sale in particular was the craziest this year, as boots were marked at least 50% off their original price. Jim and Martha went shopping and bought too many boots. Unfortunately, they live in a small apartment with little storage space. Their friends, Allen and Henry, are speculating about whether they will have to return some shoes.

Allen turns to Henry and asks, "Where do you think they will store the boots?"

Henry says, "I think under the bed, under the couch, and in the kitchen cupboard."

Actually, the only places where there is space are under the bed, under the couch, and in the kitchen cupboard. The bedroom and hall closets are totally full.

Allen reports, "Henry knows where to store the boots."

Is Allen right?

☐ Yes

☐ No



Julia has just created a new perfume, and is deciding where to sell it. Her friend Paula is helping her market it. Julia's brother and sister are discussing the situation.

Her brother asks her sister, "Where do you think they will sell the perfume?"  
Her sister says, "I think the local boutique, the pop-up and Perfumerie."

Actually, Julia ends up selling it at the local boutique, the pop-up and Perfumerie, but not at Macy's and Lord and Taylor.

Julia's brother reports, "My sister knows where they sold the perfume."

Is the brother right?

- ☐ Yes  
☐ No

Thanksgiving is tomorrow and Marissa's in-laws are hosting dinner. Marissa would like to cook something, some family members have food allergies.

She asks her husband, "Who do you think they will invite for dinner?"  
Her husband says, "I think Maggy, Jim, and Rick."

It turns out, Maggy, Jim and Rick are invited, but Ari, Gillian, and Tim are not.

Marissa reports, "My husband knows who they invited for Thanksgiving dinner."

Is Marissa right?

- ☐ Yes  
☐ No

Frannie works for a prestigious finance firm. She and her coworker Donna are wondering which brokers will be promoted at the end of this year.

Frannie asks Donna, "Who do you think they will select for a promotion?"  
Donna says, "I think Gina, Samantha and Pat."

In fact, Gina, Samantha and Pat are promoted, while Mark and Bob are not.

Frannie reports, "Donna knows who they selected for the promotion."

Is Frannie right?

- ☐ Yes  
☐ No

Which of the following creatures is not a mammal?

- ☐ Chimpanzees
- ☐ Chickens
- ☐ Humans
- ☐ Wolves

Which of the following countries is not in Africa?

- ☐ France
- ☐ Nigeria
- ☐ Ghana
- ☐ Algeria

Which of the following people is not a comedian?

- ☐ Amy Poehler
- ☐ Tina Fey
- ☐ Angela Merkel
- ☐ Conan O'Brien

Which of the following people is not a US president?

- ☐ Thomas Jefferson
- ☐ Lady Gaga
- ☐ John Adams
- ☐ George Washington

Which of the following properties don't all bugs have?

- ☐ Six legs
- ☐ An exoskeleton
- ☐ Antennae
- ☐ Fur