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Children's Judgments of Cultural Expertise: The Influence of Cultural Status and Learning Method

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ABSTRACT

The authors investigated children's use of cultural status (i.e., foreign vs. American) and learning method to evaluate informants' expertise in novel cultural practices. Ninety-six 6- to 9-year-olds heard about a foreign informant (i.e., member of an unfamiliar out-group) and an American informant (i.e., member of the participant's in-group) who each learned about a novel cultural practice differently (i.e., from a person vs. from a book). Participants decided which informant executed the cultural practice better, which informant they would prefer to learn from, and which learning method they would want to use themselves (i.e., learning method preference). Overall, participants endorsed foreign informants over American informants and foreign informants who learned from a person were generally viewed as the preferred option for imparting information in this context. These findings suggest that during the transition to middle childhood, learning context is an important influence on children's evaluations of cultural identity and learning methods.

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Expertise; knowledge acquisition; learning methods; cultural identity

From an early age, children attend to a variety of perceptual features that distinguish one person from another such as accent (Kinzler & DeJesus, 2013), race (e.g., Shutts, Roben, & Spelke, 2013), or gender (e.g., Boseovski, Hughes, & Miller, 2016). Young children use these characteristics selectively to decide whose opinion to endorse when forming their own preferences for friends (e.g., Kinzler, Shutts, DeJesus, & Spelke, 2009), objects, and activities (e.g., VanderBorghet & Jaswal, 2009)—a process known as selective social learning (Harris, 2007). This process enables children to acquire information that they could not realistically obtain on their own.

Beginning in the preschool years, children consider both the social characteristics of potential teachers and the topic of learning situations to evaluate the quality of information provided by informants (Koenig & Sabbagh, 2013). In addition to perceptual features, it is well established that children select reliable sources of information over unreliable sources to learn new knowledge (Harris, 2007). For example, preschoolers endorse novel object labels from an accurate informant rather than an inaccurate informant (e.g., Koenig & Harris, 2005) and distinguish between experts and nonexperts (e.g., Koenig & Jaswal, 2011). By 6 years of age, children recognize that variations in expertise exist (Landrum & Mills, 2015), but children's understanding of subtle differences in the quality and quantity of expertise improves across middle childhood. For example, during middle but not early childhood, children begin to appreciate that social and scientific knowledge are distinct such that scientific experts do not require social traits to be effective, although such traits may be desirable (e.g., niceness, fairness; Danovitch & Keil, 2007).

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Children's understanding of expertise that is inherently social (e.g., social psychology) or cultural may undergo protracted development across middle childhood.

Because learning is culturally embedded (Dayton & Rogoff, 2016), it is important to understand the degree to which children value cultural expertise when learning from other people, which is the central focus of the present study. There has been little systematic research in this regard (but see Souza & Legare, 2011), despite debate over the ways in which culture influences teaching and learning (Koenig, 2015; Rogoff, 2015). Consider the following example: a native of the Andes practices belt-loom weaving to make traditional clothing. A native of Baltimore read about belt-loom weaving and is also a capable weaver. To what extent is one of these people more qualified to teach belt-loom weaving and to whom would children be more receptive? Children may prioritize teachers who gain cultural knowledge directly in person over those who lack such culturally embedded experiences.

Children's own learning experiences (Rogoff, 2014) and cultural learning strategies (Legare & Harris, 2016) vary based on upbringing and perceptions of learning change across middle childhood (Sobel & Letourneau, 2015). In turn, evaluation of informants' knowledge in culturally situated learning experiences may change as children begin to appreciate different learning strategies used to acquire such knowledge (Bridgers, Gweon, Bretzke, & Ruggeri, 2018). In this study, 6- to 9-year-olds judged whether a foreign informant immersed in an unfamiliar culture is considered more knowledgeable about that culture's practices (i.e., cultural activities that require following a procedure) than an American informant who learned about those same practices.

We examined whether informant learning method influenced judgments about the knowledge of the informants. Specifically, participants evaluated whether learning novel cultural practices from a person or from a book would be most effective. It is possible that modality of learning, rather than cultural expertise, is central to young children's beliefs about knowledge acquisition. Although there is evidence of an early bias toward print sources for learning labels (e.g., Einav, Robinson, & Fox, 2013), 5- to 10-year-olds seem to understand the importance of instruction from another person for the acquisition of procedural information (Lockhart, Goddu, Smith, & Keil, 2016), similar to the cultural practices informants learned in the present study. Examination of the interplay between cultural expertise and modality of learning may suggest ways in which informant history plays a role in theoretical models of children's social learning. An informant's learning experience may influence children's perceptions of teacher legitimacy for sociocultural topics or offer new ways to harness children's interest in diverse cultures to improve intergroup relations and school-related outcomes (e.g., Vezzali, Gocłowska, Crisp, & Stathi, 2016).

Social Group Information May Influence Expertise Evaluations

In the present study, children's perceptions of social groups may influence whether they prioritize an assumed advantage of the foreign informant relative to the American informant. Although young children exhibit sophisticated selective social learning in some circumstances (Harris, 2007), there is evidence that social biases can interfere with appropriate evaluations of others (e.g., bias to endorse inaccurate informants who share social group membership over accurate but unfamiliar informants; Elashi & Mills, 2014; Elashi, Mills, & Grant, 2010). On one hand, these biases may reveal limitations in children's ability to capitalize on cultural expertise information. On the other hand, these biases may reflect practical considerations about individuals from unfamiliar groups (e.g., a foreign accent may be difficult to understand). The present study may reveal variation in the direction of influence for social group information during middle childhood.

Preschoolers demonstrate a preference for members of their own social group that peaks around 6 years of age and declines after 7 years of age (Aboud, 2008). Although this preference is not always associated with negative views of the out-group, 4- to 6-year-olds attribute more

positive traits to in-group members than out-group members (e.g., Aboud, 2003) and 3- to 5-year-olds prefer to learn functions for novel objects from a native-accented informant over a foreign-accented informant (Kinzler, Corriveau, & Harris, 2011). In contrast to preschoolers, older children may recognize that acceptance of diverse teachers affords access to higher-quality knowledge. In one study, 6- to 8-year-olds were more willing to learn about ballet and football from counterstereotypical (e.g., a male ballet expert) and opposite gender experts than were younger children (e.g., Boseovski et al., 2016). Older children also appreciate that other information about diverse individuals could be important for social relationships. For example, 9- to 10-year-olds demonstrate a willingness to befriend out-group members (e.g., gender) if those individuals share similar values (e.g., norm for equality in resource allocation; Mulvey, Hitti, Rutland, Abrams, & Killen, 2014). Indeed, greater acceptance of diverse individuals may result from a decline in negative out-group stereotyping (Aboud, 2008) and better ability to coordinate social acumen (Nesdale, 2013) with predictions about the advantages afforded by diverse cultural status. We included 6- to 9-year-olds in the present study to capture the potential early transition toward placing greater value on diverse cultural status for the impact it may have on the quality of cultural expertise.

In the present study, we were interested in whether children would prioritize a foreign informant over an American informant when the informants were described as equally knowledgeable. This design enabled us to assess the expectation that cultural status is tied to cultural expertise and to examine the ways in which children make nuanced evaluations of expertise with age. Overall, we predicted that participants would assume the foreign informant to be more skilled than the American informant. Based on the research described previously regarding developmental changes in children's perception of social and cultural groups and improvement in children's understanding of expertise, we expected that 8- to 9-year-olds would endorse the foreign informant to a greater degree than 6- to 7-year-olds.

Perceptions of Learning Method May be Particularly Important in Cultural Contexts

In addition to the changes that occur in children's use of social group information across middle childhood, this period may also be an ideal time to investigate preferences for certain learning methods, especially those that could engage children in learning about diverse groups. Some of children's earliest cultural learning occurs through the imitation of adults or interactions with peers that result in children learning cultural norms (e.g., gender role behavior; Ma & Woolley, 2013). In addition to these salient personal experiences, metacognitive development between 6 and 10 years of age (Schneider, 2008) allows children to reflect on strategies that contribute to learning and knowing in the cultural domain. Children's ability to evaluate learning method efficacy in the present study might reveal how much the manner of knowledge acquisition is prioritized relative to other cues.

Across middle childhood, children attend to the differences between learning procedural information and other forms of learning (Sobel & Letourneau, 2015) as online decision making about whether another person is required for learning develops during this period. Lockhart et al. (2016) demonstrated that 5- to 10-year-olds are indeed sensitive to the necessity of different learning methods. Overall, children in their study distinguished information that could be acquired on one's own from procedural information that required third-person instruction. However, kindergartners (i.e., 5- to 6-year-olds) were more likely than second-grade students (i.e., 7- to 8-year-olds), who were more likely than fourth-grade students (i.e., 9- to 10-year-olds), to believe that a person could learn how to build a roller coaster without third-person instruction. Thus, children are better able to assess the need for third-person instruction for procedural information with age.

Children are also familiar with and sometimes prefer learning methods that do not involve humans directly such as print or technology. For example, “early readers” prefer text over spoken word from an animated informant when they assess object or animal labels (Eyden, Robinson, & Einav, 2014). Indeed, by 6 years of age, children are familiar with books as learning tools and even demonstrate a preference for books over “smart” devices to learn facts (e.g., about dogs; Eisen & Lillard, 2016). Given that adults and some 6-year-olds prefer these sources that seem less prone to error than humans, it is feasible that children would value book instruction over person instruction in the present study.

However, children are also aware of the limitations of nonhuman learning methods. Between kindergarten and fourth-grade, children are increasingly aware that inanimate resources are less likely than humans to understand human tendencies, perceive these sources to be less interactive than humans (Danovitch & Alzahabi, 2013), and perceive nonhuman sources as perhaps best suited for “pure facts” (Danovitch & Keil, 2008). Based on children’s developing understanding that human interaction is required to learn procedural information, 8- to 9-year-olds in the present study were expected to be more sensitive than 6- to 7-year-olds to the need for another person to learn novel cultural practices.

We investigated how 6- to 9-year-olds use information about informants’ learning methods (person instruction vs. book instruction) to evaluate informants’ knowledge about a novel cultural practice. Participants heard about both a foreign informant (i.e., from the target country) and an American informant (i.e., from the United States) who learned the same cultural information. The informant learning method varied such that half of the time the foreign informant learned from a person and the American informant learned from a book; these contingencies were switched for the other half (see Figure 1). Children were asked which informant was better at a cultural practice and from which informant they would want to learn about the practice to investigate the extent to which children prioritize cultural status in their cultural expert endorsements. Children were also asked which learning method they preferred to investigate whether this preference influenced acceptance of cultural expertise. To determine whether children displayed any preference for one informant over the other, children also rated how much they liked each informant.

Overall, we predicted an age effect qualified by an age by informant learning method interaction: we predicted that older children’s endorsement of the foreign informant who learned

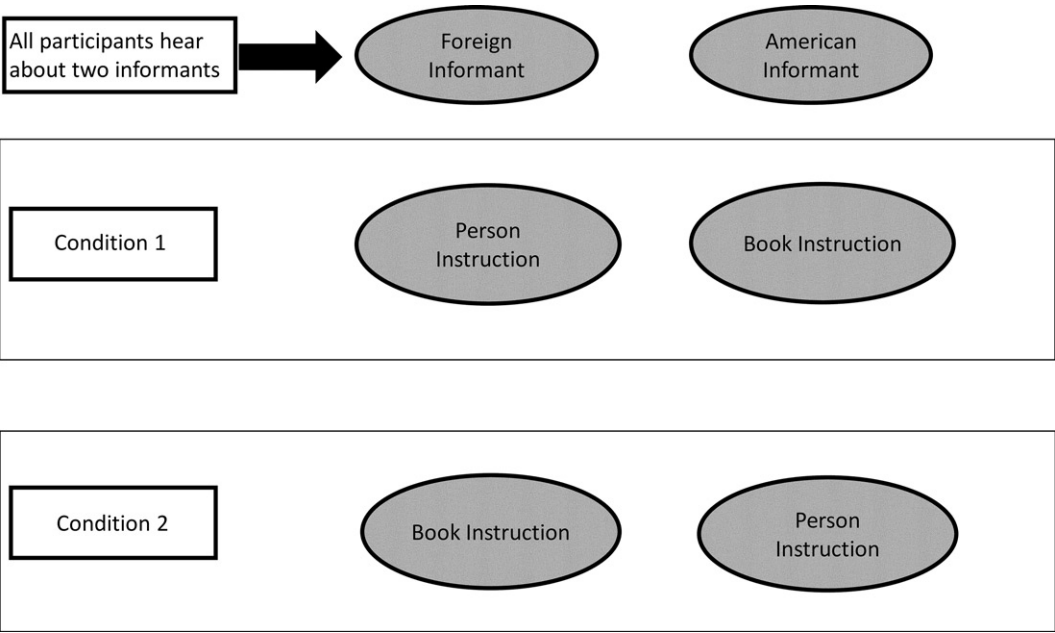


Figure 1. Depiction of study design.

from a person would be stronger than younger children's endorsement of this informant. Relative to older children, younger children were not expected to differentiate between person instruction and book instruction.

Method

Participants

Ninety-six 6- to 9-year-olds (6- to 7-year-olds: $n = 47$, $M_{age} = 84.2$ months, $SD = 7.1$ months, 23 boys; 8- to 9-year-olds: $n = 49$, $M_{age} = 108.5$ months, $SD = 7.1$ months, 23 boys) were tested. Participants were recruited from child care programs and community events in a mid-sized southeastern city. Participants' ethnic or racial identities consisted of 68.8% European American, 14.6% African American/Black, 6.3% Hispanic/Latino, 3.1% Asian, and 11.5% whose parents identified them as biracial or multiracial; an additional 2.1% of parents chose not to disclose ethnic or racial identity. Diverse socioeconomic backgrounds were represented, but the majority of participants' parents (57.3%) reported an annual household income of \$60,000 or more. Testing sessions occurred in the lab or after school centers, except for one that occurred in a home residence for two participants who were unable to travel to these locations. Parents signed consent forms and children 7 years of age and older provided written assent before participation. Approval for this study was obtained from the institutional review board.

Materials

A total of eight photographs of European American adult women with neutral expressions from the NimStim face database (Tottenham et al., 2009) represented the informants and four images from the Internet represented cultural practices (table, paper bird, doll, dance). All stimuli were presented via laptop and in gray scale on a white background in Microsoft PowerPoint. For each story, participants viewed two informants and one cultural item. The experimenter provided story information and administered test questions verbally. All testing sessions were video-recorded.

Design

This study used a 2 (Age: 6.0–7.9 years vs. 8.0–9.9 years) \times 2 (Informant learning method: person instruction vs. book instruction) between-subjects design (Figure 1). In each age group, half of the participants heard about a foreign informant who learned a cultural practice from a person and an American informant who learned this practice from a book across two stories; these informant learning method contingencies were reversed for the remaining half of participants. All participants were asked to choose between the foreign and American informant in response to several questions. Consistent with previous research (e.g., Boseovski & Thurman, 2014; Koenig & Jaswal, 2011), both informants were adult women. Each participant heard two stories about a set of informants learning a cultural practice (e.g., Story 1: how Informant A and Informant B learned to sew a doll; Story 2: how Informant C and Informant D learned to create a paper bird; see Appendix A for an example). Testing sessions lasted approximately 45 minutes.

Procedure

Main task

In each story, participants heard about a foreign informant (e.g., from the target country where a target cultural practice was developed) and an American informant (e.g., from the United States, like participants in this study) who learned about the same target cultural practice through different

learning methods. A different pair of informants was used for each story. There were four possible story topics (e.g., making a table, learning a dance, sewing a doll, making a paper bird). Story pair assignment and presentation order of the stories was counterbalanced across participants.

For each story, the experimenter introduced the target informants side by side on the laptop. All country and language names were fictitious to eliminate the possible influence of prior knowledge on children's responses, with different names used for each story. Participants were told where each informant was born, where each currently lived, and the language that she spoke with her family (see Appendix A). Informant presentation order was randomized for this introduction as well as the subsequent parts of this task.

Participants answered memory questions for each informant (e.g., "Which girl is Sasha?" and "Where is Sasha from?") to ensure that they remembered them correctly. Introductions for both informants were repeated for participants who provided incorrect responses.

Learning experience phase

Next, participants heard learning method information for each informant while the informant's photograph was displayed next to the image of a target cultural item or practice (e.g., Ruslandian paper bird). For example, in one narrative about a foreign informant who learned from a person, the foreign informant "sat with her mom and carefully watched her" complete a cultural practice, her mother helped her several times to complete the practice, but now the informant could complete it on her own (see Appendix A). After the experimenter transitioned to the next photographic display, participants heard learning method information for the American informant who learned from a book. This informant "read the book about Ruslandian birds and looked at the pictures showing how to fold the paper," used the books several times to complete the cultural practice, but now she could complete it on her own (see Appendix A).

Critically, participants heard each informant receive the same instructions for carrying out the cultural practice (i.e., in this example both complete the same folding movements to create the paper bird).

Participants answered memory questions about each informant's learning method (e.g., "Who learned to make Ruslandian birds at home with her mom?") to ensure that participants recalled informants' learning experiences accurately. This information was repeated for participants who provided incorrect responses.

Test phase

Participants answered a series of forced-choice questions after each story: the main test questions and "liking" ratings of the informants. The main test questions always preceded the "liking" ratings to reduce the likelihood that participants' explicit subjective judgments of the informants would influence judgments of informant expertise. Question order and answer options within each of these three blocks of questions were randomized, with the exception of answer options indicated on a scale (i.e., "liking" ratings).

The main test questions were the following: (a) correctness question (e.g., "Who would make a better Ruslandian bird?"), (b) future learning preference question (e.g., "If you wanted to learn how to make these Ruslandian birds, *who* would you want to learn from?"), and (c) learning method preference question (e.g., "If you wanted to learn how to make these Ruslandian birds, *how* would you want to learn about them?").

Participants provided justifications of their informant endorsement for the main test questions (e.g., "Why would Sasha make a better bird?" "Why would you want to learn from Sasha?" and "Why would you want to learn from a person?"). To gain more information about participants' reasons for their endorsements, each justification was followed by a forced-choice question to assess whether participants endorsed an informant or learning method due to the cultural

expertise of an informant, a perception that the informant was similar to them, or a learning method preference (e.g., “Would Sasha make a better bird because she: [a] knows the most about Rusland, [b] comes from a family like your family, or [c] learned about the birds the best way?”) if the participant did not include this information in his or her justification.

For the “liking” ratings, participants rated how much they liked each informant on a scale of one to three stars, with one star indicating “not very much,” two stars indicating “a little,” and three stars indicating “a lot.”

Debriefing

At the end of testing, participants were told that the countries they heard about were not real countries, but rather had been made up only for the day’s activities. The experimenter made sure that children understood the use of fake countries before she ended the session.

Results

Preliminary analyses indicated that there were no significant effects of story content (i.e., learning about the table, paper bird, doll, or dance) or story order (i.e., which story content participants heard about first), participant gender, race, or family annual income (all $ps > .08$). A chi-square test confirmed that participants tested in day care or school locations, including the two participants tested at home, did not differ significantly in their responses from those participants tested in the lab (all p values > 0.08). These factors were excluded from the analyses below.

For the correctness and future learning preference questions, participants received a score of 0 if they selected the American informant and 1 for the foreign informant. Given the lack of significant differences between stories based on their content, scores from each story were summed to create a total score that could range from 0 to 2 for these questions.

Correctness question

One child refused to answer this question for the first story. Thus, her data were excluded from the analyses for this question. Overall, participants endorsed the foreign informant as correct significantly more than expected by chance, $t(94) = 5.45$, $p < .001$, $d = 0.56$ (Figure 2). This was

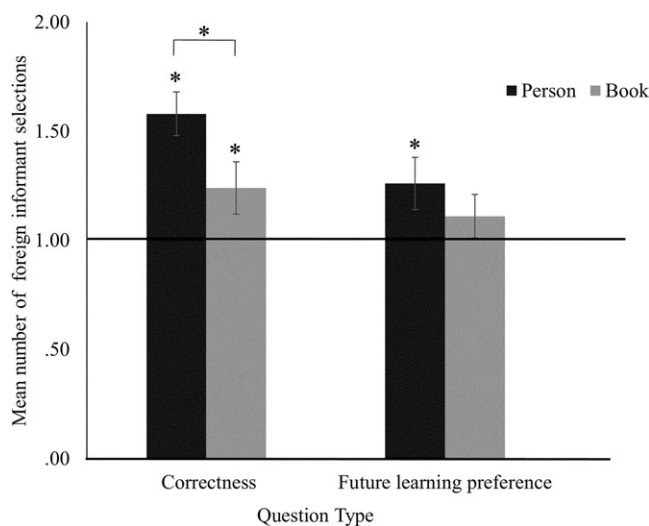


Figure 2. Children’s selection of the foreign informant by question type and informant learning method. Error bars reflect standard errors. Chance performance is equal to a value of 1.00. * $p < .05$.

true for both younger children, $M=1.30$, $SD=0.78$, $t(45)=2.63$, $p=.012$, $d=0.39$; and older children, $M=1.53$, $SD=0.71$, $t(48)=5.23$, $p<.001$, $d=0.75$. An age by informant learning method analysis of variance (ANOVA) on the correctness question revealed a main effect of informant learning method, $F(1, 91)=4.80$, $p=.03$, $\eta_p^2=.05$. Participants who heard person instruction were more likely to endorse the foreign informant as correct ($M=1.58$, $SD=0.70$) than were those who heard book instruction ($M=1.24$, $SD=0.77$; see Figure 2). There were no significant effects of age, $F(1, 91)=2.09$, $p=.15$, nor was there an interaction between age and informant learning method, $F(1, 91)=0.40$, $p=.53$.

Exploratory analyses

Exploratory analyses were conducted to examine whether the main effect of informant learning method was associated with the informant’s cultural status (i.e., foreign or American) or the learning method. Specifically, because there were no conditions in the present study that held one of these factors constant to examine the effect of the other, the data were recoded to estimate the effect of informant cultural status alone. Participants’ correctness totals were recoded such that for each story, they received a score of 0 if they selected the informant who learned from a book and a score of 1 if they selected the informant who learned from a person. Scores for each story were combined for a total that could range from 0 to 2. When both informants learned from a person, participants endorsed the foreign informant as correct ($M=1.58$, $SD=0.70$) significantly more than the American informant ($M=0.76$, $SD=0.77$), $t(93)=5.45$, $p<.001$, $d=0.56$.

Qualitative data

Participants were asked to justify their informant selections. Justifications were coded as “in-group bias”, “learning method preference”, “cultural expertise”, or “other/don’t know” for both the correctness and future learning preference questions (see Table 1). Participants had the opportunity to provide separate verbal justifications for each story, so these responses were not combined across stories. Justifications were dependent on whether participants endorsed the foreign or American informant: Story 1, $\chi^2(3)=27.13$, $p<.001$; Story 2: $\chi^2(2)=14.82$, $p=.001$. Most participants who endorsed the foreign informant referenced her cultural expertise, but many referenced learning method. Most of the participants who endorsed the American informant referenced learning method. Proportions of each type of justification for each story are reported in Table 2 and there was substantial or better interrater agreement (McHugh, 2012)

Table 1. Examples of coding scheme for correctness and future learning preference questions.

	Correctness	Future learning preference
Code		
In-group bias	—	Because she does the things I like to do. She speaks English. Because she lives in the U.S.
Learning method preference	Because books are very knowledgeable. Because she could look at the instructions. Because she saw her mom doing it and she learned from there.	Because she read it from a book and it has more information. Because she could ask questions about it when she learned.
Cultural expertise	Because she because um she’s from Polmania and it’s a special thing that they do. Because she’s native to Rusland and that’s where the Ruslandian birds come from.	Because they’re from her country and it’s probably a little more special to her. Because she is from that country and she knows a lot about it.
Other (Includes “I don’t know” and no response)	Because she would be the best. Because she knows a lot about them. Because she’s the best at sewing.	She’s good at them. Because she’s a good reader. She looks like hers is a little bit better.

Table 2. Proportion of participant informant endorsements by response type for the correctness and future learning preference questions ($N = 96$).

Code	Correctness								Future learning preference							
	Story 1				Story 2				Story 1				Story 2			
	Foreign		American		Foreign		American		Foreign		American		Foreign		American	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
In-group bias	0	0	1	3.0	0	0	0	0	0	0	9	21.4	0	0	5	13.9
Learning method preference	20	32.3	22	66.7	30	41.1	20	87.0	22	40.7	21	50.0	27	45.0	17	47.2
Cultural expertise	34	54.8	1	3.0	29	39.7	0	0	24	44.4	0	0	20	33.3	0	0
Other (Includes "I don't know" and no response)	8	12.9	9	27.3	14	19.2	3	13.0	8	14.8	12	28.6	13	21.7	14	38.9
Total	62		33		73		23		54		42		60		36	

Note. The *n* for Correctness Story 1 is 95 because one participant refused to answer.

across stories; Story 1: $\kappa = 0.64$; Story 2: $\kappa = 1.00$, $ps < .001$. Responses did not depend on age: Story 1, $\chi^2(3) = 7.07$, $p = .07$; Story 2, $\chi^2(2) = 3.58$, $p = .17$. Fifteen participants needed the follow-up forced-choice justification question for Story 1 because they did not provide a relevant justification (e.g., "I don't know"); one participant refused to answer this question. Six participants needed this question for Story 2.

Future learning preference question

Overall, participants endorsed the foreign informant for future learning significantly more than expected by chance, $t(95) = 2.47$, $p = .02$, $d = 0.25$ (see Figure 2). This pattern was demonstrated by older children, $M = 1.33$, $SD = 0.75$, $t(48) = 3.06$, $p = .004$, $d = 0.44$, but not younger children, $M = 1.04$, $SD = 0.72$, $t(46) = 0.41$, $p = .69$. An age by informant learning method ANOVA on future learning preference revealed no significant main effect of age, $F(1, 92) = 3.32$, informant learning method, $F(1, 92) = 0.90$, nor an interaction between these factors $F(1, 92) = 2.35$, all $ps > .07$.

Exploratory analyses

Although the ANOVA revealed no effects for this variable, exploratory analyses provided a more sensitive examination of the possibility that informants' cultural status nevertheless had a similar effect to that found for the correctness question. Future learning preference totals were recoded in the same way as the correctness totals. When both informants learned from a person, participants endorsed the foreign informant for future learning ($M = 1.26$, $SD = 0.80$) significantly more than the American informant ($M = 0.89$, $SD = 0.67$), $t(94) = 2.43$, $p = .02$, $d = 0.50$.

Qualitative data

Justifications were coded in the same way as the correctness question and were again dependent on whether participants endorsed the foreign or American informant: Story 1, $\chi^2(3) = 31.17$, $p < .001$; Story 2, $\chi^2(3) = 22.11$, $p < .001$. Most participants who endorsed the foreign informant referenced her cultural expertise or learning method. Most participants who endorsed the American informant referenced learning method. Proportions of each type of justification for each story are reported in Table 2 and there was substantial or better interrater agreement (McHugh, 2012) across stories (Story 1: $\kappa = 0.63$; Story 2: $\kappa = 0.97$; $ps < .001$). Justifications were not dependent on participant age: Story 1, $\chi^2(3) = 4.54$, $p = .21$; Story 2, $\chi^2(3) = 2.94$, $p = .40$.

Eighteen participants needed the follow-up question for Story 1; 17 participants needed this question for Story 2.

Learning method preference question

For each story, participants could choose if they would learn for themselves from a book or from a person. Overall, 26% of participants selected that they would want to learn from a book across both stories, 41.7% selected that they would want to learn from a book for one of the stories but from a person for the other story, and 32.3% selected that they would want to learn from a person across both stories. Chi-square tests revealed that participants' learning method preference was not dependent on informant learning method for Story 1, $\chi^2(1) = 0.64$, $p = .42$, but it was dependent on informant learning method for Story 2, $\chi^2(1) = 8.02$, $p = .005$. For Story 2, the majority of participants (72%) who heard about a foreign informant who learned from a person endorsed learning from a person for themselves. Participants who heard about a foreign informant who learned from a book remained relatively evenly divided between the learning methods. Preferred learning method was not dependent on age: Story 1, $\chi^2(1) = 1.06$, $p = .30$; Story 2, $\chi^2(1) = 0.34$, $p = .56$.

"Liking" ratings

An average rating of how much participants liked each informant was calculated, collapsed across both stories. Overall, participants rated liking both informants a moderate amount and there was no difference in how much participants rated liking the foreign informant ($M = 2.21$, $SD = 0.63$) versus the American informant ($M = 2.24$, $SD = 0.59$).

An age by informant learning method ANOVA revealed no significant effects of age $F(1, 92) = 2.59$, or informant learning method, $F(1, 92) = 1.31$, nor did it show an interaction between these factors, $F(1, 92) = 0.19$, all $ps > .10$, for the foreign informant, nor for the American informant: age, $F(1, 92) = 0.30$; informant learning method, $F(1, 92) = 0.35$; and the interaction between these factors, $F(1, 92) = 0.27$, all $ps > .10$.

Discussion

Six- to 9-year-olds received information about informants' cultural status and learning method and evaluated informants' knowledge about a novel cultural practice. As predicted, children preferred a foreign informant over an American informant overall. Contrary to predictions, an age difference was evident for only future learning preferences and children's preference for an informant who learned from a person over an informant who learned from a book did not differ by age. These results suggest that a foreign informant who learned from a person was viewed as a particularly potent source of cultural expertise for children at all ages. Children did not demonstrate a systematic learning method preference for their own learning.

Whereas studies that examine children's perceptions of expertise often investigate children's evaluations of experts versus nonexperts, the present study offered a situation in which both informants were equally knowledgeable. Children may need to consider additional characteristics beyond knowledge, intent, or other features (Landrum, Eaves, & Shafto, 2015) to evaluate experts with equal knowledge. Specifically, children may prioritize information regarding how cultural knowledge was acquired in a way that would be irrelevant in other knowledge domains or make inferences about the quality of expertise based on the experience assumed to accumulate by virtue of cultural involvement. An important consideration for theoretical models of children's social learning is that the domain of expertise might influence the information children prioritize in their evaluation of experts.

Indeed, children endorsed the foreign informant as correct and as the preferred informant for future learning overall, which suggests at least two possible ways in which children could have used cultural status information in this context. One possible interpretation is that children used cultural status to make additional learning method inferences beyond the information that was provided. A decreased in-group bias (Aboud, 2008), coupled with children's general positivity bias at this age (Boseovski, 2010), may have contributed to children's appreciation for a foreign informant's advantage due to her direct experience as a member of the target culture. Social group information was irrelevant to expertise in previous research, but directly relevant in the present study, such that children may have assumed that foreign informants had experienced more opportunities to learn these cultural practices implicitly relative to American informants. Many young children tend to prefer their own mothers over other adults as sources of information (e.g., Corriveau et al., 2009) and in the present study, half of participants heard that the foreign informant learned about the cultural practice from her mother. This detail may have influenced participants to assume a special advantage for the foreign informant who learned from her mother (i.e., also from the target culture).

This information may have been particularly salient due to the cultural learning context, but it should be noted that younger children were less likely than older children to choose the foreign informant for future learning. Approximately half of the younger children chose the American informant. It is unlikely that this result represents an explicit bias against a foreigner, as only a small percentage of these participants mentioned social group affiliations in their justifications of informant endorsement (and only one participant did so for the correctness question). Children also reported liking both informants approximately the same amount. Perhaps in this context, some younger children preferred to affiliate with the more familiar American informant over the less familiar foreign informant without an explicit bias toward the foreign informant (Cameron, Alvarez, Ruble, & Fuligni, 2001); these children may have imagined that they would feel more comfortable receiving corrective feedback from a familiar individual in this particular learning situation.

Another possible interpretation of children's overall endorsement of the foreign informant is that children used cultural identity as a stereotype about what the foreign informant would know, consistent with the idea that children use cultural identity to make prejudicial assumptions about out-groups (Bigler & Liben, 2007). A large proportion of children justified an endorsement of the foreign informant with reference to her cultural expertise (e.g., involvement with the target country) rather than her learning method. During the transition to middle childhood, children may struggle with how to interpret social information about unfamiliar individuals and rely on some Western stereotypes that unfamiliar cultures are more "traditional" in a pejorative way (e.g., "undeveloped"; see Rogoff, 2014).

Data from this study suggest that by middle childhood, some children perceive learning from a person as helpful. However, participants were initially divided in their learning method preferences when asked about them explicitly and the measures in this study could not pinpoint a cause for these individual differences. After the second story, over half of participants endorsed learning from a person. This shift could have resulted from the additional time children had to reflect on the best method to learn cultural practices and is consistent with the prediction that children would perceive human instruction as necessary for procedural learning (Lockhart et al., 2016).

Beyond its utility, children may view learning cultural practices from a person as socially preferable and familiar based on their own personal experiences learning cultural information from peers and parents (Vygotsky, 1978). In other domains, children may view learning method as more dissociable from the content than an expert learned. However, recent research suggests that children use learning method information to decide whom to direct their questions to when learning new information (Bridgers et al., 2018). Together, studies that incorporate information about informant knowledge acquisition suggest that models for children's social learning should include this aspect of informant history to help predict children's evaluations of experts.

Importantly, knowledge acquisition may include dissociable implicit and explicit processes such as indirect and direct learning experiences.

Future Directions and Limitations

In general, children endorsed a foreign informant in an unfamiliar cultural setting and prioritized the direct experience of an informant who learned from a person over the indirect experience of an informant who learned from a book. In this study, only informant learning method was manipulated so exploratory analyses were used to estimate the effect of cultural status alone on children's evaluations of cultural expertise. A future study could include condition variants to examine children's evaluations of two foreign informants who differ in their learning method (e.g., person instruction vs. book instruction) and those who share a common learning method (e.g., person instruction) but otherwise differ (e.g., foreign vs. American). We did not ask participants in the present study how strongly they identified as American, which could be important information to consider in future research.

It may be that the use of a maternal figure in the present study drew participants toward informants who received third-person instruction, which could also be addressed in future research that examines whether the role of the instructor (e.g., mother vs. teacher) influences this learning method preference. In research regarding children's perceptions of expertise, occupation labels provide cues about experts' training (e.g., Lutz & Keil, 2002). Similarly, specific labels regarding informant role may be prioritized over cultural status when learning in domains for which cultural status is not inherent to an informant's knowledge. Future research should also explore the potential for individual differences in children's own learning experiences, perhaps as a result of family resources, that could influence their preference for different types of instruction.

Conclusion

Six- to 9-year-olds take into account cultural status and learning method in their evaluations of cultural expertise. This finding demonstrates a sophisticated reasoning ability for this developmental period that influences children's approach to learning about unfamiliar cultures. Specific learning methods and types of teachers are especially important to consider in the classroom, where educators may be able to capitalize on children's preferences to expand children's interest in learning about diverse cultural groups or sharing their diverse experiences. If these types of teaching and learning experiences appeal to children, they may serve to improve school climate and academic motivation (Byrd, 2015; McKeown, Williams, & Pauker, 2017) as well as promote intergroup contact (McGlothlin & Killen, 2010).

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