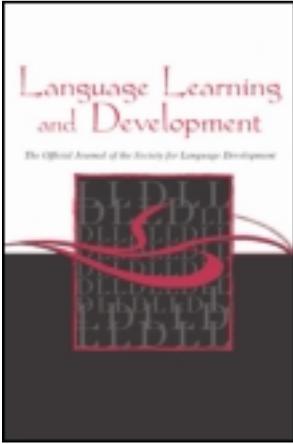


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## Language-based Social Preferences among Children in South Africa

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Monolingual English-speaking children in the United States express social preferences for speakers of their native language with a native accent. Here we explore the nature of children's language-based social preferences through research with children in South Africa, a multilingual nation. Like children in the United States, Xhosa South African children preferred speakers of their first language (Xhosa) to speakers of a foreign language (French). Thus, social preferences based on language are observed not only among children with limited exposure to cultural and linguistic variation but also among children living in a diverse linguistic environment. Moreover, Xhosa children attending school in English expressed social preferences for speakers of English over speakers of Xhosa, even when tested by a Xhosa-speaking experimenter. Thus, children's language-based social preferences do not depend exclusively on preferences for more familiar or intelligible speech but also extend to preferences for speech that may convey higher status in the child's society.

Although language serves first and foremost to convey information about the world, it also conveys social information about its speakers. An individual's language, dialect, and accent support inferences about his or her national and geographic origins, social group membership, and social status (Giles & Billings, 2004; Gluszek & Dovidio, 2010; Labov, 2006). Social judgments made about others based on their language are often thought to reflect people's knowledge of cultural stereotypes about different groups of speakers, but the origins and development of this knowledge are obscure. Recent research provides evidence that social evaluations based on language are manifest in children with little exposure to linguistic or cultural variation. In particular, 5- and 6-year-old White, English-speaking monolingual children in the United States expressed social preferences for unfamiliar children who spoke English with their native accent, relative to children who spoke English with a foreign accent or children who spoke in a foreign language

(Kinzler, Dupoux, & Spelke, 2007; Kinzler, Shutts, DeJesus, & Spelke, 2009). Because the children were monolingual and spoke their society's dominant language, their preferences might stem from a number of sources, including lack of experience with diverse languages and accents, preferences for individuals who speak their native language, and preferences for individuals who speak what might be considered a high-status language.

Here we begin to explore these possibilities through research with multilingual children in South Africa. In particular, this research with South African children addresses two questions. First, do children raised in a diverse linguistic environment show social preferences for speakers of their native language, as monolingual children do? Second, do multilingual children prefer individuals who speak in their native language or individuals who speak in a language that conveys social status in their society?

### ACCENT ATTITUDES IN ADULTHOOD

Adults judge others based on their speech (e.g., Cargile, Giles, Ryan, & Bradac, 1994; Giles & Billings, 2004; Gluszek & Dovidio, 2010); for instance, judgments of the personality, intelligence, and even the height of an individual may vary with changes in the language, accent, or dialect with which he or she speaks. Adults also make inferences about others' nationality, regional origin, social class, religion, income, and education based on their manner of speech (Labov, 2006). Originating with seminal studies conducted by Lambert and colleagues in the 1960s (Anisfeld, Bogo, & Lambert, 1962; Lambert, Anisfeld, & Yeni-Komshian, 1965; Lambert, Frankel & Tucker, 1966; Lambert, Hodgson, Gardner, & Fillenbaum, 1960), a field of research investigating "accent attitudes" emerged and prospered (Riagáin, 2008). These accent attitudes often reflect two general (and often interrelated) tendencies: an affinity for members of one's own linguistic community and preferences for individuals who speak what is considered a high-status or "prestige" language or dialect. We review the evidence for each tendency in turn.

Language is a particularly reliable and hard-to-fake marker of social group membership (Henrich & Henrich, 2007; Nettle & Dunbar, 1997). Adults and older children often exhibit social preferences for native-accented speakers of their native language, which in turn is thought to foster collaboration and reciprocal exchange. Studies that test adults' social preferences based on accent or language frequently use a "matched guise" technique such that, unbeknown to participants, they are asked to evaluate the same bilingual individual speaking in different languages or accents. This method often reveals implicit bias that is not observed when participants are asked to provide explicit judgments regarding the desirability of two different groups (e.g., Anisfeld et al., 1962; Lambert et al., 1966). To cite a few examples of ingroup preferences based on language, when Jewish and Arab adolescents were asked to evaluate individuals who spoke in Hebrew or Arabic (again, bilingual speakers recorded voices in both languages), both participant groups evaluated the speech in their native language as belonging to people who were more honest and friendly. Jewish participants showed even more nuanced preferences for ingroup members, awarding the most favorable ratings to Hebrew speakers speaking in their native (i.e., Azkenaisic) rather than a nonnative (i.e., Yeminite) dialect of Hebrew (Lambert et al., 1965). More recently, American adults rated the personality characteristics of American-accented speakers more positively than foreign-accented speakers, even when the foreign-accented speech was highly intelligible (Bresnahan, Ohashi, Nebashi, Liu, & Shearman, 2002).

Adults also demonstrate social preferences for high-status or “prestige” languages or dialects (Fasold, 1984; Trudgill, 1972). For example, both French- and English-native speaking Canadians living in Montreal rated the personality characteristics of someone speaking in English more positively than the same person speaking in French (Lambert et al., 1960). On a similar task in Canada in the 1960s, both Jewish and non-Jewish Canadian adults rated speakers of English with what was perceived to be a Jewish accent as shorter, less good-looking, and less likely to be in a leadership position than speakers who spoke in what was considered to be a more “standard” Canadian accent at the time (Anisfeld et al., 1962). In more recent studies in the United States, both White and Hispanic adolescents in southern California evaluated American-accented speakers as having more favorable personality characteristics than Spanish-accented speakers (Dailey, Giles, & Jansma, 2005). Studies of adults’ perceptions of northern- and southern-accented English similarly find that adults in both the North and the South of the United States rate southern-accented English as being “less correct,” and that adults sometimes demonstrate “linguistic insecurity” if they themselves speak what they consider to be a less-standard accent in English (Labov, 2006; Preston, 1998).

Finally, preferences for one’s linguistic ingroup and for the linguistic high-status group can interact. For example, though French-speaking Canadians living in Montreal evaluated English speakers more favorably than French speakers (Lambert et al., 1960), participants’ own linguistic experiences also mattered: French speakers with low proficiency in English showed relatively more ingroup (French) favoritism than French speakers with a high proficiency in English. A similar trend was found among adolescent French-Canadians attending elite private schools in Montreal, who exhibited greater pro-English biases than their peers in public schools. Indeed, this pro-English bias was strongest among children who were the most fluent bilinguals (Lambert et al., 1966). In both these cases, adolescents’ and adults’ divergent preferences might result from differences in familiarity or proficiency with the languages, or from different knowledge of or beliefs about the importance of the status relationships among different linguistic communities. Relatedly, though Hispanic adolescents in California rated American-accented speech more favorably than Spanish-accented speech, those who were exposed to more Spanish in their homes, schools, and neighborhoods showed relatively less bias in favor of an American accent than did adolescents who lived in predominantly Anglophone environments (Dailey et al., 2005). Thus, research with adults and adolescents suggests a complex relationship between social preferences for native speech and preferences for high-status speech, and provides evidence that an individual’s status as a speaker of these languages influences this relationship — either via language proficiency or via knowledge or beliefs about status relationships between the different linguistic groups. Open questions concern the development of this relationship in children, particularly those who live in multilingual, diverse societies.

## DEVELOPMENT OF LANGUAGE-BASED SOCIAL EVALUATION

Beginning at birth, newborn infants are sensitive to human speech, prefer the sound of their mother’s voice and their native language (DeCasper & Fifer, 1980; Mehler et al., 1988; Moon, Cooper, & Fifer, 1993; Vouloumanous & Werker, 2007), and can even discriminate two foreign languages provided that they are sufficiently different (Nazzi, Bertoncini, & Mehler, 1998). Throughout the first year of life, an ability to distinguish phonemic contrasts between nonnative

speech sounds diminishes, whereas sensitivity to native speech is maintained (Kuhl, Williams, Lacerda, Stevens, & Lindblom, 1992; Werker & Tees, 1984; Weikum et al., 2007). Although very young infants cannot discriminate their own language from another language in the same rhythmic class (Christophe & Morton, 1998), by 5 months of age infants are able to discriminate two languages or dialects within the same rhythmic class, provided that one of the languages or dialects is their own (Bosch & Sebastián-Gallés, 1997; Nazzi, Juszyk, & Johnson, 2000; Nazzi & Ramus, 2003). Bilingual infants maintain perceptual discrimination of phonetic boundaries in both of their languages (Burns, Yoshida, Hill, & Werker, 2007), and also demonstrate improved cognitive control abilities when compared to monolingual children within the first year of life (Kovács & Mehler, 2009). As early as 2 years of age, bilingual children show proficient interlocutor sensitivity, making the appropriate choice of which language should be used to address which person (Deuchar & Quay, 1999; Petitto et al., 2001). Nonetheless, bilingual children's code-switching reflects influences of majority/minority language status. A study of French-English bilingual 3–4-year-old children in Canada revealed that children introduced more English words into a French context than French words into an English context (Paradis & Nicoladis, 2007; for a review, see Werker & Byers-Heinlein, 2008).

Though infants and young children demonstrate remarkable linguistic capacities, less research has investigated the development of attitudes and preferences towards speakers of different languages. Beginning around the age of 6, children demonstrate social preferences for, as well as enhanced perspective-taking abilities toward, individuals who are members of their national group (see Barrett, 2007, for a review), or their ethno-linguistic group (e.g., individuals who are labeled as “French Canadian” versus “English Canadian”; Genesee, Tucker, & Lambert, 1978). This research is often discussed in terms of national group rather than linguistic group and does not test children's reactions toward unlabeled individuals whom they hear speaking in different languages. Nonetheless, other research suggests that young children confound “national group” with “linguistic group” and see language as a basis by which national groups are formed (Carrington & Short, 1995; Jahoda, 1964). Related to this possibility, preschool-aged children match voices in their native language with pictures of individual speakers who are of a familiar race, wear familiar clothes, and live in familiar dwellings (Hirschfeld & Gelman, 1997; Wagner, Greene-Havas, & Gillespie, 2010). Finally, language exposure influences children's national group identification. For instance, one study investigating children's national group identification in the Basque country in Spain found that children's home language (Spanish, Basque, or both) covaried with their national group identification (e.g., whether they considered themselves to be “from Spain” or “from Basque Country”), as well as with the positive and negative qualities they attributed to each group (Reizábal, Valencia, & Barrett, 2004).

Recent research suggests sensitivity to language as a source of social information and a basis for social preferences begins early in development, presumably prior to children's awareness of national group membership. Before they are able to speak themselves, infants look longer at an individual who previously spoke to them in a native accent, accept toys preferentially from native speakers (Kinzler et al., 2007), and choose to eat foods first eaten by native speakers (Shutts, Kinzler, McKee, & Spelke, 2009). As we noted above, these preferences persist in older children (see McElreath, Boyd, & Richerson, 2003, for an evolutionary model predicting how cultural evolution might create local variation among dialect groups, in which learners are predisposed to learn from and interact with members of their own dialect group). In one study that provides the foundation for the current research (Kinzler et al., 2009), 5- and 6-year-old

monolingual English-speaking children in the United States were introduced to pairs of people who differed in language, accent, and/or race, and were asked to choose which member of a pair they would prefer to have as a friend. Children expressed preferences for people who spoke in their native language (English) compared to a foreign language (French). Two further findings suggested that these preferences were not due exclusively to the intelligibility of the speech. First, children's social preferences for a familiar accent (American English over English with a French accent) were just as robust as those for a native language (English over French). Second, children who were presented with one speaker of French and one speaker of French-accented English reported that they understood the latter speaker and not the former but showed no social preference between these two speakers. Interestingly, children's preferences based on language outweighed their preferences based on race when the two dimensions were crossed. Though children demonstrated preferences for both native speakers and own-race individuals when tested separately, children preferentially selected native-accented speakers who were of a different race (Black) compared to foreign-accented speakers who were of the participants' race (White).

Although the findings of Kinzler et al. (2009) demonstrate children's early and robust social preferences for native speakers of their native language, these studies focus on children who are monolingual learners of their society's majority language. This is not a representative sample of children, given that most children grow up in bilingual or multilingual environments (Werker & Byers-Heinlein, 2008). Little research has focused on the language-based preferences of children in multilingual environments. In one notable study conducted in Hawaii, kindergarten-aged children who lived in a neighborhood where Hawaiian Creole was spoken preferred Hawaiian Creole to Standard English, yet by first grade this preference reversed (Day, 1980). Thus, preferences for high-status language can emerge remarkably early among bilingual or bidialectal children. Studies of a more diverse range of children are needed to investigate the nature and generality of children's language-based social evaluations for both ingroup and high-status languages.

## THE PRESENT RESEARCH

In the present studies, we test the language-based social preferences of Xhosa children in South Africa. With 11 official languages, South Africa is a highly multilingual nation. Children tested in experiments 1 and 2 were residents of Langa, a primarily Black community in Cape Town. Langa was designated as a Black township prior to the former system of apartheid in South Africa (Wilson & Mafeje, 1963). The majority of its residents are Xhosa, but it also includes a small community of Sotho families (whose language, Sesotho, is another of South Africa's official languages) as well as other South African ethnic groups and immigrants from other African countries. In educational and multilingual settings in Cape Town, English serves as the *lingua franca*, and speaking English is thought to provide economic viability to its speakers (Kamwangamalu, 2003). English is widely taught in school and is the native language of many White South Africans. Ethnographers report that many Xhosa parents express a desire for their children to gain proficiency in English (De Klerk, 2000). Xhosa children in Cape Town, therefore, are exposed to multiple languages: They typically speak Xhosa as their first language, but by adulthood most speak several languages with some fluency. Individuals with higher levels of education,

moreover, tend to be proficient in English, and analyses of South African census data reveal ongoing language shift toward English among Black South Africans in Cape Town (Deumert, 2010). Studies of Xhosa South African children's language-based social preferences can begin to tease apart the social effects of language that are confounded in monolingual American children.

Through this research, we aim to address two questions. First, like monolingual children, do children raised in a diverse linguistic environment demonstrate social preferences for speakers of their native language? It is possible that preferences for native speakers will be observed only in children living in monolingual communities; by nature of living in a multilingual nation, children may be more open to, and accepting of, speakers of a foreign language. Alternatively, preferences for native over foreign speakers may be observed even in a highly multilingual environment; indeed, sensitivity to language and accent may even be enhanced in children who are regularly exposed to different language groups. Second, do multilingual children who speak a lower-status language prefer speakers of their native language, speakers of a high-status language from their society, or both? If preferences for native speech rely exclusively on familiarity and/or ease of processing that speech, then children may demonstrate a preference for their primary language, regardless of their social environment. In contrast, if language-based social preferences stem not only from a preference for the most comprehensible or familiar speech, but rather include more sophisticated social judgments, children may prefer others who are seen as high-status members of their society. In particular, young Xhosa children may prefer other individuals who speak English to those who speak Xhosa, despite Xhosa's status as the children's first and primary language.

## EXPERIMENT 1

The first experiment used the method of Kinzler et al. (2009) to investigate whether Xhosa children living in a multilingual environment prefer speakers of their native language (Xhosa) to speakers of a foreign language that is not spoken in their community (French). French was selected as the foreign language because (a) it is the language on which U.S. children were tested in Kinzler et al.'s (2009) research, (b) it is not one of South Africa's official languages and is not spoken by any of the communities in Langa, but (c) it is spoken in some communities on the African continent, as it is on the North American continent. All children tested were raised in Langa, and their home language was Xhosa.

## METHOD

### Participants

The experiment was conducted with 28 children (14 females) ranging in age from 5 to 11 years ( $M = 7.5$  years). Children's parents gave both verbal and written consent to a Xhosa adult prior to their child's participation in the study but did not accompany children during the testing session. Children received a sheet of stickers to thank them for their participation, and parents received approximately \$1.50 to compensate them for their time and effort.

## Materials

The stimulus set consisted of 32 faces of Black South African people who varied in age (child/adult) and gender (male/female). All people were photographed in Cape Town or in a rural community in KwaZulu Natal; all were judged by a group of Xhosa adults to be Xhosa. Faces were presented in gender- and age-matched pairs against a white background on a laptop computer. Voice stimuli consisted of 16 voice clips in both French and Xhosa. Each voice clip was approximately three seconds in length and neutral in content (e.g., “Penguins are birds even though they don’t fly”) recorded by child and adult native speakers of Xhosa and French.

## Procedure

A female Xhosa-speaking experimenter from the township of Langa conducted the experimental session with children. Children were shown a series of 16 pairs of faces. On each pair, the experimenter said (in Xhosa), “Here are pictures of two people.” She then pointed to each in turn, and said, “This person sounds like this,” and a voice played, either in French or Xhosa. Pairings of voices to faces were counterbalanced across participants, and the lateral location of the French and Xhosa speaker, as well as the age and gender of the pair depicted, varied throughout the testing session. Children were then asked, “Who do you like more?” Children’s pointing to one of the two faces was recorded.

## RESULTS AND DISCUSSION

Overall, children chose the Xhosa speakers over the French speakers (Chance = 50%;  $M_{\text{Xhosa}} = 70.09\%$ ,  $t(27) = 5.18$ ,  $p < .001$ ). Children’s choices did not differ based on the age or gender of the target faces: A repeated-measures ANOVA with the child’s gender as a between-subjects factor, and the gender and age of the target individuals as within-subjects factors, revealed no significant main effects or interactions. There was a significant positive correlation between children’s age and their choices of Xhosa speakers: Pearson  $r = .50$ ,  $p < .01$ . With increasing age, children demonstrated more extreme responses in favor of the Xhosa over French speakers. This age trend may reflect task demands that made this study easier for older children to complete, or it could reflect changes in the robustness of language-based social preferences over development. Critically, even as children developed and presumably spent more time outside of their home environment in this multilingual community, their social preferences for speakers of their native language did not diminish.

Children’s choices of Xhosa speakers over French speakers highlight the robustness and cultural prevalence of children’s social preferences for speakers of their native language over speakers of a foreign language. For many children in Langa, participating in a research study was a highly novel experience and the first time they had used a computer. Nonetheless, the results of this study were similar to results obtained in past research testing monolingual children in the United States. Due to differences in testing environments between the laboratory in the United States and the home testing environment in South Africa, we do not directly compare the effect sizes of children’s responses across the two populations. Nonetheless, we

can conclude that social preferences for native speakers are not limited to children living in monolingual communities but also are observed in children residing in a multilingual community and nation. Future research might explore both similarities and potential differences in the magnitude of children's language-based social preferences across children living in diverse bilingual or multilingual communities.

Given that Xhosa children prefer speakers of their native language to speakers of a language that is wholly foreign, we next ask whether they also prefer speakers of their native language to speakers of a second language that is prevalent in their community: English. We focus on English for two reasons. First, because English could be considered the *lingua franca* of this community, and because it is taught in school, most children are familiar with English and will eventually gain proficiency in this language (Hornberger, 2002; Kamwangamalu, 2002, 2003). By comparing Xhosa children's preferences between speakers of Xhosa and speakers of English, we can test whether children prefer speakers of their native language to speakers of a nonnative but familiar language. Second, because English is the native language of one of the wealthiest and highest status groups in South Africa (English South Africans) and also is increasingly associated with wealthy Black South African professionals, it is a language that conveys high status (De Klerk, 2000; Deumert, 2010). Past research suggests that by adolescence, children attend to this status dimension. For instance, research with secondary school and college-aged students who are native speakers of Xhosa and Zulu reports that adolescents demonstrate social preferences for English-speaking South Africans and often acknowledge English to hold status as the language of opportunity (Bangeni & Kapp, 2007; Dalvit & De Klerk, 2005; De Kadt, 2005; Rudwick, 2008). However, past research has not tested younger South African children's attention to linguistic status. In the current study, we ask whether children's language-based social preferences are modulated by the status that different languages may convey.

## EXPERIMENT 2

Experiment 2 followed the method of Experiment 1 with two changes. First, instead of testing Xhosa children's preferences between Xhosa speakers and French speakers, we tested their preferences between Xhosa individuals speaking in Xhosa and Xhosa individuals speaking in English. Second, we elicited information from children and their parents about their exposure to English (in particular, whether or not they attended school in an English-speaking environment) prior to the experiment. With this information, we could test for associations between the child's exposure to English and the child's preference between members of their community who speak in Xhosa, compared to those who speak in English.

## METHOD

### Participants

Twenty-four children (13 females) ranging in age from 5 to 11 years ( $M = 8.8$  years) participated in the study after the informed consent procedures described in Experiment 1.

## Materials and Design

The face stimuli set consisted of the same 32 Black South African faces that were featured in Experiment 1. Voice stimuli consisted of 32 voice clips of bilingual Xhosa adults and children speaking in either Xhosa or English (16 clips in each language). These faces and voices were paired and presented following the same design as in Experiment 1.

## Procedure

Prior to the testing session, each child and parent was asked whether the child was learning English in school. The same female Xhosa-speaking experimenter as in Experiment 1 conducted the experimental session with children (without a parent present), following the same procedure.

## RESULTS AND DISCUSSION

As a group, children showed a nonsignificant trend towards picking the English speakers over the Xhosa speakers ( $M_{\text{Xhosa}} = 44.27\%$ ,  $t(23) = -1.32$ ,  $p = .20$ ). As in the first experiment, a repeated-measures ANOVA revealed no significant effects of the gender of the child or the gender or age of the target faces on children's choices. Comparing children's performance in Experiments 1 and 2, children in Experiment 1 demonstrated a greater preference for Xhosa (when the contrasting language was French) than they did in Experiment 2 (when the contrasting language was English):  $t(50) = 4.45$ ,  $p < .001$ .

Further analyses tested for effects of age and English proficiency on children's social preferences between Xhosa and English speakers. A linear regression analysis with age and English proficiency as independent variables and choices for the Xhosa speaker as a dependent variable revealed a significant effect of English proficiency ( $b = -.49$ ,  $p < .05$ ), but not of age ( $b = .07$ ,  $p = .74$ ), on children's choices. Due to the overall sample size, we were unable to examine the interaction between age and English proficiency in the regression context. However, there was no significant correlation of choices of Xhosa with age: Pearson  $r = -.04$ ,  $p = .84$ .

To further explore the effects of English exposure, children were divided into two groups, based on the binary variable of whether or not they attended school in English ( $N = 18$ ,  $M$  age = 9, range 5–11) or not ( $N = 6$ ,  $M$  age = 8.2, range 5–10). An analysis of only the responses of children who attended school in English revealed that these children exhibited a significant preference for speakers of English over speakers of Xhosa ( $M_{\text{Xhosa}} = 38.54\%$ ,  $t(17) = -2.37$ ,  $p < .05$ ). Though they were too few in number to draw firm conclusions, the responses of the children who did not attend school in English suggested the opposite pattern ( $M_{\text{Xhosa}} = 61.46\%$ ,  $t(5) = 2.10$ ,  $p = .09$ ).

The results of Experiment 2 present a strikingly different pattern from that observed in Experiment 1. Rather than demonstrating preferences for speakers of their native language compared to speakers of a foreign language, children overall demonstrated no significant preference between speakers of Xhosa and English, and children with greater exposure to English demonstrated social preferences for individuals speaking in English rather than Xhosa. From one perspective, this finding is surprising given that children were tested in a (Xhosa-speaking) home

environment by a Xhosa experimenter who conversed with the child entirely in Xhosa. Moreover, Xhosa was all children's first language.

From another perspective, these results are consistent with the idea that children are aware of their surrounding sociolinguistic environment, perhaps beginning as early as toddlerhood (Paradis & Nicoladis, 2007). With exposure to English as the *lingua franca* and the language of education, children may demonstrate preferences for associating with individuals who speak that language. Just as adults are highly attentive to linguistic status and power dynamics denoted by language (De Klerk, 2000; Giles & Billings, 2004; Hornberger, 2002; Labov, 2006), so too may be young children (Day, 1980).

Intriguing open questions concern the mechanisms underlying the difference observed between the two groups of children. Children who attended school in English expressed preferences for English speakers. Although few in number, children who did not attend school in English expressed a reverse pattern of preference for Xhosa speakers. Although our sample size was limited (and quite small, in particular, for children who did not attend school in English), the results of this study suggest that schooling environment matters; an open question concerns *how* it matters. One possibility is that children who attend school in English are more aware of the status hierarchies in their societies than are children who attend school in Xhosa (or who do not attend school regularly). Langa township, though situated among diverse areas of Cape Town, is somewhat homogeneous as a neighborhood itself. According to the 2001 census, 99% of residents are Black South Africans, and 97% are Xhosa. Thus, a child who lives and attends school in Langa might be less familiar with the diversity of Cape Town and relationships among different groups than would a child who attends an English-speaking school in a different area of Cape Town. Further support for this hypothesis is provided by research on children's attitudes about race, tested in both Langa and the same multi-ethnic school in Cape Town. Xhosa children tested in the diverse school environment expressed social preferences for White over Black children; children tested in Langa expressed a less reliable preference between the two groups (Shutts, Kinzler, Katz, Tredoux, & Spelke, 2011). Thus, it is possible that exposure to the broader diversity of the city affects children's reasoning about the status relationships among different groups in their society when assessed by measuring either children's language-based or race-based social attitudes.

A second possibility is that some other variable may differ systematically between the group of children who attend school in English and those who do not. For instance, children who attend school in English may, on average, be higher in socioeconomic status than children who attend school in Xhosa. This too might contribute to children's perceptions of, and reasoning about, status hierarchies in their society. Or there may be differences among the values or expectations of parents who choose to send their children to different school environments. Parents who select an English-speaking school may place particular value on the importance of learning English or on English as providing potential economic and social capital. These values might in turn be communicated to children, independent of children's school experiences.

Finally, children's proficiency in a language may play a role in guiding their social preferences for speakers of that language. At an extreme, comprehensibility cannot fully account for the data presented here. All children in the sample spoke Xhosa as a first language. Thus, even among children attending school in English, Xhosa was not likely less intelligible than English. Nonetheless, it is plausible that some proficiency in a language is a necessary precondition for fostering social preferences for speakers of that language. Under this hypothesis, preferences for

high-status languages might be observed only among languages that a child speaks. In this case, proficiency in English may underlie children's relative preference for English and Xhosa.

Though several potential mechanisms may be at play (and the effects of these potentially contributing mechanisms, too, may be additive), the results of Experiment 2 provide initial evidence that Xhosa children who attend school in English demonstrate social preferences for English-speaking over Xhosa-speaking individuals. Nonetheless, our knowledge of children's schooling environment (and the degree to which English was the common language of instruction spoken at their school) was quite limited due to potential inaccuracies in parental report. Thus, in Experiment 3 we sought to directly test the prediction that Xhosa children attending school in an English-speaking school environment would prefer English to Xhosa by testing Xhosa children in a school whose primary language of instruction was English.

### EXPERIMENT 3

Experiment 3 replicated and extended the results of Experiment 2 in a school environment. We tested children attending a racially diverse school in Cape Town where the language of instruction was English. Children were shown a contrast of Xhosa versus English, as in Experiment 2. In addition, we included a comparison of Xhosa versus Sesotho (a South African language that was not spoken by participants but that likely is familiar to them because it is spoken by communities of Black South Africans living in the Cape Town area) to investigate whether children prefer their native language (Xhosa) to a non-native (though familiar) African language.

### METHOD

#### Participants

Participants included 12 children (7 females) ranging in age from 5 to 9 years ( $M = 7.25$  years). Children were tested individually in a room at their school, and their parents gave written consent. Children's parents identified their children as Xhosa on a demographic form.

#### Materials

The stimulus set consisted of 16 faces of Black South African adults. Faces were presented in gender-matched pairs against a white background on a laptop computer. The voice clips for the block of Xhosa-English trials were taken from the voices in Experiment 2. Voice clips for the block of Xhosa-Sesotho trials included voices from additional Xhosa and Sesotho-speaking adults. As in previous studies, each voice clip was approximately three seconds in length and neutral in content.

#### Procedure

A female Xhosa-speaking experimenter conducted the experimental session with children. All testing was conducted in Xhosa. Children were shown two blocks of trials presented in

counterbalanced order across children: a Xhosa versus English block and a Xhosa versus Sesotho block. As in previous experiments, the experimenter said (in Xhosa), “Here are pictures of two people.” She then pointed to each in turn and said, “This person sounds like this.” Pairings of voices to faces were counterbalanced across participants and the lateral location of the languages, as well as the gender of the pair depicted, varied throughout the testing session.

## RESULTS AND DISCUSSION

Analyzing the Xhosa versus English block separately, children chose the English speakers rather than the Xhosa speakers more often than would be predicted by chance ( $M_{\text{Xhosa}} = 21.88\%$ ,  $t(11) = -4.18$ ,  $p < .002$ ). Analyzing the Xhosa versus Sesotho block separately, children chose the Xhosa speakers over the Sesotho speakers ( $M_{\text{Xhosa}} = 69.79\%$ ,  $t(11) = 3.8$ ,  $p < .01$ ). A repeated-measures ANOVA with block (Xhosa vs. English, Xhosa vs. Sesotho) as a within-subject factor, block order (English or Sesotho block first) as a between-subject factor, and % choice of Xhosa speakers as the dependent measure, revealed a significant effect of block ( $F(1,10) = 42.32$ ,  $p < .001$ ) but no significant main effect of block order or interaction of the two factors. Thus, children chose the Xhosa speakers more often when the contrasting language was Sesotho than when it was English, and this effect was not qualified by the order in which the blocks were presented. Finally, there was no correlation with age observed for children’s choices on the Xhosa versus English block (Pearson  $r = .009$ ,  $p = .98$ ). Older children were nonsignificantly more likely to choose Xhosa over Sesotho speakers (Pearson  $r = .45$ ,  $p = .14$ ).

Xhosa children in an English school environment preferred Xhosa speakers of English to Xhosa speakers of Xhosa. This was the case even though all participants spoke Xhosa at home, and children were tested in Xhosa. In contrast, the same group of children who preferred English to Xhosa also preferred Xhosa to Sesotho, suggesting that although they preferred English, children did not lose any and all favor for speakers of their native language. Together, these two findings provide evidence that attention to linguistic status in South Africa emerges early and is likely based on a preference for speakers of the high-status English language, rather than disfavor for speakers of Xhosa. In fact, though not significant, the correlation between age and children’s choices of Xhosa speakers over Sesotho speakers parallels the age trend reported in Experiment 1, where older children were statistically more likely than younger children to prefer Xhosa to French. These findings suggest that with age and presumable exposure to linguistic diversity, children do not lose a preference for their native language — if anything, this preference increases with age. Yet, these children nonetheless express a simultaneous preference for high-status language — a preference that our data suggest to be relatively stable beginning early in the school years.

It should be noted that children’s preference for English over Xhosa in Experiment 3 (78%) appears to be of a greater magnitude than the preferences expressed by children tested in Experiment 2 who were attending school in English, yet tested in a home environment (61.5%), a difference that reached statistical significance ( $F(1,28) = 4.20$ ,  $p < .05$ ). This difference raises the question of whether and in what ways testing environment might influence children’s reasoning about linguistic status. A conservative interpretation of these data would caution against drawing a strong conclusion from observed differences between the two samples. Critically, the home testing environment was much louder and more chaotic than the school. Although

observations that support the same general conclusions across testing environments are interesting, comparisons of the magnitude of these observations may not be advisable. Nonetheless, the two testing environments may have differed in meaningful ways. For instance, a school setting might highlight children's attention to status relationships (either linguistic status or otherwise). Furthermore, the particular composition of a child's school environment (both in terms of languages and groups present, and also perhaps the numerical majority/minority relations among those groups) might guide children's preferences. Finally, the language spoken by the experimenter might impact children's choices. In all studies presented here, children were tested by an experimenter who spoke Xhosa with them. Nonetheless, the experimenter was also able to speak English; given the prevalence of English proficiency among young Xhosa adults in Cape Town, children may well have guessed that the experimenter could speak both languages. It is possible that children would have evidenced even greater relative preferences for English if tested in English, or children might have exhibited a more muted preference for English speakers if they thought that the experimenter was not capable of speaking English. Future research might address how a child's environment, both habitually and at the local instance of test, influences children's language-based social preferences.

## GENERAL DISCUSSION

The present findings provide evidence for both the cultural universality and the potential malleability of children's language-based social preferences. In Experiment 1, Xhosa-speaking children demonstrated social preferences for native Xhosa speakers compared to French speakers; in Experiment 3, children expressed preferences for speakers of Xhosa to speakers of Sesotho. These findings replicate and extend past findings from studies of the preferences for native speakers shown by monolingual English-speaking children in the United States (Kinzler et al., 2009). Unlike children in the United States tested in these studies, Xhosa children in South Africa are raised in a multilingual environment; nevertheless, they, too, prefer speakers of their native language to speakers of a foreign or less familiar language. Such preferences therefore are observed in children living in diverse linguistic and cultural environments.

In Experiment 2, Xhosa children did not prefer speakers of their first language (Xhosa) to speakers of English as it is spoken in their community (i.e., Xhosa-accented English). Moreover, Xhosa children who attended school in English chose speakers of English as preferred, an effect that was replicated in Experiment 3 with tests of Xhosa children attending school in English. Finally, children tested in Experiment 3 did not show a general preference for speakers of other South African languages, for they favored speakers of Xhosa over speakers of Sesotho. The results of these three studies provide evidence that children prefer not only native speakers, but also speakers of the society's "prestige" language.

The present findings reveal that children's language-based social preferences are not exclusively reflective of preferences for speech that is relatively more comprehensible. If children's choices had reflected a preference for speech that is more easily comprehended, then the children in Experiments 2 and 3 would likely have chosen speakers of Xhosa (their first and primary language) over speakers of English. The dissociation between children's comprehension of a language and their social preferences for speakers of language is consistent with past research. For instance, children's sociolinguistic judgments of matching a native language to a familiar-race

individual are also made when both native and foreign languages are filtered such that neither is intelligible (Hirschfeld & Gelman, 1997). Moreover, past research finds that children's social preferences based on accent are just as robust as those based on language (Kinzler et al., 2009), even when children understand the foreign-accented speech. Children trust the testimony of native-accented over foreign-accented speakers, even when both speak in nonsense speech (Kinzler, Corriveau, & Harris, 2011). The research presented here provides the most direct evidence that children's social preferences are not explained by preferences for speech that is relatively more comprehensible. Nonetheless, comprehensibility may play a subtle role in guiding children's preferences for high-status speech. In Experiment 2, children who attended school in English preferred speakers of English to Xhosa, yet children who did not attend school in English evidenced the opposite pattern of a preference for Xhosa. It is therefore possible that some proficiency in a language (e.g., English) may be necessary to foster a child's preferences for individual speakers of that language. Future research might continue to explore the mechanisms that guide children's transition from preferring speakers of a native language to speakers of a high-status language (see also Day, 1980).

The evidence for both ingroup preferences and status preferences based on language accords well with findings from studies of children's social preferences based on race. In the United States, White children aged 4 years and older tend to show a preference for unfamiliar children who are White over unfamiliar children who are Black (Aboud, 1988). In contrast, Black children in the United States tend not to show a preference for Black children over White children; instead they may show little or no preference between children of the two racial groups (Aboud & Skerry, 1984). Although these findings have sometimes been interpreted as reflecting the relative familiarity of the two races, since the majority race in the United States is White (Cameron, Alvarez, Ruble, & Fuligni, 2001), recent findings from studies of children in South Africa cast doubt on that interpretation. Xhosa children in Langa who viewed silent displays of Black and White South African faces showed no preference between the people of these two races, despite living in a predominantly Black community (Shutts et al., 2011). Both Xhosa and White South African children tested at a racially diverse school in Cape Town expressed social preferences for White over Black South African children (Olson, Shutts, Kinzler, & Weisman, in press; Shutts et al., 2011). Taken together, these findings suggest that children's social choices are modulated both by a preference for members of their own group and by a preference for individuals who are members of high-status groups.

Together, these findings suggest a complex interplay between children's preferences for individuals of high status and for speakers from their native linguistic community. Future research could fruitfully explore the conditions that modulate these preferences. For example, the dependent measure in the studies presented here involved asking children "who do you like more?" We used this measure to assess a general preference or positivity toward one individual over another, but "liking" might take on different meanings in different contexts: whom you like as a friend or social partner might differ from whom you would like in a time of need, or whom you would empathize with if someone were hurt or in trouble. Moreover, whom you feel an affinity toward may differ from whom you would choose as a friend. Dissociations between liking of ingroup individuals and liking of high-status individuals might differ not only as a function of a child's age and exposure to different status relationships in a society but also as a function of test environment. Methods that investigate under what circumstances children prefer native group individuals and how those instances diverge from situations in which they prefer individuals who are members of higher-status groups would be of particular interest.

The present research may provide points of contact with research of ethnographers, linguists, and policy makers in South Africa who are concerned with the forces guiding language change. Previous research with adolescents and adults suggests that many Xhosa speakers in South Africa value English as affording prestige and economic mobility (De Klerk, 2000; Kamwangamalu, 2003). Analyses of census data reveal that English is being spoken more frequently among Black South African communities than in the past (Deumert, 2010). The present research provides evidence that children's reasoning about linguistic social meaning and status emerges remarkably early in development. This finding, in turn, might have implications for social scientists and policy makers who are interested in the causes and ramifications of language change (Johnson, 2006).

Though the experiments presented here provide initial evidence of the language-based social preferences of children raised in a multilingual society, many questions remain for future research. Given that this was a difficult population to access, our knowledge of each child's linguistic background was limited compared to what it might have been in a laboratory study. In particular, we have no data on the parents' educational or linguistic backgrounds or on their views about the value of their children learning English. In Experiment 2 we knew whether children were reported to attend school in English but knew little more about their schooling environment. In Experiment 3, we had better information about children's school environment but less information about their home language communities. Children from both samples who attended school in English professed preferences for English speakers compared to Xhosa speakers, although they were tested while speaking in Xhosa. Yet children tested at school in Experiment 3 expressed a relatively greater preference for speakers of English than children who were tested at home in Experiment 2. It is not clear whether these differences reflect inadvertent artifacts of the testing environment or more potentially meaningful differences (e.g., being tested in a school environment may facilitate thinking about social hierarchies). In future research, we hope to test children's language-based social preferences in different school and home environments, to more carefully assess the impact of individual children's linguistic exposure, linguistic competence, and social context on their language-based social preferences.

Despite their limitations, the data presented here suggest a relation between children's social preferences based on language and their attention to linguistic status. However, we did not directly test the relationship of language preferences to children's explicit knowledge of social status. Future research might assess children's understanding of English as a high-status or prestige language and test whether this correlates with their social preferences for English speakers. The English-speaking voices presented in Experiment 2 were of bilingual speakers of English and Xhosa who recorded voices in both languages. Future research might investigate whether children who prefer English prefer *any* accent in English (e.g., including American accents which, outside of portrayal on television, would be unfamiliar), or whether children specifically favor English as it is accented by Xhosa speakers or by other South African groups.

Finally, the research presented here provides an initial investigation of the language-based preferences of children who are raised in a multilingual, multiethnic, and multicultural society. This research demonstrates that children's social preferences based on language are observed in diverse communities and take diverse forms. Multilingual communities and their sociolinguistic contexts vary dramatically. Future studies might investigate the social preferences of children raised in diverse multilingual environments, including children who speak languages other than English in the United States, to further investigate the effects of multilingualism and of attention

to linguistic status on children's social reasoning. Future studies might also fruitfully focus on the malleability of children's social preferences when they are given experiences with children from different linguistic and social groups. In light of the present findings, the early school years may be an especially important period in which interventions may increase children's openness to others living in diverse communities and circumstances.

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