

**PAPER**

**M . . . a a d b . . a c d e ' , c a \_ e e e c e**

speaker of a foreign language, and also look longer at a speaker with a native-sounding accent than at a speaker with a foreign accent (Kinzler, Dupoux & Spelke, 2007). A few months later, at age 10 months, monolingual infants prefer to interact with a speaker of their native language than with a speaker of a foreign language (Kinzler et al., 2007). Slightly older infants prefer to imitate the actions (Buttelman, Zmyj, Daum & Carpenter, 2013; Howard, Henderson, Carrazza & Woodward, 2015) and eat the foods endorsed by a native language speaker over a foreign language speaker (Shutts, Kinzler, McKee & Spelke, 2009).



Methods

Participants

than the bilingual speaker,  $M = .60$ ,  $SD = .18$ ,  $t(17) = 2.48$ ,  $p = .024$ ,  $d = .58$ . See Figure 1 for a graphical display of these results.

Among the 18 children, 11 children endorsed the monolingual speaker most often, four children endorsed the two types of speaker equally often, and three children endorsed the bilingual speaker most often. Under the binomial theorem, there was a non-significant trend towards difference from chance,  $\chi^2(2) = 5.134$ ,  $p = .077$ . However, pairwise comparisons confirmed that more children preferred the monolingual speakers than the bilingual speakers  $\chi^2(1) = 4.57$ ,  $p = .033$ .

## Discussion

The monolingual children in Study 1, who were raised in a predominantly monolingual community, preferred to be friends with a monolingual speaker over a bilingual speaker. Even though both speakers demonstrated membership in the child's language group by speaking the child's native language (English), children tended to avoid speakers who demonstrated additional membership in another language group. At the same time, children'



were significantly more likely than chance to endorse the monolingual speaker,  $M = .65$ ,

## Individual factors affecting children's social preferences

A set of exploratory analyses was conducted to investigate individual factors that contribute to children's language-based social preferences. First, correlations were computed to investigate the relationships between children's choices on the two types of trials. Monolingual children who endorsed the monolingual speaker over the bilingual speaker were also more likely to endorse the dominant speaker over the non-dominant speaker,  $r(18) = .47, p = .028$ . A similar pattern was observed amongst bilingual children,  $r(18) = .44, p = .051$ . Thus, children's preferences on the two trial types were predictive of each other.

Next, we investigated whether individual bilingual children's relative exposure to each language could

account for variance in their preferences. We conducted a series of analyses to investigate the relationship between relative exposure to each language and children's preferences. We found that relative exposure to the dominant language was a significant predictor of children's preferences,  $r(18) = .33, p = .031$ . We also found that relative exposure to the non-dominant language was a significant predictor of children's preferences,  $r(18) = .21, p = .049$ . Next, we conducted a series of analyses to investigate the relationship between relative exposure to each language and children's preferences. We found that relative exposure to the dominant language was a significant predictor of children's preferences,  $r(18) = .33, p = .031$ . We also found that relative exposure to the non-dominant language was a significant predictor of children's preferences,  $r(18) = .21, p = .049$ .



to endorse the dominant-language speakers. We explore possible explanations for this finding in the next section.

Finally, for both monolinguals and bilinguals, links were found across their patterns of social preferences in the two conditions we tested. Children who showed stronger preference for the monolingual over the bilingual speaker also showed stronger preference for the dominant-language over the non-dominant language speaker. This suggests that, beyond effects of a monolingual versus bilingual language background, children have stable individual differences in the strength of their preference for in-group members. Some children appear more accepting than others of interlocutors who use a less familiar language.

## General discussion

Numerous previous studies have shown that children prefer unaccented speakers of their own language com-



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