








Scofield, J., Behrend, D. A., Williams, A., & Marsden, S. (2006). Word Learning from Videos: Implications for Joint Attention and Word Learning? Poster accepted at the Meeting for the International Conference on Infant Studies. Kyoto, Japan.

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| <div style="display: flex; justify-content: space-around;">   </div> <h2 style="text-align: center;">Word Learning in the Absence of a Speaker</h2> <p style="text-align: center;"> Jason Scofield, Amie Williams, Stephanie Marsden, University of Alabama Douglas A. Behrend University of Arkansas </p> | <h3 style="text-align: center;"><u>Introduction</u></h3> <ul style="list-style-type: none"> Word learning often occurs within a rich referential context and is supported by such cues as: <ul style="list-style-type: none"> – Pointing, Eye Gaze, Direction of Voice – Child Directed Speech – Joint Attention, Referential Intent The prominence of these cues, and the robustness of word learning in their presence, support the argument that a referential context is important and possibly necessary for successful word learning. However, to date very few studies have examined the success of word learning in the absence of the referential context. |
| <h3 style="text-align: center;"><u>Current Study</u></h3> <ul style="list-style-type: none"> The goal of the current study was to examine the success of word learning in the absence of the referential context by removing the speaker from the word learning episode. <ul style="list-style-type: none"> – Unsuccessful word learning in the absence of a speaker would suggest that the referential context is necessary for word learning. In contrast, <ul style="list-style-type: none"> – Successful word learning in the absence of a speaker would suggest that the referential context is not necessary for word learning. To meet this goal, novel words and referents were presented as part of an animated video in which the presentation of the words was dubbed directly onto the video. | <h3 style="text-align: center;"><u>Method</u></h3> <ul style="list-style-type: none"> Participants <ul style="list-style-type: none"> – Number: N = 30 months – Age: 2-year-olds (M = 32 months) – Gender: 19 Girls, 11 Boys Materials <ul style="list-style-type: none"> – Warm-up Phase: Wooden Blocks – Familiarization Phase: 2 Animated Videos, 8 Known Object Images, 5 Animated Videos – Test Phase: 20 Novel Object Images, 5 Novel Words |
| <h3 style="text-align: center;"><u>Method</u></h3> <ul style="list-style-type: none"> Procedure <ul style="list-style-type: none"> – Warm-up Phase (4 Trials) <ul style="list-style-type: none"> • Children presented with wooden blocks • Children asked to categorize blocks (e.g., by color) – Familiarization Phase (2 Trials) <ul style="list-style-type: none"> • Target appeared on screen and was labeled 3 times with a known word (e.g., "This is a dog.") • Target and 3 known distracters appeared on screen • Children selected the referent that corresponded to the word (e.g., "Can you help me find the dog?") | <h3 style="text-align: center;"><u>Method</u></h3> <ul style="list-style-type: none"> – Test Phase (5 Trials, Fully Counterbalanced) <ul style="list-style-type: none"> • Experimental Condition (4 Trials) <ul style="list-style-type: none"> – Target appeared on screen and was labeled 3 times with a novel word (e.g., "This is a koba.") – Target and 3 novel distracters appeared on screen – Children selected the referent that corresponded to the word (e.g., "Can you help me find the koba?") • Control Condition (1 Trial) <ul style="list-style-type: none"> – Target appeared on screen and was labeled 3 times with a neutral comment (e.g., "Wow.") – Children selected the referent that corresponded to the word (e.g., "Can you help me find the blicket?") |
| <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Stimuli</p> <p>"This is a koba."</p>  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>"Where is the koba?"</p> </div> <div style="text-align: center;">  </div> </div> | <h3 style="text-align: center;"><u>Hypotheses</u></h3> <ul style="list-style-type: none"> Hypothesis 1 <ul style="list-style-type: none"> – Children will select the target in the experimental condition at a rate significantly higher than is predicted by chance. – Experimental Condition > Chance Hypothesis 2 <ul style="list-style-type: none"> – Children will select the target in the experimental condition at a rate significantly higher than in the control condition. – Experimental Condition > Control Condition Hypothesis 3 <ul style="list-style-type: none"> – Children in the control condition will not select the target at a rate that differs significantly from the rate predicted by chance. – Control Condition = Chance |

Results

- Hypothesis 1 (See Figure 1)
 - Target selected on 77% of all trials (i.e., 92/120)
 - Chance = 25% (i.e., 30/120)
 - **Experimental Condition > Chance**
- Hypothesis 2 (See Figure 2)
 - Target selected on 77% of all trials (i.e., 92/120)
 - Target selected on 53% of control trial (i.e., 16/30)
 - **Experimental Condition > Control Condition**
- Hypothesis 3 (See Figure 3)
 - Target selected on 53% of control trial (i.e., 16/30)
 - Chance = 25% (i.e., 30/120)
 - **Control Condition > Chance**

Figure 1: Experimental Trials Compared to Chance

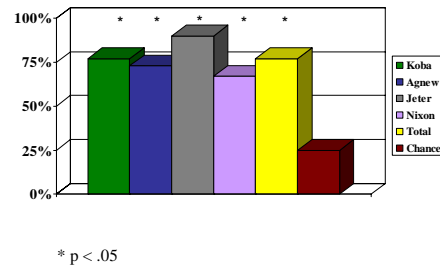


Figure 2: Experimental Trials Compared to Control

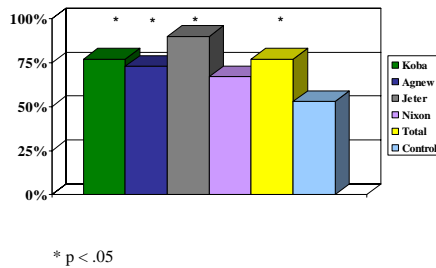
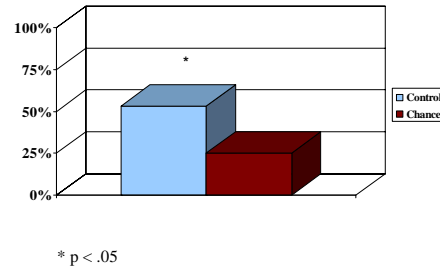


Figure 3: Control Trial Compared to Chance



Conclusions

- Successful word learning can occur in the absence of a speaker.
- Success in the absence of a speaker (i.e., 77%) does not appear to differ substantially from success in the presence of a speaker (i.e., 67%) (Grela, Krcmar, & Lin, 2004).
- Previous exposure to the target may influence children's target selection.
- **Word learning can occur in the absence of a referential context and therefore the referential context is not necessary for successful word learning.**