Local or foreign? Flexibility in children's preference for similar others

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Open access version of
Sehl, C. G., Denison, S., & Friedman, O. (2023). Local or foreign? Flexibility in children's preference for similar others. Developmental Psychology.

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Abstract

Children have a robust social preference for people similar to them, like those who share their language, accent, and race. In the present research, we show that this preference can diminish when children consider who they want to learn about. Across three experiments, 4- to 6-year-olds (total $N = 160$; 74 female, 86 male, from the Waterloo region in Canada, a predominantly White and middle-class region) and adults ($N = 103$) saw pairs of characters. One character was from nearby and had characteristics typical of the participating child's location (e.g., playing soccer), whereas the other character was from far away and had characteristics atypical of children's location (e.g., playing hurling). In Experiment 1, children had no preference when judging who they liked better, but preferred foreign characters when judging who they wanted to learn about. Experiments 2 and 3 followed up by using procedures where participants were not told anything about the characters besides whether they were local or foreign. Children and adults preferred local characters when choosing who they liked, but preferred local characters less when choosing who to learn about. These findings show that children's preferences for similar others are flexible and depend on the judgment they are making.

Keywords: social preferences, homophily, novelty seeking, social cognition, cognitive development

Local or foreign? Flexibility in children's preference for similar others

Suppose it is midway through the school year and children hear that two newcomers have joined their class. One is from a local town, while the other is from a distant country. We might expect that children in the class will be more interested in playing with the child from nearby, as younger children prefer to befriend those who are similar to them (e.g., Creel, 2018; Kinzler et al., 2007, 2009). However, suppose the children are faced with the choice of who they would rather learn about during show-and-tell. Will children show the same preference for similar others? Or will their preferences differ such that they prefer the child from a distant country, or show no preference at all?

Many studies suggest that children tend to prefer ingroup members over outgroup members (for a review, see Haun & Over, 2015). In these studies, children are shown two people, one who is similar and one who is different from them on some dimension. For example, one person might speak the child's language while the other speaks a foreign language; or one might have a native accent while the other has a foreign accent. After, children are asked which person they would rather be friends with. From age 5, children prefer to befriend those who speak their language (Kinzler et al., 2007), share their accents (Paquette-Smith et al., 2019; Souza et al., 2013), are the same gender (Martin et al., 1999; Shutts et al., 2013), and are the same race (Baron & Banaji, 2006; Kinzler et al., 2009). Children also prefer to befriend those who have the same preferences as them. For instance, 3-year-olds prefer others that like the same toys and foods as them (Fawcett & Markson, 2010; see also DeJesus et al., 2019). Children even prefer similar others in minimal group tasks where the basis for viewing others as similar is arbitrary (e.g., random assignment to one of two teams; Richter et al., 2016; Yang & Dunham, 2019). However, children's preference for similar others can diminish and even reverse when counteracting information is available. In one study, Xhosa-speaking 5- to 11-year-olds preferred English speakers over speakers of their own language, presumably because they viewed the English speakers as having a higher social status (Kinzler et al., 2012; for related findings, see Shutts et al., 2011). Relatedly, although children normally prefer acquiring information from people who are similar to them rather than dissimilar, this preference reverses when the dissimilar informants are more accurate or knowledgeable (Corriveau et al., 2013; Reyes-Jaquez & Echols, 2013). For instance, although 4- to 7-year-olds typically prefer object labels provided by same-gender than other-gender speakers, this preference reverses when the other-gender speaker previously provided more accurate labels than the same-gender speaker (Taylor, 2013; see also Terrier et al., 2016).

In this article, we examine another circumstance that might diminish or reverse children's preference for similar others. Rather than exploring the effects of counteracting information, we examine whether children's preferences change when they make a different kind of judgment. Specifically, we investigate children's preference for who they would rather learn about. Examining whether children's preferences vary across different social judgments may provide insight into the nature of children's preference for similar others. That is, this research may reveal whether this preference is flexible or whether it is instead relatively rigid and applied by default.

Children might prefer learning about individuals who are different from them, or they might show no preference. Either of these tendencies would suggest that children's preferences for similarity are flexible. These tendencies might also suggest that children's preferences for similarity are rational (for related discussion, see Begus et al., 2016; Byers-Heinlein et al., 2017; Weatherhead, White, & Friedman, 2018). It may be reasonable to assume that you will like a

person who shares your background over someone from far away—after all, you will have more in common with the local person and may have shared interests. But these considerations do not carry over to judging who you should learn about. On the contrary, you can gain more knowledge by learning about someone from far away. So, children's preference for similar others may not apply when they judge who they want to learn about.

Alternatively, children may persist in preferring similar others when deciding who they would rather learn about. If so, this would suggest that children's similarity preference may be relatively reflexive and inflexible. Children might always prefer similar over dissimilar others except when this preference is countered by additional considerations, like information about prior accuracy (e.g., Corriveau et al., 2013). This bias could reflect a broader tendency to favor similar others—a tendency that impacts many judgments and not just those about liking and befriending. Consistent with this, children have favorable expectations about people who are similar to them. In one study, 3- to 11-year-olds expected speakers of their language would be more likely to conform to social conventions than speakers of different languages (Liberman et al., 2018). Children's favorable expectations for similar others even emerges when they are randomly assigned to minimal groups (Baron & Dunham, 2015; Dunham, 2018; Dunham et al., 2011), and even appears in preverbal infants (Bian et al., 2018; Kinzler et al., 2007; Mahajan & Wynn, 2012; Pun et al., 2018).

Two Clarifications

Before proceeding, we should clarify how the present work relates to previous research. First, we have suggested that our investigation will be informative about the flexibility of children's preferences for similarity. However, it might seem that previous research has already spoken to this issue—as discussed, previous research shows that while children often prefer similar over dissimilar others, they seem to prefer dissimilar agents who are higher in social status or more knowledgeable (e.g., Corriveau et al., 2013; Kinzler et al., 2012). However, most of these findings do not speak to the flexibility of children's preferences, as they could reflect a fixed ordering of preferences (e.g., high social status > knowledgeable > similar > dissimilar).

This said, some recent work suggests that infants and children flexibly reason about *others'* similarity preferences (Bian & Baillargeon, 2022; Pesowski et al., 2023). For example, 4- to 6-year-olds in one study inferred that a character liked someone who wanted the same foods and toys as them (i.e., similar preferences) when these resources were plentiful, but not when they were limited (Pesowski et al., 2023). Likewise, another study found that infants expect other people to prefer individuals who wear similar clothing, but not when the clothing serves a function (Bian & Baillargeon, 2022). However, this work did not examine whether children's *own* preferences are flexible and change across contexts. Moreover, our investigation is the first to examine whether children's similarity preferences flexibly change within the exact same situation, based only on the judgments children are making. As such, this research can speak to whether children differentiate between different kinds of preferences (Pesowski et al., 2021).

Second, while we are focusing on children's preference for who to learn *about*, previous research looked at the related judgment: who to learn *from*. Specifically, this research found that young children prefer to learn from those similar to them over those dissimilar to them, such as a native-accented speaker over a foreign-accented speaker (Kinzler et al., 2011). These judgments may be importantly different—learning *about* someone involves gaining knowledge about their experience, whereas learning *from* someone involves trusting them as an informant. Since children's similarity preference may be more flexible for learning about others than learning

from them, we focused on children's preference for learning about others. However, as noted in the General Discussion, it might be worth comparing the difference between these judgments.

The Current Studies

To test children's varied preferences across judgments, we examined children's preference for local and foreign individuals. That is, we either asked children whether they liked or would rather learn about someone who lives nearby or far away. Geographic similarity might be especially likely to reveal differences between children's liking and learning preferences. Children might recognize they have much to learn about people from far away because they expect people from distant places to have different speech (DeJesus et al., 2018; Weatherhead, White & Friedman, 2018), norms (Conry-Murray & Turiel, 2012), knowledge (Soley & Köseler, 2021), and possibilities (Bowman-Smith et al., 2019; Komatsu & Galotti, 1986). Thus, children may be curious about people with different backgrounds.

We conducted three experiments on 4- to 6-year-olds and adults. In each experiment, participants were introduced to characters who lived near or far away from them, and were asked who they liked better and who they would want to learn more about. We tested 4- to 6-year-olds because much recent research suggests that there is rapid development in children's understanding of social sources of information at these ages (Liberman, 2020; Liberman & Shaw, 2018; for a review, see Afshordi & Liberman, 2021). Previous research using similar methods has also investigated this age range (e.g., DeJesus et al., 2017; Kinzler et al., 2007, 2009). We did not have any specific developmental predictions for when children's preferences may differ across judgments, however, we suspected that children's preferences would approach adults' with age. Although earlier research asked participants about who they would rather be friends with (e.g., Shutts et al., 2013; Weatherhead, White, & Friedman, 2018), we used a liking judgment, as children could be influenced by the practical difficulty of being friends with someone who lives far away.

Experiment 1

The materials, data, and code from all experiments are available online at: https://osf.io/29quv/

Method

Participants. We tested 60 four- to six-year-olds (M_{age} = 5;6 [years;months], range = 4;0–6;6, 31 female, 29 male; 20 children per age in years). One additional 5-year-old was excluded for not answering any test questions. This sample size was based on previous experiments that used similar designs, but no formal a priori power analysis was conducted. For each experiment, we conduced post hoc power analyses to examine our power to detect main effects (*simr* package in R; Green et al., 2016). Based on 1,000 simulations, our sample size in this experiment provided 73% power (95% CI [71%, 76%]) to detect the main effect of judgment.

In all experiments, children were tested individually online in a live video call, in the presence of their parent or guardian. Parents were instructed to look down or to turn away from the screen while testing took place. In all experiments, children were located in a predominantly middle-class region where approximately 79% of residents are White, and Chinese and South Asian residents are the main visible minorities. These studies were approved by the Office of Research Ethics at the University of Waterloo (Project: Online Studies in Cognitive and Language Development, No. REB42140).

Procedure. Children first completed a warm-up task to ensure they could refer to items on the computer screen. In each of the two trials, a dog appeared in a blue or orange box, and children were asked where the dog was located. They typically referred to its location by the color box it was in. If they gave other responses (e.g., "right there" or "on the left"), they were prompted to refer to the dog's location by using color.

The experimenter then introduced the main task by asking children if they knew which country they lived in. Regardless of whether they responded with their city or country, the experimenter agreed by saying, "that's right, we live in [location]." The experimenter then described that there are many countries in the world, and some are far away.

Children then completed two trials (see Figure 1). In each trial, children were shown pictures of two similar-looking characters, and were told three characteristics of the character and where they were from. One character was described as living in the same place as the participant ("local character") and had characteristics typical of people in the child's location. For example, they were described as living in a place with a flat grassy landscape, North American houses, and where people play soccer. The other character was described as living far away from the participant ("foreign character") and had characteristics atypical of people in the child's location. For example, they were described as living in a place with a rugged mountainous landscape, Nissen huts, and where people play hurling. Children were asked two comprehension questions: which character lived near them and which is from far away. Only five children answered incorrectly but provided correct responses after the characters were described again. Children were then asked which character they liked better and which they would want to learn more about, in counterbalanced order.

Characters were gender-matched to each participant and looked approximately the same age as participants. To prevent preferences from being influenced by superficial differences in the characters' appearances, we chose characters for each pair who looked similar to one another. Images were from Generated-Photos (https://generated.photos), using artificial intelligence to create similar faces. The characters in each trial were identifiable by the color box they were in. Colors and characters were counterbalanced across trials.

Results

In all experiments, we analyzed the results using generalized estimating equation (GEE) models (binary logistic, independent correlation matrix[1]. Judgment (like, learn) was entered as a predictor, and in experiments with children, age in months (mean-centered) was entered as a covariate (see Figure 1). There was a main effect of judgment, $F(1) = 4.31$, $p = .037$, as children were more likely to select the foreign character when judging who they wanted to learn about than which they liked better. There was also a main effect of age, $F(1) = 5.72$, $p = .017$, as older children were overall more likely than younger ones to choose the foreign character. No significant interaction between age and judgment emerged, $F(1) = 3.10$, $p = .078$.

To determine the age where children's learn judgments departed from chance (i.e., so that they preferred the foreign character), we examined when the 95% CIs no longer overlapped with

[1] In the Supplemental Materials, we also report exploratory mixed logistic regression models to account for potential random effects. These analyses revealed the same patterns of results as the GEEs, except for revealing a significant main effect of age in Experiment 2.

0.5 (also see Lee & Warneken, 2020). This was at age 5;5, 95% CI [0.51, 0.72]. The CIs also show that children's like judgments never diverge from chance.[2]

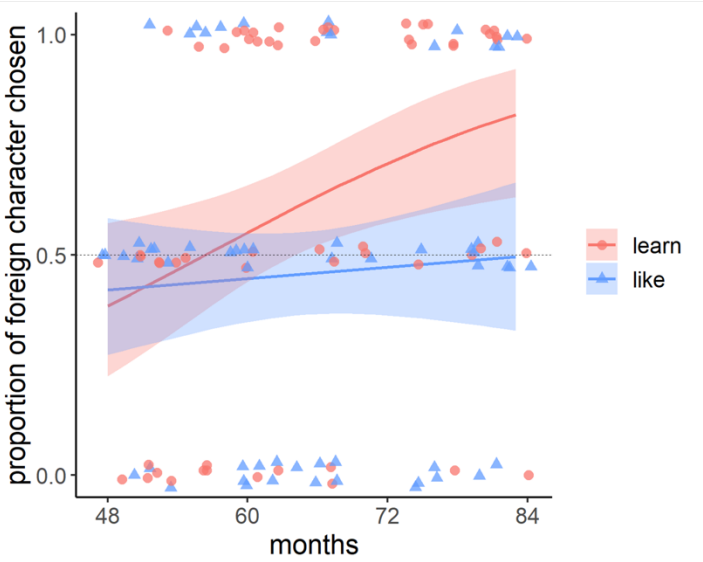
Discussion

Children were more likely to choose foreign over local characters when indicating who they preferred to learn about than when indicating who they liked more. However, children's curiosity may have depended on background information about the foreign country—they may have been interested in learning about the novel landscapes, houses, and games, rather than about the foreign characters themselves. Hence, we next investigated whether the difference between these judgments would persist if children were told only which character was foreign and which was local, and not given any further information about the countries. We expected that children might still prefer learning about foreign characters (i.e., even without this additional information) because young children infer that people from distant places are different from them (e.g., Conry-Murray & Turiel, 2012; DeJesus et al., 2018).

Figure 1

Stimuli and Results for Experiment 1.





Pre-test: Do you know which country we live in? That's right, we live in [location]. There are many other countries in the world and some of them are far far away.

Test trials: See this [blue] boy? This boy lives in [location], just like we do. Where he lives, it looks like this. The houses look like this. And the people there like to play this game. See this [orange] boy? This boy lives far far away from us. He lives in a different country. Where he lives, it looks like this. The houses look like this. And the people there like to play this game.

Questions: So which boy lives near us? Which boy lives far far away from us? **Which boy do you like better? Which boy would you want to learn more about?**

Note. Photos of characters are from Generated-Photos (https://generated.photos). Due to copyright restrictions, the original images of the soccer ball and hurling bat were replaced with similar images (Image source: Wikimedia Commons, Peter Wöllauer; License: CC BY-SA 3.0).

[2] We also conducted exploratory analyses in each experiment to examine whether gender or question order affected judgments (see OSF for analysis code). There was no effect of gender in any of the experiments. There were interactions between judgment and order in Experiments 1 and 3a (see Supplemental Materials). We revisit order effects in the Mega-analysis.

Refer to OSF for the original stimuli. In all graphs, colored bands show 95% confidence intervals; points are jittered to avoid overplotting.

Experiment 2

Method

Participants. We tested 60 four- to six-year-olds (M_{age} = 5;5, range = 4;0–6;11, 22 female, 67 male), 20 children per age (in years). We had 83% power (95% CI [81%, 85%]) to detect a main effect of judgment at $p < .05$.

Procedure. Similar to Experiment 1, children completed the warm-up task and were asked the same introductory question about which country they lived in. Children then completed two trials identical to Experiment 1 (see Figure 2). However, no characteristics were included. Instead, the local character was described as living close by, and the foreign character as living far away. Children were asked the same two questions, in counterbalanced order: which child they liked better and which they would want to learn more about. Colors and characters were counterbalanced across trials, and characters were gender-matched to each participant.

Results

There was a significant main effect of judgment, $F(1) = 7.26.76$, $p = .007$, as children were more likely to select the local character when judging who they liked better than who they wanted to learn more about (see Figure 2). There was no significant main effect of age, $F(1) = 0.74$, $p = .390$, but the judgment by age interaction was significant, $F(1) = 4.33$, $p = .037$. This interaction resulted because children were marginally more likely to want to learn about the foreign character as they got older, $F(1) = 3.51$, $p = .061$, however, their liking preference was stable with age, $F(1) = 0.99$, $p = .321$.

To determine the age where learning and liking responses first diverged, we examined when their 95% CIs no longer overlapped. This was at age 5;7; learn judgment, 95% CI [0.42, 0.62]; like judgment [0.24, 0.41]. The CIs also show that children's learning judgments never exceeded chance levels, whereas their liking judgments first fell below chance (toward the local character) at 4;6, 95% CI [0.25, 0.49].

Discussion

The results again showed that children had differing preferences for who they liked better and who they wanted to learn more about. However, these findings differed somewhat from those in the first experiment. Whereas children in this experiment liked local characters, children in the first experiment showed no preference for local or foreign characters. Also, children were only relatively more likely to prefer learning about foreign characters in this experiment, whereas children in the first experiment preferred learning about foreign characters. This difference may have resulted because children in the present experiment were not told about novel features of the foreign country. For example, they were not told about what games were played, or what foods were eaten in their countries. To ensure that the present findings are robust, we decided to replicate this experiment. This also allowed us to address a methodological concern. Specifically, the preceding experiments included comprehension questions immediately before the test trials. Because these questions required children to point to the characters, answering the questions could have impacted children's subsequent responses. To guard against this possibility, we did not include comprehension questions in the next experiment. We limited the age range to

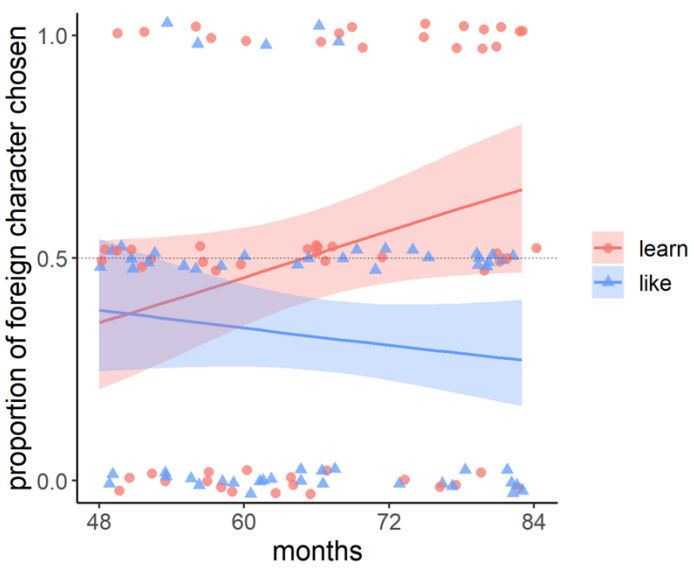
children aged 5–6 since 4-year-olds' preferences in the previous experiments did not differ by judgment, and were typically around chance.

Figure 2

Stimuli and Results for Experiment 2.



Pre-test: [Identical to Experiment 1].
Test trials: See this [blue] girl? This girl lives in a different country than us. She lives really far away from where we are. It would take all day to get to her house. See this [orange] girl? This girl lives in the same country as us. She lives really close to where we are. It would only take a few minutes to get to her house.
Questions: [Identical to Experiment 1].



Experiment 3a

Methods

Participants. We tested 40 five- to six-year-olds (Mage = 5;11, range = 5;0–6;11, 21 female, 19 male), 20 children per age (in years). We had 82% power (95% CI [80%, 85%]) to detect a main effect of judgment at $p < .05$.

Procedure. We followed the procedure from Experiment 2 but omitted the comprehension questions. Children were simply told about where the two characters were from and were asked the same two test questions in counterbalanced order: which child they liked better and which they would want to learn more about.

Results

There was a significant main effect of judgment, $F(1) = 7.37$, $p = .007$, as children were more likely to select the local character when judging who they liked better than who they wanted to learn more about (see Figure 3). There was no significant main effect of age, $F(1) = 0.47$, $p = .491$, and there was no significant judgment by age interaction, $F(1) = 2.26$, $p = .133$. Single-sample tests revealed that when judging who they liked better, children's preference for the local character significantly differed from chance, $p < .001$, though their preference for who they wanted to learn about did not differ from chance, $p = .760$.

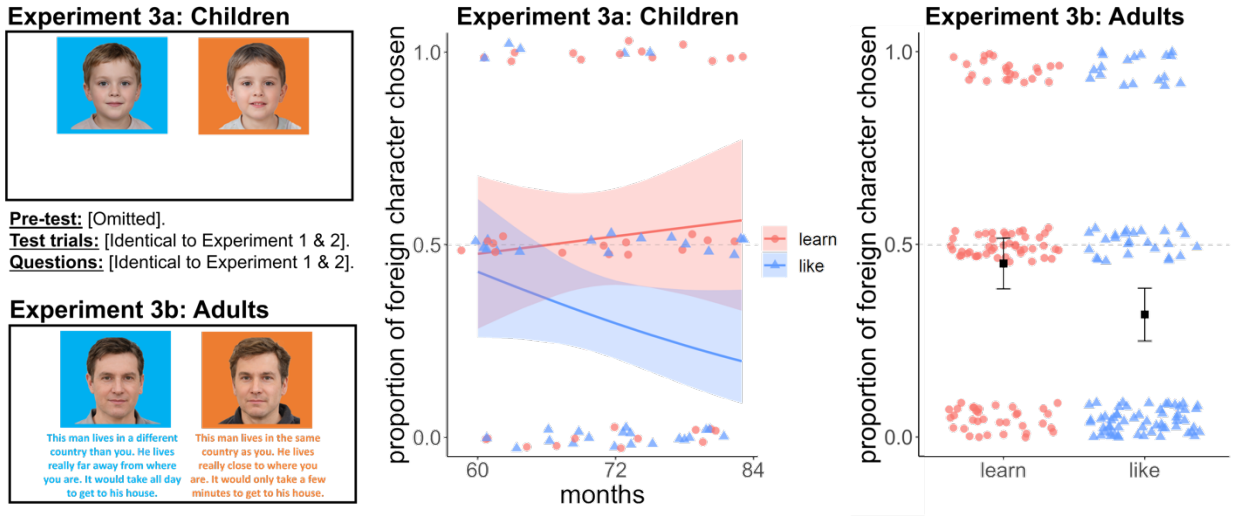
Discussion

Again, children's preferences varied across the two judgments. Children liked local over foreign characters, but they did not prefer either kind of character when asked who they would rather learn about. This finding generally replicates the pattern of findings from Experiment 2, but not from Experiment 1. Together, results from Experiments 2 and 3a show that children like local characters, but do not have a clear preference for who they would rather learn about. In the

final experiment, we examined adults' judgments to determine if these liking and learning preferences are stable across the lifespan. However, we anticipated that adults may not show the same liking preference as children since they might have been concerned about being perceived as xenophobic.

Figure 3

Stimuli and Results for Experiments 3a and 3b.



Experiment 3b

We preregistered this experiment at https://aspredicted.org/S2G_GKP.

Methods

Participants. We tested 103 adult participants (M_{age} = 37.07, range = 21–69, 38 female, 64 male, 1 other). Data were excluded from an additional 18 participants who failed at least one of the two posttest comprehension checks or neglected to answer on one or more trials. We had 98% power (95% CI [96%, 98%]) to detect a main effect of judgment at $p < .05$. Participants were recruited from Cloud Research (Litman et al., 2017). They were located throughout the United States and had a Human Intelligence Task (HIT) approval rating about 95% and completed at least 100 HITs.

Procedure. Adults completed a survey-based version of Experiment 3a with minor procedural differences (see Figure 3). First, they saw adult characters rather than children, and the characters were not gender-matched to participants. Instead, participants completed one trial with male characters and another with females (order counterbalanced across participants). Second, because participants were located across the United States, the script referred to the participants' locations, rather than a location shared by the experimenter and participant. For instance, participants read that the local character "lives close to where *you* are" rather than reading "lives close to where *we* are." Finally, participants completed two posttest comprehension checks, requiring them to identify how the characters differed and to select the question they were not asked.

Results

There was a main effect of judgment, $F(1) = 29.46$, $p < .001$, as participants were more likely to select the foreign character when judging who they wanted to learn about than who they liked better (see Figure 3). Single-sample tests revealed that when judging who they liked better, adults' preference for the local character significantly differed from chance, $p < .001$, though their preference for who they wanted to learn about did not differ from chance, $p = .140$.

As an exploratory analysis, we compared children's responses in Experiment 3a with adults' in 3b. Children's and adults' responses were analyzed in the same model, with age (child, adult) and judgment as predictors. There was a significant effect of judgment, $F(1) = 17.76$, $p < .001$, as participants were more likely to select the foreign character when judging who they wanted to learn about than who they liked better. There was no effect of age, $F(1) = 0.46$, $p = .496$, and no significant judgment by age interaction, $F(1) = 0.52$, $p = .469$.

Discussion

Adults liked local over foreign characters, but they did not prefer either kind of character when asked who they would rather learn about. This is the same pattern we observed with children in Experiments 2 and 3a.

Mega-Analyses

In sum, children across all experiments were more likely to select similar characters in liking judgments than learning judgments. At the same time, their overall rates appeared to vary across experiments. For example, children in Experiments 2 and 3a *liked* local characters at rates exceeding chance, whereas children in Experiment 1 did not. To get a sense of children's preferences overall, and whether these truly differed across experiments, we combined the data from Experiments 1 to 3a and conducted a mega-analysis.

Judgment, experiment, and age were entered as factors into a GEE model. There was no main effect of age, $F(1) = 0.74$, $p = .388$, but there was a main effect of judgment as children were more likely to select the local character when judging who they liked better than who they wanted to learn more about, $F(1) = 14.29$, $p < .001$. There was also a main effect of experiment, $F(2) = 4.62$, $p = .010$. Pairwise comparisons (Tukey method) revealed that children selected the foreign character more often in Experiment 1 than in Experiment 2, $p = .014$, and marginally more often in Experiment 1 than in Experiment 3a, $p = .054$, with no difference in response between Experiments 2 and 3a, $p = .988$.

There was a significant judgment by age interaction, $F(1) = 8.37$, $p = .004$. This interaction resulted because children were more likely to want to learn about the foreign character as they got older, $F(1) = 5.87$, $p = .015$, however, their liking preference was stable with age, $F(1) = 2.06$, $p = .151$. There was no two-way interaction between age and experiment, $F(2) = 1.77$, $p = .171$, or judgment and experiment, $F(1) = 0.08$, $p = .927$. There was also no three-way interaction between these factors, $F(2) = 0.05$, $p = .948$. We had 99.8% power (95% CI [99.2%, 99.9%]) to detect a main effect of judgment at $p < .05$.

We also conducted a second mega-analysis limited to children's response to the first question they were asked. We ran this analysis because we found effects of order in Experiments 1 and 3a, and wanted to get a sense of the results while avoiding the possibility of order effects (while maximizing power). Judgment, experiment, and age were entered as factors into a GEE model. There was a main effect of judgment, as children were more likely to select the foreign character when judging who they wanted to learn about rather than who they liked, $F(1) = 8.24$,

$p = .004$. However, there was no main effect of age, $F(1) = 0.83$, $p = .363$, or a main effect of experiment, $F(2) = 1.62$, $p = .197$.

There was a significant judgment by age interaction, $F(1) = 7.56$, $p = .006$, because children were more likely to select the local character in their liking judgment as they got older, $F(1) = 4.64$, $p = .031$, however, their learning preference was stable with age, $F(1) = 3.04$, $p = .081$. However, there was no significant two-way interaction between age and experiment, $F(2) = 0.90$, $p = .406$, or judgment and experiment, $F(1) = 1.23$, $p = .292$, or any three-way interaction between these factors, $F(2) = 1.79$, $p = .168$. We had 83% power (95% CI [81%, 86%]) to detect a main effect of judgment at $p < .05$.

General Discussion

We found that children's social preferences differed across judgments. Children were more likely to choose the local character when indicating who they liked better than who they wanted to learn more about. These preferences even diverged when children were not told any details about the local and foreign countries, and adults showed the same pattern of preferences. This work contributes to our knowledge of children's social preferences. Previous work has shown that children prefer to affiliate with others who are similar to them, like those who speak the same language, or have the same accent (e.g., Fawcett & Markson, 2010; Kinzler et al., 2009; Paquette-Smith et al., 2019; Shutts et al., 2013). However, our findings suggest that children's preference for similar others flexibly depends on the judgments they are making.

Some findings varied across the experiments. Specifically, in the first experiment children wanted to learn about foreign characters and liked characters equally, whereas in the following experiments, they wanted to learn about characters equally and liked local characters. This difference probably resulted because children in the first experiment were told background information about the characters, while children in the other experiments were not given this information and were only told about characters' distance. We also found that children's liking and learning preferences diverged around age 5. Children younger than this did not have any clear preference to like or learn about either character, nor did these judgments differ from each other. Despite these differences across experiments, the mega-analyses revealed that children liked local characters but were less likely to want to learn about them.

One explanation for why children show a diminished similarity preference in learning judgments is that children recognize that similarity is more relevant for liking decisions than learning decisions. Coming from a similar background may be relevant for liking—children might anticipate they are more likely to share interests and have things in common with people who are local rather than foreign. By contrast, there may be less reason to favor locals when deciding who to learn about, as learning about people from other places might be more informative. On this account, children's preference for similar others may have a rational basis (Weatherhead, White & Friedman, 2018).

Children's flexible preferences for similar others could also reflect a sensitivity to risk and commitment. Children may prefer similarity when their judgments involve risk and commitment, but this preference may disappear when judgments do not bring risk (for related discussion, see Sehl et al., 2022). Liking someone can be risky—we often spend time with people we think we might like, and so we may regret our efforts if we discover they are actually boring or unpleasant. Learning about someone is less risky, though, because seeking information about someone does not bring commitment. It is an open question, though, whether children consider liking as a risky decision. This risk-based account could be examined by asking about

decisions that carry greater risk and commitment than liking, such as the decision to befriend or work with someone.

Our experiments demonstrate the flexibility of children's social preferences for one kind of similarity—namely, whether others are from the same geographic background or a distant one. However, it is unknown whether children would show the same flexibility with other kinds of similarities. For instance, it is uncertain whether children would be similarly flexible with characters who speak with their accent versus a different one, or with characters who share their preferences or have dissimilar ones. Perhaps the findings would depend on the specific kind of similarity. For example, with accent, children might like native-accented speakers over foreign-accented ones, but prefer native-accented speakers less when choosing who to learn about. We might expect this because children infer that foreign-accented speakers are from far away (Weatherhead, Friedman, & White, 2018, 2019), and so children might treat accent similarly to information about geographic background. By contrast, with preferences, children might favor people with similar preferences for both liking and learning judgments—for example, if another child likes the same toys, children might be curious to learn about whether they have other things in common. Further, we might not expect children's flexibility to apply when similarities are arbitrary, such as minimal group membership (e.g., Richter et al., 2016; Yang & Dunham, 2019), or loose associations (e.g., people waiting at the same tram stop; Plötner et al., 2016).

In our experiments, children were told whether the characters were from their country or a distant foreign one. However, how children construed this information is an open question. Children may have simply treated this as information about distance. That is, they may have just viewed local characters as living nearby, and the foreign ones as coming from faraway places. Alternatively, children might have specifically cared about characters' nationality. That is, children may have seen the local character as sharing their nationality, and this could be enough reason to like them over foreign characters. This possibility is consistent with previous work finding that young children essentialize national groups: they recognize that nationality is a stable and in-born trait, and even use nationality to infer others' preferences (Hussak & Cimpian, 2019; Siddiqui et al., 2020) and to reason about shared knowledge (Liberman, 2020). So, children's preferences based on geographic background and physical distance could have been driven by two different mechanisms.

Finally, future work could also examine the flexibility of children's preferences by comparing other judgments. For example, it might be worth comparing preferences for who to learn *about* versus who to learn *from*. These preferences may differ—whereas we found that children's preference for similar others diminishes when they decide who to learn *about*, earlier work finds that children prefer learning *from* similar others over dissimilar ones (Corriveau et al., 2013; Corriveau & Harris, 2009; for a review see Haun & Over, 2015). For example, in one study, 4- to 5-year-olds chose to learn the function of a novel toy from a native-accented speaker over a foreign-accented one (Kinzler et al., 2011). Although both judgments concern learning, they are notably different—for example, whereas we might be cautious about learning from people who habitually lie, learning about them may be fascinating nonetheless. While future work is needed to directly compare children's choices to learn *from* and *about* others, the differing findings suggest that young children have a nuanced understanding of these different kinds of learning.

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