## The icing on the cake. Or is it frosting? How group membership affects children's lexical choices

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Everyday objects frequently have multiple labels, with speakers in a community often showing a clear preference for one label over the alternatives (e.g., couch vs. sofa). Often, the label speakers choose to use has a clear social motivation, for example, to signal to others what kind of political and/or ideological group they associate themselves with (e.g., illegal vs. undocumented immigrant). When do children begin to demonstrate the ability to use language to signal their affiliation with others? Here, we investigated the effect of group membership on 8 -year-old children's labeling of objects in a trivia-type game, looking at whether children were more likely to use a particular label if members of their "team" also use that label (regardless of whether that label was preferred or dispreferred by the overall community).

Children were first assigned to a team (red or green), and then participated in a virtual trivia game they believed involved 2 fellow teammates and 3 children from the opposing team (instead, the other children were pre-recorded audio files controlled by the experimenter). The game included 24 trivia questions (8 critical questions); some questions were answered by 1 member from each team, and other questions answered by multiple members from each team. Importantly, the critical questions involved multiple team members and had multiple possible answers (e.g., blackboard vs. chalkboard; see Table 1); in these trials, children heard two members from their team respond with one label, and 2 members from the other team respond with the other. We manipulated (1) whether in-group members always produced the preferred term or the dispreferred term (between subjects), and (2) whether children were asked to provide their own answer immediately after hearing the others (live trials), or at the end of the game, where they were asked to recall the answers to previously heard questions with just the experimenter left in the 'room' (recall trials; within subjects). We predicted that children would be more likely to produce dispreferred labels when their teammates also produced dispreferred labels, but would feel less pressured to do so when other children were not present (i.e., during recall trials).

We ran a logistic mixed effects model predicting the likelihood of producing a dispreferred label from In-group Label (preferred, coded -0.5, dispreferred, 0.5), Trial Type (live, -0.5, recall, 0.5), and their interaction. Preliminary results on 39 participants (we have pre-registered to run 72) indicate that children were overall more likely to produce a dispreferred term when their teammates did so as well ( $\beta_{l n \text {-groupLabel }}=-1.46, S E=0.37, z=-3.95, p<.001$ ), and were more likely to produce a dispreferred term in live trials compared to recall trials ( $\beta_{\text {Trialtype }}=-0.87, S E=$ $0.33, z=-2.69, p<.01$ ), suggesting that children's responses were indeed influenced by group membership, and the presence (or not) of group members.

As children develop, they must learn how language is used to convey social-in addition to propositional-meaning. Although children may begin the language acquisition process by speaking like their primary caregivers, eventually they will come to speak more like their peers (Eckert, 2000). The current study provides a step forward in understanding how children's word choice is influenced by social factors.


## Round 1 <br> Question 1



Figure 1. An example display for a critical trial. In this example, the participant is on the red team (number 03), with their initials represented on their jersey (their team color corresponds to their preferred colorred or green-as reported by parents). Player 02 on the red team (an experimenter-controlled recording) is currently speaking in the example, as indicated by the yellow box.

Table 1. Children-who completed 8 critical trials-encountered label pairs either from Group 1 or Group 2. Label preference (preferred or dispreferred) was determined from an earlier norming study. Preferred labels are those which first came to mind in more than $70 \%$ of children in the norming study (20-22 per pair); dispreferred labels needed to be recognized by at least $80 \%$ of children.


| Group 1 |  | Group 2 |  |
| :---: | :---: | :---: | :---: |
| preferred | dispreferred | preferred | dispreferred |
| chalkboard | blackboard | couch | sofa |
| life jacket | life vest | sled | toboggan |
| grade 1 | $1^{\text {st }}$ grade | dinner | supper |
| fishing rod | fishing pole | lollipop | sucker |
| rainboots | rubber boots | hot | chocolate |
| hot cocoa |  |  |  |
| bunny | rabbit | jam | jelly |
| present | gift | icing | frosting |
| dirt | soil | jacket | coat |

Figure 2. The proportion of trials in which the dispreferred label is produced. Children were more likely to produce a dispreferred label when their teammates did, but less likely to do so when other children were not present.

## References

Eckert, P. (2000). Linguistic variation as social practice: The linguistic construction of identity in belten high. Blackwell Publishers.

