**Introduction:** From early in language learning, children produce gestures with speech to help them communicate (e.g., Özçalışkan & Goldin-Meadow, 2005a). Little research has examined when children comprehend information conveyed through gesture. In the current poster, we ask whether children display any behaviors when observing gestures that indicate the comprehension of the meaning of the gesture. We hypothesize that children who talk about or imitate others’ gestures will be more likely to accurately match the gestures to their referents. These behaviors may reflect better attention to the gestures or more advanced language skills.

**Method:** Children, 36 3-year-olds and 36 4-year-olds, completed two training trials followed by eight test trials. Children were shown a demonstration in which the actor in the video states, “He is moving,” followed by rapidly moving fingers to convey a motion (e.g. running left). This was followed by two animations. Both animations showed stick figures moving. The correct animation matched the same manner and path as demonstrated by the actor. After watching the videos, the children were asked “Which one is he?” The children would then point to the stick figure they thought matched the manner and path shown by the actor in the video. The current poster will report whether there is a relation between the number of times the participants imitated the actor’s gesture or talked about the videos and their comprehension of the gestures.

**Results:** Preliminary data (10 participants) shows that there is variability in children’s responses to the gestures. 20% of the participants imitated the hand motion shown, and 40% talked about the actor’s gesture. We will test whether there is a relation between these behaviors and children’s performance on the gesture comprehension task.

**Discussion/Conclusion:** Identifying specific behaviors that indicate comprehension could help parents and teachers better track what children understand.