# Discussion

This study tested the primary hypothesis that the presence of social information during word learning reduces learners’ referential uncertainty, causing them to be more likely to track a single strong hypothesis for a word’s referent in cross-situational contexts. Unlike previous studies, it uses eye-tracking to examine the interaction between social information and cross-situational learning in resolving referential uncertainty. In this section, I discuss both the broader implications of our findings as well as ways in which the current study might address some limitations of previous investigations.

We found evidence to support the first of our hypotheses; namely, that allocation of attention between the two objects during exposure trials would differ for participants in different conditions. Specifically, as predicted, we found that participants in the *gaze* condition largely followed the speaker’s gaze, spending a disproportionate amount of time looking to the target of gaze and creating the bimodal distribution shown in Figure 2 for the *gaze* condition. Meanwhile, also as predicted, we found that participants in the *no-gaze* condition tended to divide attention more equally between the two objects, creating the roughly normal distribution shown in Figure 2 for the *no-gaze* condition.

Our second prediction was a quantitative relation between exposure accuracy and test accuracy. Evidence to support this prediction can be found in both Figure 4 and Table 1 of the Results section. In particular, the significant strong positive correlation between exposure accuracy and test accuracy across conditions is consistent with prior findings that attention allocated to an object during exposure is related to memory for that object later.

Finally, we hypothesized that participants in the *gaze* condition would perform at chance on “Switch” test trials, in which the object the participant looked at less during exposure was the one “kept” during testing, and that participants in the *no-gaze* condition would perform better than participants in the *gaze* condition. **[posthoc analysis]**

The current study does, of course, have certain potential limitations, some of which may have influenced our results and can hopefully be addressed in future work. Perhaps the most salient difference between this study and its immediate predecessors is the current study’s lack of explicit instruction and forced choice. That is, unlike Yurovsky and Frank (2015b) and MacDonald, Yurovsky, and Frank (2015), we did not tell participants to attempt to learn the meanings of words, or to make explicit guesses about a word’s referent via clicking on an object. Instead, participants were asked only to watch the video. On the one hand, the lack of forced choice makes it admittedly difficult to analyze the current results using the same framework as was used for previous similar studies; on the other hand, it avoids forcing the participant to make a hypothesis about a word’s referent. The lack of discrete choice allowed us to see, for instance, participant uncertainty reflected in divided attention to both objects during testing. Smith, Suanda, and Yu also point out that paradigms like the one used in the present study may be too simple to generalize to real-world word learning (2014).

[implications – to do once hypothesis section has been filled out entirely]

Future work, we hope, will take the framework used in this study in order to conduct more fine-grained tests of infant referential uncertainty reduction via a combination of cross-situational statistics and social information, leading to a better understanding of the ways in which word-object links are stored in word learners’ minds.