CHILD DEVELOPMENT

Child Development, xxxx 2017, Volume 00, Number 0, Pages 1–13

Smart Conformists: Children and Adolescents Associate Conformity With Intelligence Across Cultures

Nicole J. Wen
The University of Texas at Austin

Jennifer M. Clegg
Texas State University

Cristine H. Legare
The University of Texas at Austin

The current study used a novel methodology based on multivocal ethnography to assess the relations between conformity and evaluations of intelligence and good behavior among Western (U.S.) and non-Western (Ni-Vanuatu) children (6- to 11-year-olds) and adolescents (13- to 17-year-olds; $N = 256$). Previous research has shown that U.S. adults were less likely to endorse high-conformity children as intelligent than Ni-Vanuatu adults. The current data demonstrate that in contrast to prior studies documenting cultural differences between adults' evaluations of conformity, children and adolescents in the United States and Vanuatu have a conformity bias when evaluating peers' intelligence and behavior. Conformity bias for good behavior increases with age. The results have implications for understanding the interplay of conformity bias and trait psychology across cultures and development.

Children are sensitive to conformity early in childhood. Three- and 4-year-olds are highly attuned to majority views when assessing the reliability of potential informants (Harris & Corriveau, 2011) and prefer to seek and endorse information from majority informants over dissenters (Corriveau, Fusaro, & Harris, 2009). Two- to 4-year-old children are sensitive to peer pressure and conform to erroneous unanimous public judgments (Corriveau, Kim, Song, & Harris, 2013; Haun, Rekers, & Tomasello, 2014). Three-year-olds recognize conformity in actors' endorsement of a social norm and enforce norms when they are violated (Schmidt & Tomasello, 2012).

Children engage in high-fidelity imitation as a way to conform to and affiliate with social groups (Legare & Nielsen, 2015; Watson-Jones & Legare, 2016). Three- to 6-year-olds engage in high-fidelity imitation to conform with conventional norms (Clegg & Legare, 2016b; Herrmann, Legare, Harris, & Whitehouse, 2013; Legare, Wen, Herrmann, & Whitehouse, 2015; Watson-Jones, Legare, Whitehouse, & Clegg, 2014; Watson-Jones, Whitehouse, & Legare, 2016). Children from both Western and non-Western populations (ranging from 2- to 13-year-old) are high-fidelity imitators, frequently conforming with demonstrated behaviors rather than innovating (Berl & Hewlett, 2015; Clegg & Legare, 2016a; Corriveau et al., 2017; Nielsen, Mushin, Tomaselli, & Whiten, 2014; Nielsen & Tomaselli, 2010).

The objective of the current study was to examine cultural variation in children's conformity in the context of imitative fidelity. We define high conformity as high-fidelity imitation of a modeled behavior and low conformity as low-fidelity imitation of a modeled behavior. Children in both Western and non-Western populations display a robust sensitivity to conformity (Clegg & Legare, 2016a), yet there is variation in the emphasis on conformity versus creativity in children's socialization and education

This work was supported by a University of Texas at Austin Continuing Graduate Fellowship to Nicole J. Wen, a National Science Foundation Graduate Research Fellowship Grant to Jennifer M. Clegg, and an Economic and Social Research Council Large Grant [REF RES-060-25-0085] to Cristine H. Legare. Special thanks to our participants in Austin, TX recruited through the University of Texas at Austin Children's Research Center Database and at the Thinkery and our participants in Tanna, Vanuatu. We also thank Aiyana K. Willard for her statistical insight and analysis advice, Allison Tsao and Dorothy Pang for their assistance with data collection and coding, and our Ni-Vanuatu research assistants, Anna, Janet, and Bev.

Correspondence concerning this article should be addressed to Nicole J. Wen, Department of Psychology, The University of Texas at Austin, 1 University Station #A8000, Austin, TX 78712. Electronic mail may be sent to nicole.wen@utexas.edu.

 0009-3920/2017/xxxx-xxxx
DOI: 10.1111/cdev.12935

between populations. We investigated whether conformity, or high-fidelity imitation, impacts children's and adolescents' reasoning about evaluative traits in Western (U.S.) and non-Western (Vanuatu) populations. We examined the role of conformity in children's and adolescents' judgments of evaluative traits (i.e., intelligence and good behavior) in Vanuatu, a culture that emphasizes conformity in children's behavior, and the United States, a culture that encourages creativity (Clegg, Wen, & Legare, 2017).

Socialization of Conformity Versus Creativity Across Cultural Contexts

Socialization in Vanuatu cultivates collective and cooperative goals and encourages social conformity (Dadkah, Harizuka, & Mandal, 1999; Little, Carver, & Legare, 2016; Peck & Gregory, 2005; Strachan, Samuel, & Takaro, 2007; Walker, 2013). Six- to 8-year-old children from Vanuatu (Ni-Vanuatu) engage in higher levels of imitative fidelity than U.S. children, potentially due to this variation in cultural expectations for conformity (Clegg & Legare, 2016a). Children's socialization in Vanuatu is consistent with ethnographic research from other non-Western cultures demonstrating that folk concepts of intelligence are associated with conformity (Booth, 2002), obedience (Harkness & Super, 1992), and fulfillment of social responsibility (Serpell, 1993; Sternberg & Grigorenko, 2004; Tobin, Hsueh, & Karasawa, 2009). These behaviors are all seen as more desirable in children than individuality (Azuma & Kashiwagi, 1987; Lutz, 1985; Poole, 1985; Raval, Raval, & Deo, 2014; Serpell, 2011; White, 1985). Adults from non-Western cultures also often identify children's attention to and ability to copy adults' actions as a social learning strategy and a sign of intelligence (Booth, 2002; Harkness & Super, 1992; McGillicuddy-De Lisi & Subramanian, 1996; Serpell, 1993).

U.S. children are socialized from a young age to be creative and innovative by parents, caregivers, and educators (Harkness et al., 2007; Kim, 1994; Lancy, 2010; Suizzo, 2007). U.S. adults scaffold creativity (i.e., low-fidelity imitation) with their children in certain contexts at the expense of high-conformity behavior (i.e., high-fidelity imitation; Clegg & Legare, 2017). U.S. adults (from Euro-American, higher socioeconomic status [SES] backgrounds) promote self-confidence, independence, assertiveness, and intellectual curiosity in children over obedience and conformity (Lawton, Schuler, Fowell, & Madsen, 1984; Maccoby & Martin, 1983; Raina, 1975; Tobin et al., 2009).

Previous experimental research conducted in the United States and Vanuatu support this documented variation in the emphasis of conformity in children's socialization. There is variation in adults' reasoning about the role of conformity—demonstrated by high- and low-fidelity imitation—in assessing children's intelligence (Clegg et al., 2017). U.S. adults were more likely to endorse low-conformity U.S. children as intelligent, whereas Ni-Vanuatu adults were more likely to endorse high-conformity Ni-Vanuatu children as intelligent. As a comparison, Ni-Vanuatu adults were more likely to endorse high-conformity children as well behaved than U.S. adults. Given cultural variation in adults' beliefs, we examined the role of conformity in assessments of competency across development to determine when variation in beliefs about conformity may emerge.

Here, we examined the role of conformity in U.S. and Ni-Vanuatu children's and adolescents' judgments of other children's competency and behavior. Our method was based on previous cross-cultural research with adults, using *multivocal ethnography* (Clegg et al., 2017; Tobin et al., 2009). We examined variation in evaluations on conformity in both children and adolescents to assess the development of conformity bias. Adolescence may represent a key period of transition between the conformity bias documented in children's learning and behavior and adults' endorsement of creativity and independence as desirable traits.

Previous research suggests that there is tension between conformity and individuality in adolescence. On one hand, in Western cultures, adolescence is depicted as a period for establishing individual identity, autonomy, independent decision making, and self-reliance (Greenberger, 1982; Steinberg, 1990). Adolescents (12- to 17-year-olds) are less likely to erroneously conform with a majority than children (3- to 11-year-olds) when the accuracy of the conformity judgment is unambiguous (Walker & Andrade, 1996). On the other hand, peer conformity to antisocial, prosocial, and neutral behaviors peaks at early and midadolescence (11- to 15-year-olds), but decreases in later adolescence (16- to 17-year-olds; Berndt, 1979). Adolescents also engage in conformity when participating in desirable risk-taking behavior, potentially as a means of affiliation with peer groups (Ennett et al., 2006; Gardner & Steinberg, 2005). This may be attributed to sensation seeking and lack of impulse control (Steinberg & Cauffman, 1996). Notably, previous research on adolescent conformity has been conducted almost exclusively with Western populations. Examining

the relations between conformity and Ni-Vanuatu adolescents', judgments of peers also contributes to the development of a more comprehensive understanding of cultural variation in beliefs about conformity.

Evaluative traits are used to reason about and predict the behavior of others (Alvarez, Ruble, & Bolger, 2001; Heyman, Gee, & Giles, 2003; Heyman & Giles, 2004). Children link task performance and effort to intelligence, though this link decreases with age (Heyman et al., 2003; Kun, 1977; Nicholls & Miller, 1984). We chose to examine conceptions of intelligence and good behavior because they are evaluative traits (i.e., traits that tend to be value laden or socially desirable; Heyman & Giles, 2004), which can be assessed from observable behaviors over self-report in 10- and 11-year-olds (Heyman & Legare, 2005). Rather than rely on participants' descriptions of the traits, we used a methodology relying on assessments of children's observed behavior. We intentionally used two different evaluative traits, intelligence and good behavior, to ensure we were examining the relations between conformity and these traits and not an overall preference for high conformity. Thus, it is possible that if conformity is viewed as effortful, it could be interpreted as requiring greater intelligence. It is also possible, however, that conformity may not be an indicator of effort, but rather an indicator of task difficulty. In this case, children would view high conformity as a sign of a lack of understanding or task difficulty, which is not associated with intelligence (Kun, 1977; Nicholls & Miller, 1984).

We examined whether beliefs about competency and behavior varied depending on whether participants were watching children from their in- or outgroup. Children's and adolescents' beliefs about traits of children from their own cultural group or a comparison group were assessed. Children and adolescents from both populations watched videos of children engaging in high- and low-conformity behavior (i.e., engaging in high- or low-fidelity imitation of an adult's necklace-making demonstration) and were asked to evaluate which child was intelligent and which was well behaved and to explain their choices. Participants were shown videos from either their own or a comparison cultural group to assess whether their conformity evaluations could be generalized beyond their own cultural group.

We hypothesized that cultural differences in the value of conformity versus creativity in the United States and Vanuatu may impact evaluations of children's intelligence and good behavior. Consistent with previous findings examining adults' beliefs (Clegg et al., 2017), we predicted that U.S. children and adolescents would be more likely than Ni-Vanuatu children and adolescents to endorse the low-conformity child as intelligent and well behaved, reflecting a cultural preference for creativity and individuality that is socialized starting at a young age. U.S. adults are more likely to endorse the U.S. low-conformity child as intelligent and the U.S. and Ni-Vanuatu low-conformity children as well behaved. We predicted that endorsing the low-conformity child would increase with age in the United States (e.g., adolescents would be more likely than children to endorse the low-conformity child). Ni-Vanuatu adults endorsed the Ni-Vanuatu high-conformity child as intelligent and the U.S. and Ni-Vanuatu high-conformity children as well behaved. We predicted there would be no age-related differences between children and adolescents in Vanuatu, reflecting a pervasive cultural preference for collective and cooperative values.

Method

Participants

Participants (N = 256) in the United States and Vanuatu were recruited from two age groups, 128 children (6- to 11-year-olds) and 128 adolescents (13- to 17-year-olds) from March 2013 to December 2014.

Tanna, Tafea Province, Vanuatu

Vanuatu, a Melanesian archipelago, consists of 65 islands, with high levels of linguistic and cultural diversity. Our study was conducted in Tanna, Vanuatu, the most highly populated island in the Tafea Province. The total population of Tanna is 28,800 inhabitants. Most adults have not participated in formal education beyond primary school and families engage in subsistence agriculture. Between 2008 and 2012, 72% of children completed primary school, 36% of children attended some secondary school, and 83% of the adult population was literate (UNICEF, 2013).

One-hundred and twenty-eight individuals were recruited from Vanuatu, 64 children (26 females; M_{age} = 8 years old, range = 6–11 years old) and 64 adolescents (38 females; M_{age} = 15 years old, range = 13–17 years old). Ni-Vanuatu children were recruited from 1st, 2nd, and 3rd year classrooms in primary schools in Lenakel and Isingel, Tanna, Vanuatu. Adolescents were recruited from classrooms in a secondary school in Lenakel. Based on

conversations with school officials and local Peace Corps volunteers, we recruited participants from these classrooms because these students tended to be between 6 and 11 years old and 13 and 17 years old. When possible, we obtained birthdate information from teachers and school officials. If exact birthdate information was not available for Ni-Vanuatu participants, we gathered participants' ages in years. Age information was not known for seven children in the Ni-Vanuatu sample. For analysis purposes, we input the average age of the children in the same classroom as the missing value. When comparing those models to a model where those seven participants were removed from the analyses, we did not find any differences when examining significant predictors.

Children and adolescents were from families that were employed in a variety of subsistence living and tourism activities and their parents typically had limited exposure to Western education beyond primary or limited amounts of secondary school. Sample size was determined prior to data collection in Vanuatu based on anticipated limited access to participants. Our sample included all of the school-aged children in the village, which we then matched the useable number of participants with the adolescents for comparison. Data from 11 additional participants were dropped due to experimenter error (n = 8) and the participant electing to stop the study (n = 3). We were highly stringent in our inclusion criteria and worked with a local research assistant to translate the content of each experimental session.

Austin, Texas, United States

One-hundred and twenty-eight individuals participated in the United States, 64 children (35 females; M_{age} = 9 years, 0 months; range = 6 years, 0 months to 11 years, 11 months) and 64 adolescents (35 females; M_{age} = 15 years, 10 months; range = 12 years, 11 months to 17 years, 11 months). U.S. children and adolescents were recruited from a participant database at a research university and from a local children's museum. Participants were primarily Euro-American and from middle- to high-SES families. Sample size was selected to match the number of participants tested in Vanuatu.

Procedure and Coding

In the United States, testing was conducted in English in a quiet room in the university children's research laboratory or in a quiet office at the children's museum. In Vanuatu, testing was conducted in a quiet room or secluded outdoor area in each of the recruitment locations. The study protocol was translated into Bislama (one of the official languages of Vanuatu) and back-translated into English by two Ni-Vanuatu teachers with high English proficiency. Two female Ni-Vanuatu research assistants were recruited from local villages and were extensively trained by the first author on how to execute the protocol. The first author was present for all studies in Vanuatu. All studies were transcribed and translated back to English to ensure compliance with the experimental protocol.

Video Demonstration

Using a between-subjects design, participants were assigned to one of two video country conditions (same country video or different country video) and one of two conformity framing conditions (low or high). In the same country video condition, participants saw videos of actors from the same country as themselves (i.e., U.S. participants saw U.S. actors; Ni-Vanuatu participants saw Ni-Vanuatu actors). In the different country video condition, participants saw videos of actors from a different country from themselves (i.e., U.S. participants saw Ni-Vanuatu actors; Ni-Vanuatu participants saw U.S. actors). Over the course of the experimental session, each participant watched three videos—one of the adult demonstrator and a video of a high-conformity child and a video of a low-conformity child. Actor nationality was kept constant throughout the experimental session, so participants either only saw videos of Ni-Vanuatu actors or U.S. actors.

At the beginning of each experimental session, the following words appeared on the screen and the research assistant read them aloud as well, "I am going to show you some videos from the U.S." or "I am going to show you some videos from Vanuatu." In the United States, an extra slide was read that clarified where Vanuatu was on a map (since many participants were unfamiliar with the country), and the RA read, "Vanuatu is a group of islands in the South Pacific." Because all Ni-Vanuatu participants were familiar with where the United States was, there was no need to clarify with a map.

The slide then read, "Two children watch an adult demonstrate something new. Before the adult shows the children something new, she says . . ." At this point, the participants were presented with one of two frames for the task—the high-conformity

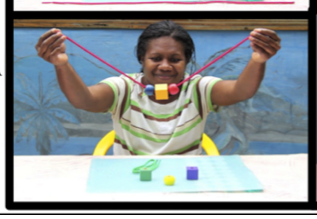
Component of Action Sequence	Description of Model's (M) Behavior	Ni-Vanuatu Model	U.S. Model
1. Stretch String	M Brings the Ends of the String Together and then Opens it Twice.		
2. Place String	M Lays the String Out on the Table Above the Tray.		
3. Three Bead to Forehead Touches	M Touches the Purple, Yellow, &Green Beads to Forehead Before Placing them on the String.		
4. Circle, Square, Circle	M's Necklace Consists of Three Beads in Order–A Circular Bead, A Square Bead, and A Circular Bead.		
5. Three Beads	M's Necklace Consists of Only Three Beads.		

Figure 1. Video demonstrations of adult models in the United States and Vanuatu.

frame, "Everyone always does it like this. Let's watch what I'm doing. Everyone always does it like this." or the low-conformity frame, "I'm going to make a necklace. Let's watch what I'm doing. I'm going to make a necklace." These two different frames varied in cues to conformity and were used in order to ensure that the instructions given to the children in the videos about the task did not influence participants' judgments. The words then read, "Now you'll watch the adult." Participants watched a video of an adult actor (a U.S. or Ni-Vanuatu female actor) demonstrating a necklace-making sequence while engaging in both causally relevant and irrelevant actions. This necklace-making task has been used in past research examining the impact of culture on children's imitative behavior as a tool for social learning and has been validated as a task that represents typical social learning situations in both the United States and Vanuatu (Clegg & Legare, 2016a, 2016b).

The actor sat in front of a set of necklace-making materials (a plastic placemat with one row of three circle beads in front of a row of three square beads in front of two folded strings) on the table (see Figure 1). The actor began the sequence by looking down and picking up one of the strings. She held one end of the string in each hand, stretched the string into a straight line, and then brought the ends back together in front of her. Next she repeated this action once more before stretching the string into a straight line and placing it in front of the tray (the side closest to the child) and removing both of her hands. She then picked up a circle bead and touched it to her forehead before stringing it on the right side of the string and moving the bead to the middle of the string. She repeated this sequence for a square bead and a circle bead. After the experimenter placed the last bead on the string, she picked one end of the string up in each hand, held the necklace up, and smiled.

Participants were told, "Now you'll watch Child 1" and then watched a video of a girl completing the necklace making sequence with the same objects as the adult. Participants were then told, "Now you'll watch Child 2" and watched a video of another girl completing the necklace making sequence with the same objects as the adult. The videos of the children were taken from previous

studies using the necklace-making task, so the behaviors were naturally occurring, rather than scripted videos. Videos of children from both cultures were matched on child age, the length, and the types of the behaviors that the high- and low-conformity children displayed. One girl imitated the adult with higher fidelity, engaging in all the same actions as the adult (high-conformity child). The other girl eliminated the causally irrelevant actions (did not stretch the string and did not touch the beads to her forehead) and put all of the beads on the string (low-conformity child). The same videos were used for all participants (participants who watched the U.S. videos saw the same two U.S. girls each time; participants who watched the Ni-Vanuatu videos saw the same two Ni-Vanuatu girls each time). Video order (high- vs. low-conformity child first) was counterbalanced. The current study uses the same method as Clegg et al. (2017).

Preference for Conformity Measure

After watching the videos, participants were told "Remember what the adult told the children—Everyone always does it like this. Let's watch what I'm doing. Everyone always does it like this." or "Remember what the adult told the children—I'm going to make a necklace. Let's watch what I'm doing. I'm going to make a necklace." The participants were then asked to indicate "Which one is smart?" and "Which one is well behaved?" Participants were asked to choose one of the children. Participants' responses were coded as a 1 (endorsing the high-conformity child) or a 0 (endorsing the low-conformity child).

Explanations

Following each question, the participants were asked why they made their selection for the smart and well-behaved question. Using both the forced choice measure (a selection between the high-conformity and low-conformity child) and an open explanation measure allowed us to assess each participants' use of conformity as a factor in their decision and their justification of their choice. Explanations were coded for the participant's justification for choosing the child that they indicated and any additional content (e.g., explaining why the other child might also be considered smart or well behaved) was not coded. Participants' explanations for why they selected the specific child were coded into two categories: conformity and creativity. Conformity explanations included those in which the participant mentioned that the child followed the directions, copied the adult, engaged in a specific action modeled by the adult, paid attention to what the adult did, or knew how to complete the task (e.g., "She was able to completely duplicate the adult's actions" or "She watched the teacher and made the same"). This category also included normative judgments (e.g., "She made it well" or "She made it right"). Creativity explanations included those in which the participant mentioned that the child displayed creativity or indicated that the child displayed behavioral variation such as mentioning a specific action the child did that was different from the adult's (e.g., "[Child 2] shows thinking on her own and outside of the box, not doing what everyone else does" and "She used all of the beads").

Results

Overview of Analyses

Preference for Conformity Measure

Binary logistic regressions were performed to test the effects of participant country and age on preference for conformity (i.e., the likelihood that participants selected the high-conformity child) for each question. All predictor variables were standardized, so odds could be interpreted as the odds of selecting the child who imitated with higher fidelity over the child who imitated with lower fidelity for a 1 *SD* change in a predictor variable (see Table 1). The logistic regression model was fit to a probit curve due to cell size (n = 16 per cell).

Since age information was not known for seven children in the Ni-Vanuatu sample, we input the average age of the children in the same classroom as the missing value for analyses purposes. We compared these models to a model where those same participants were removed from the analyses and did not find any differences when examining significant predictors.

Explanations

Binary logistic regressions were performed to test effects of participant country, age, and preference for conformity (i.e., the likelihood that participants selected the high-conformity child) on the likelihoods of giving a conformity explanation and a creativity explanation in evaluating intelligence and in evaluating good behavior. All predictor variables were standardized, so odds could be interpreted as

Table 1
Binary Logistic Regression Analyses for Predictors of Preference for Conformity by Question

	Evaluation of child			
	Smart		Well behaved	
Predictors	β (*SE*)	OR [95% CI]	β (*SE*)	OR [95% CI]
Intercept	0.66 (0.36)†	1.94 [0.96, 3.94]	−0.80 (0.36)*	0.45 [0.22, 0.91]
Participant country (United States)	0.55 (0.19)**	1.74 [1.19, 2.54]	1.19 (0.21)***	3.30 [2.20, 4.96]
Age (years)	−0.01 (0.03)	0.99 [0.94, 1.04]	0.09 (.03)***	1.10 [1.04, 1.15]
Video country (same)	−0.04 (0.19)	0.96 [0.66, 1.39]	−0.09 (0.19)	0.91 [0.63, 1.33]
Conformity framing (high)	0.21 (0.19)	1.23 [0.85, 1.79]	0.29 (0.19)	1.33 [0.92, 1.94]
Video order (low–high)	0.15 (0.19)	1.16 [0.80, 1.69]	−0.11 (0.19)	0.90 [0.62, 1.31]

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

Table 2
Binary Logistic Regression Analyses for Predictors of Explanation Type in Evaluating Intelligence and Good Behavior

		Evaluation of child			
		Smart		Well behaved	
Explanation type	Predictors	β (*SE*)	OR [95% CI]	β (*SE*)	OR [95% CI]
Conformity	Intercept	−3.33 (0.54)***	0.04 [0.01, 0.10]	−0.63 (0.68)	0.53 [0.14, 2.01]
	Preference for conformity (high)	2.25 (0.31)***	9.47 [5.16, 17.37]	−0.26 (0.75)	0.77 [0.18, 3.36]
	Participant country (United States)	1.03 (0.21)***	2.79 [1.84, 4.25]	0.53 (0.18)**	1.70 [1.19, 2.44]
	Age (years)	0.12 (0.03)***	1.13 [1.07, 1.20]	−0.04 (0.06)	0.96 [0.85, 1.09]
	Video country (same)	0.21 (0.21)	1.23 [0.82, 1.84]	−0.01 (0.18)	0.99 [0.70, 1.39]
	Conformity framing (high)	−0.05 (0.21)	0.95 [0.64, 1.43]	0.18 (0.18)	1.20 [0.85, 1.69]
	Video order (low–high)	0.17 (0.21)	1.18 [0.79, 1.77]	−0.37 (0.18)*	0.69 [0.49, 0.98]
	Preference for Conformity (High) × Age (Years)	—	—	0.13 (0.07)*	1.14 [1.00, 1.31]
Creativity	Intercept	−0.96 (0.78)	0.38 [0.08, 1.75]	−1.19 (0.66)†	0.30 [0.08, 1.10]
	Preference for Conformity (high)	−3.36 (0.60)***	0.03 [0.01, 0.11]	−5.45 (270.86)	0.00 [0.00, 1.56e^{228}]
	Participant country (United States)	0.20 (0.40)	1.22 [0.56, 2.66]	−0.67 (0.60)	0.51 [0.16, 1.64]
	Age (years)	0.09 (0.05)	1.09 [0.98, 1.22]	0.05 (0.05)	1.05 [0.95, 1.17]
	Video country (same)	−0.60 (0.40)	0.55 [0.25, 1.19]	0.01 (0.37)	1.01 [0.49, 2.10]
	Conformity framing (high)	1.12 (0.47)*	3.07 [1.22, 7.73]	−0.20 (0.39)	0.82 [0.38, 1.74]
	Video order (low–high)	−0.72 (0.40)†	0.49 [0.22, 1.06]	0.15 (0.38)	1.16 [0.05, 2.44]

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

the odds giving the explanation for a 1 *SD* change in a predictor variable (see Table 2).

Analyses

There were no significant effects of video country (same or different), conformity framing (high or low), or video order (high- or low-conformity child first) for participants' preference for conformity and explanations for either question but these components were retained in both models to control for any variance due to differences in these variables (see Tables 1 and 2).

Smart

Preference for conformity. When asked "Which one is smart?," there was a significant main effect of participant country on preference for conformity. This indicates that U.S. participants were more likely to endorse the high-conformity child as intelligent ($M = .90$, $SD = .30$) than Ni-Vanuatu

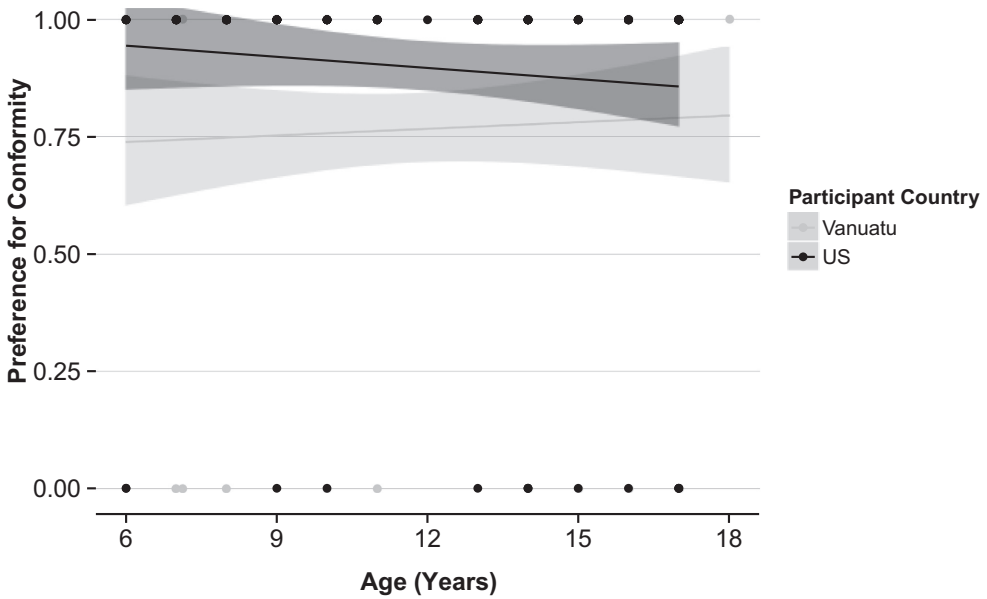


Figure 2. Preference for conformity in evaluating intelligence by participant country and age.

participants (M = .77, SD = .43; odds ratio = 1.74). There was no main effect of age, video country, conformity framing, or video order (see Table 1 and Figure 2).

Further analyses revealed that all groups' responses differed from chance. U.S. children's responses were significantly different from chance (χ^2 = 49.00, df = 1, p < .001), as were Ni-Vanuatu children's responses (χ^2 = 14.06, df = 1, p < .001), U.S. adolescents' responses (χ^2 = 33.06, df = 1, p < .001), and Ni-Vanuatu adolescents' responses (χ^2 = 22.56, df = 1, p < .001).

Conformity explanations. There was a significant main effect of preference for conformity, participant country, and age on the likelihood of giving a conformity explanation. This indicates that participants endorsing the high-conformity child (M = .81, SD = .39) were more likely to give a conformity explanation than those endorsing the low-conformity child (M = .12, SD = .32; odds ratio = 9.47). U.S. participants were more likely to give a conformity explanation (M = .85, SD = .36) than Ni-Vanuatu participants (M = .54, SD = .50; odds ratio = 2.79). As participants increase in age, they were more likely to give a conformity explanation (odds ratio = 1.13). There was no main effect of video country, conformity framing, or video order (see Table 2).

Creativity explanations. There was a significant main effect of preference for conformity and conformity framing on the likelihood of giving a creativity explanation. This indicates that participants endorsing the low-conformity child (M = .49, SD = .51) were more likely to give a creativity explanation than those endorsing the high-conformity child (M = .00, SD = .07; odds ratio = 0.03). Participants who received the high-conformity framing (M = .09, SD = .29) were more likely to give a creativity explanation than those who received the low-conformity framing (M = .08, SD = .27; odds ratio = 3.07). There was no main effect of age, participant country, video country, or video order (see Table 2).

Well Behaved

Preference for conformity. When asked "Which one is well behaved?," there was a significant main effect of participant country and age on preference for conformity. This indicates that U.S. participants were more likely to endorse the high-conformity child (M = .92, SD = .27) in evaluating good behavior than Ni-Vanuatu participants (M = .62, SD = .49; odds ratio = 3.30). As participants increase in age, they are more likely to endorse the high-conformity child as well behaved (odds ratio = 1.10). There was no main effect of video country, conformity framing, or video order (see Table 1 and Figure 3).

Further analyses revealed that Ni-Vanuatu children's response did not differ from chance (χ^2 = 0.06, df = 1, p = ns). However, U.S. children's responses were significantly different from chance (χ^2 = 36.00, df = 1, p < .001), as were U.S.

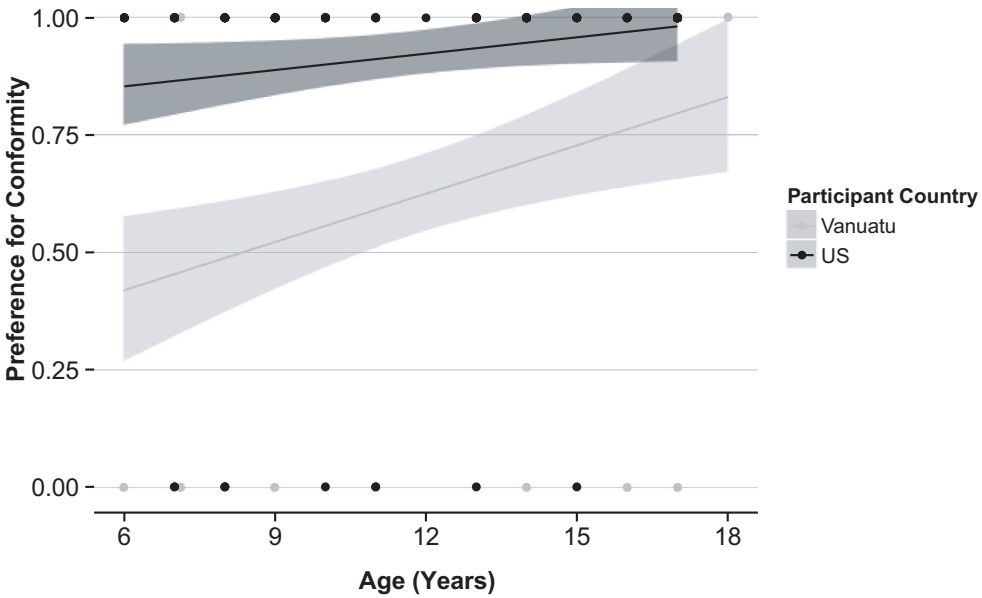


Figure 3. Preference for conformity in evaluating good behavior by participant country and age.

adolescents' responses (χ^2 = 56.25, *df* = 1, *p* < .001) and Ni-Vanuatu adolescents' responses (χ^2 = 12.25, *df* = 1, *p* < .001).

Conformity explanations. There was a significant main effect of participant country and video order, as well as a significant interaction between preference for conformity and age. This indicates that participants endorsing the high-conformity child (*M* = .69, *SD* = .47) were more likely to give a conformity explanation than those endorsing the low-conformity child (*M* = .15, *SD* = .36) when controlling for age (odds ratio = 1.14). In other words, when endorsing the high-conformity child, participants were more likely to give a conformity explanation with age, but when endorsing the low-conformity child, participants were less likely to give a conformity explanation with age. This also indicates that U.S. participants were more likely to give a conformity explanation (*M* = .71, *SD* = .45) than Ni-Vanuatu participants (*M* = .41, *SD* = .49; odds ratio = 1.70). This also indicates that participants were more likely to give a conformity explanation if they saw the high-conformity video first (*M* = .63, *SD* = .49) than if they saw the high-conformity video last (*M* = .50, *SD* = .50; odds ratio = 0.69). There was no main effect of preference for conformity, age, video country, or conformity framing. There were also no other significant interactions (see Table 2).

Creativity explanations. There were no significant effects of preference for conformity, participant country, age, video country, conformity framing, or video order on the likelihood of giving a creativity explanation (see Table 2). This is likely due to the overall low levels of giving a creativity explanation (5.47% of participants) and of endorsing the low-conformity child (22.27% of participants).

Discussion

Despite children's well-documented early-developing sensitivity to conformity, there has been little systematic research about whether children and adolescents use conformity in their evaluative judgments of others. Even less is known about how this may differ across cultures that vary in emphasis on creativity versus conformity in children's behavior. In the present study, we used a multivocal paradigm (Clegg et al., 2017) to examine the relations between creativity and conformity and children's and adolescents' judgments of peers' competency and behavior in a Western cultural context that values creativity and a non-Western cultural context that values conformity. Across both populations, children and adolescents associated conformity with both intelligence and good behavior.

Ni-Vanuatu children's and adolescents' endorsement of the high-conformity child as intelligent and well behaved is consistent with our predictions and with previous ethnographic evidence of what constitutes intelligence in collectivist cultures. A child is considered intelligent if they can learn by watching adults and conforming with the demonstrated

behavior (Booth, 2002). This is also consistent with findings that Ni-Vanuatu adults are more likely to endorse high-conformity children from their in-group as intelligent and high-conformity children from both their in- and out-groups as well behaved (Clegg et al., 2017).

In contrast, U.S. children's and adolescents' endorsement of the high-conformity child as intelligent is inconsistent with our prediction that U.S. children and adolescents would endorse the low-conformity child as intelligent and that this effect would increase with age. This is also in stark contrast to findings that U.S. adults evaluate low-conformity children as intelligent and were less likely than Ni-Vanuatu adults to endorse high-conformity children as well behaved (Clegg et al., 2017). Our data demonstrate that participants endorsed the high-conformity child as more well behaved and intelligent across age groups and populations. This effect was stronger among U.S. than Ni-Vanuatu participants (for good behavior and intelligence) and among adolescents than children (for good behavior). A potential explanation for these results is that conformity bias among children and adolescents outweighs adults' judgments about intelligence and conformity and cultural narratives concerning individualism and creativity in the United States (Harkness et al., 2007; Lancy, 2010).

Participants' explanations for their choices were consistent with their endorsements and provided converging evidence for the role of conformity in judgments of intelligence and good behavior. In evaluating intelligence, participants across both populations who endorsed the high-conformity child were more likely to give conformity explanations (e.g., "[She] followed what the teacher did.") and those who endorsed the low-conformity child were more likely to give creativity explanations (e.g., "do their own thing" or "think outside the box"). Older participants were more likely to give a conformity explanation in evaluating intelligence. In evaluating good behavior, U.S. and Ni-Vanuatu participants who endorsed the high-conformity child were more likely to give a conformity explanation with age, but those who endorsed the low-conformity child were less likely to give a conformity explanation with age. Thus, for both traits, participants' explanations were consistent with their judgments and indicated behavioral conformity was associated with competency and behavior. The frequency of verbally expressing this association increased with age. In evaluating both intelligence and good behavior, U.S. participants were more likely to give conformity explanations than Ni-Vanuatu participants. Children and adolescents had a strong preference for conformity across populations regardless of the framing of the task as requiring high or low conformity. The lack of effect of task framing indicates that the participants are evaluating children's conformity behavior in relation to intelligence.

Participants did not differ in their evaluations of children from their own cultural group versus a different cultural group. There is substantial evidence that social group cognition develops early in human ontogeny (Rhodes, 2012; Watson-Jones & Legare, 2016; Watson-Jones et al., 2016) and that placing young children in novel social groups activates in-group biases (Dunham, Baron, & Banaji, 2008; Nesdale & Flesser, 2001; Wen, Herrmann, & Legare, 2016). Other research, however, has found that children demonstrate a preference for consensus (when learning information from an in- or out-group member) while learning new information (Chen, Corriveau, & Harris, 2013). Our data suggest that children's and adolescents' preferences for consensus outweigh preferences for in-group members in assessing evaluative traits. Additional research should expand upon our assessment of intelligence and good behavior to examine other psychological traits that could vary developmentally and cross-culturally. Future research should also examine the mechanisms by which certain traits are socialized and how these cultural narratives are transmitted between generations.

U.S. children's and adolescents' endorsement of high-conformity children as intelligent and well behaved reveals a tension between conformity bias and the U.S. emphasis on individuality and creativity. Ethnographic and psychological research (Clegg & Legare, 2016a; Clegg et al., 2017; Kim, 1994; Suizzo, 2007) demonstrate that individualism, innovation, and creativity are highly valued among U.S. adults. There may be a tension between the messages that children and adolescents are hearing from adults about creativity and how their success in school and other pursuits is determined. Schools may be reinforcing behavioral conformity, as they are imperfect vehicles of cultural values and beliefs (Tobin et al., 2009). Thus, cultural narratives encouraging creativity and innovation are inconsistent with children's early-developing and heavily reinforced conformity bias. It may not be until post-secondary school that U.S. young adults gain exposure to nonconformists perceived as intelligent, who may have more opportunity to succeed outside of the constraints of the conventional U.S. classroom.

Our results demonstrate the importance of theoretically motivated cultural comparisons. We chose the United States and Vanuatu due to differences in the degree to which they represent globally typical child-socialization environments and because of the variation in the cultural narratives about conformity and creativity. There are cross-cultural differences in adults' beliefs about the relations between conformity and intelligence (Clegg et al., 2017) not evident in judgments from children and adolescents. The lack of cultural variation in judgments early in development demonstrates the importance of studying a wide age range when conducting cross-cultural research (Legare, 2017; Nielsen, Haun, Kaertner, & Legare, 2017). There are very few experimental studies examining conformity that span age groups, utilizing the same paradigm. To our knowledge, this is the first cross-cultural study to examine how an early-developing conformity bias interacts with cultural narratives to impact how children and adolescents reason about others.

In this study, high-fidelity imitation was used as a measure of conformity. There are, however, many different kinds of conformity, such as conformity to conventional norms (Schmidt & Tomasello, 2012; Watson-Jones et al., 2016), majority judgments (Corriveau et al., 2009, 2013; Harris & Corriveau, 2011), majority actions (Asch, 1956; Haun et al., 2014; Herrmann et al., 2013; Walker & Andrade, 1996), and obedience (Berndt, 1979). Future research could examine the role of different kinds of conformity on reasoning about others. In interpreting the generalizability of our data, it is also critical to consider the geographic limitations of the sampling. Because this study is limited to a sample from one island in Vanuatu and from one city in the United States, it is necessary to be cautious about generalizing these findings outside of the contexts in which they were collected. Future studies should explore these questions in populations (both Western and non-Western) that vary in other aspects of child socialization goals.

Developmental science has revealed that children have an early sensitivity to conformity. Our data demonstrate that conformity bias overrides cultural beliefs about creativity as indicative of intelligence in U.S. children and adolescents. In the United States and Vanuatu, children and adolescents demonstrate similar levels of conformity bias when evaluating peers' intelligence and behavior, despite differences in cultural narratives emphasizing creativity versus conformity. Our results have implications for using cross-cultural comparison to reevaluate our understanding of the interplay of conformity bias and trait psychology.

References

Alvarez, J. M., Ruble, D. N., & Bolger, N. (2001). Trait understanding or evaluative reasoning? An analysis of children's behavioral predictions. *Child Development*, *72*, 1409–1425. https://doi.org/10.1111/1467-8624.00356

Asch, S. E. E. (1956). Studies of independence and conformity: A minority of one against a majority. *Psychological Monographs*, *70*(9), 1–71. https://doi.org/10.1037/h0093718

Azuma, H., & Kashiwagi, K. (1987). Descriptors for an intelligent person: A Japanese study. *Japanese Psychological Research*, *29*(1), 17–26. https://doi.org/10.4992/psycholres1954.29.17

Berl, R. E. W., & Hewlett, B. S. (2015). Cultural variation in the use of overimitation by the Aka and Ngandu of the Congo Basin. *PLoS ONE*, *10*. https://doi.org/10.1371/journal.pone.0120180

Berndt, T. J. (1979). Developmental changes in conformity to peers and parents. *Developmental Psychology*, *15*, 608–616. https://doi.org/10.1037/0012-1649.15.6.608

Booth, M. Z. (2002). Swazi concepts of intelligence: The universal versus the local. *Ethos*, *30*, 376–400. https://doi.org/10.1525/eth.2002.30.4.376

Chen, E. E., Corriveau, K. H., & Harris, P. L. (2013). Children trust a consensus composed of outgroup members-but do not retain that trust. *Child Development*, *84*, 269–282. https://doi.org/10.1111/j.1467-8624.2012.01850.x

Clegg, J. M., & Legare, C. H. (2016a). A cross-cultural comparison of children's imitative flexibility. *Developmental Psychology*, *52*, 1435–1444. https://doi.org/10.1037/dev0000131

Clegg, J. M., & Legare, C. H. (2016b). Instrumental and conventional interpretations of behavior are associated with distinct outcomes in early childhood. *Child Development*, *87*, 527–542. https://doi.org/10.1111/cdev.12472

Clegg, J. M., & Legare, C. H. (2017). Parents scaffold flexible imitation during early childhood. *Journal of Experimental Child Psychology*, *153*, 1–14. https://doi.org/10.1016/j.jecp.2016.08.004

Clegg, J. M., Wen, N. J., & Legare, C. H. (2017). Is nonconformity WEIRD? Cultural variation in adults' beliefs about children's competency and conformity. *Journal of Experimental Psychology: General*, *146*, 428–441. https://doi.org/10.1037/xge0000275

Corriveau, K. H., DiYanni, C. J., Clegg, J. M., Min, G., Chin, J., & Nasrini, J. (2017). Cultural differences in the imitation and transmission of inefficient actions. *Journal of Experimental Child Psychology*, *161*, 1–18. https://doi.org/10.1016/j.jecp.2017.03.002

Corriveau, K. H., Fusaro, M., & Harris, P. L. (2009). Going with the flow: Preschoolers prefer nondissenters as informants. *Psychological Science*, *20*, 372–377. https://doi.org/10.1111/j.1467-9280.2009.02291.x

Corriveau, K. H., Kim, E., Song, G., & Harris, P. L. (2013). Young children's deference to a consensus

varies by culture and judgment setting. *Journal of Cognition and Culture*, *13*, 367–381. https://doi.org/10.1163/15685373-12342099

Dadkah, A., Harizuka, S., & Mandal, M. K. (1999). Pattern of social interaction in societies of the Asia-Pacific region. *Journal of Social Psychology*, *139*, 730–735. https://doi.org/10.1080/00224549909598252

Dunham, Y., Baron, A. S., & Banaji, M. R. (2008). The development of implicit intergroup cognition. *Trends in Cognitive Sciences*, *12*, 248–253. https://doi.org/10.1016/j.tics.2008.04.006

Ennett, S. T., Bauman, K. E., Hussong, A., Faris, R., Foshee, V. A., Cai, L., & DuRant, R. H. (2006). The peer context of adolescent substance use: Findings from social network analysis. *Journal of Research on Adolescence*, *16*, 159–186. https://doi.org/10.1111/j.1532-7795.2006.00127.x

Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, *41*, 625–635. https://doi.org/10.1037/a0026993

Greenberger, E. (1982). Education and the acquisition of psychosocial maturity. In D. McClelland (Ed.), *The development of social maturity* (pp. 155–189). New York, NY: Irvington.

Harkness, S., Blom, M., Oliva, A., Moscardino, U., Zylicz, P. O., Bermudez, M. R., . . . Super, C. M. (2007). Teachers' ethnotheories of the "ideal student" in five western cultures. *Comparative Education*, *43*, 113–135. https://doi.org/10.1080/03050060601162438

Harkness, S., & Super, C. M. (1992). Parental ethnotheories in action. In I. Sigel, A. V. McGillicuddy-DeLisi, & J. Goodnow (Eds.), *Parental belief systems: The psychological consequences for children* (2nd ed., pp. 373–392). Hillsdale, NJ: Erlbaum.

Harris, P. L., & Corriveau, K. H. (2011). Young children's selective trust in informants. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *366*, 1179–1187. https://doi.org/10.1098/rstb.2010.0321

Haun, D. B. M., Rekers, Y., & Tomasello, M. (2014). Children conform to the behavior of peers; Other great apes stick with what they know. *Psychological Science*, *25*, 2160–2167. https://doi.org/10.1177/0956797614553235

Herrmann, P. A., Legare, C. H., Harris, P. L., & Whitehouse, H. (2013). Stick to the script: The effect of witnessing multiple actors on children's imitation. *Cognition*, *129*, 536–543. https://doi.org/10.1016/j.cognition.2013.08.010

Heyman, G. D., Gee, C. L., & Giles, J. W. (2003). Preschool children's reasoning about ability. *Child Development*, *74*, 516–534. https://doi.org/10.1111/1467-8624.7402013

Heyman, G. D., & Giles, J. W. (2004). Valence effects in reasoning about evaluative traits. *Merrill-Palmer Quarterly*, *50*, 86–109. Retrieved from http://www.jstor.org/stable/23096118

Heyman, G. D., & Legare, C. H. (2005). Children's evaluation of sources of information about traits. *Developmental Psychology*, *41*, 636–647. https://doi.org/10.1037/0012-1649.41.4.636

Kim, M. S. (1994). Cross cultural comparisons of the perceived importance of conversational constraints. *Human Communication Research*, *21*, 128–151. https://doi.org/10.1111/j.1468-2958.1994.tb00343.x

Kun, A. (1977). Development of the magnitude-covariation and compensation schemata in ability and effort attributions of performance. *Child Development*, *48*, 862. https://doi.org/10.2307/1128335

Lancy, D. F. (2010). Learning "from nobody": The limited role of teaching in folk models of children's development. *Childhood in the Past*, *3*, 79–106. https://doi.org/10.1037/e643262011-001

Lawton, J. T., Schuler, S. G., Fowell, N., & Madsen, M. K. (1984). Parents' perceptions of actual and ideal child-rearing practices. *The Journal of Genetic Psychology: Research and Theory on Human Development*, *145*(1), 77–87. https://doi.org/10.1080/00221325.1984.10532252

Legare, C. H. (2017). Cumulative cultural learning: Development and diversity. *Proceedings of the National Academy of Sciences of the United States of America*, *114*, 7877–7883. https://doi.org/10.1073/pnas.1620743114

Legare, C. H., & Nielsen, M. (2015). Imitation and innovation: The dual engines of cultural learning. *Trends in Cognitive Sciences*, *19*, 688–699. https://doi.org/10.1016/j.tics.2015.08.005

Legare, C. H., Wen, N. J., Herrmann, P. A., & Whitehouse, H. (2015). Imitative flexibility and the development of cultural learning. *Cognition*, *142*, 351–361. https://doi.org/10.1016/j.cognition.2015.05.020

Little, E. E., Carver, L. J., & Legare, C. H. (2016). Cultural variation in triadic infant–caregiver object exploration. *Child Development*, *87*, 1130–1145. https://doi.org/10.1111/cdev.12513

Lutz, C. (1985). Ethnopsychology compared to what? Explaining behavior and consciousness among the Ifaluk. In G. M. White, & J. Kirkpatrick (Eds.), *Person, self, and experience: Exploring Pacific ethnopsychologies* (pp. 35–79). Berkeley, CA: University of California Press.

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent–child interaction. In P. H. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology: Socialization, personality, and social development* (4th ed., pp. 1–101). New York, NY: Wiley.

McGillicuddy-De Lisi, A. V., & Subramanian, S. (1996). How do children develop knowledge? Beliefs of Tanzanian and American mothers. In S. Harkness & C. M. Super (Eds.), *Culture and human development* (pp. 143–168). New York, NY: Guilford.

Nesdale, D., & Flesser, D. (2001). Social identity and the development of children's group attitudes. *Child Development*, *72*, 506–517. https://doi.org/10.1111/1467-8624.00293

Nicholls, J. G., & Miller, A. T. (1984). Reasoning about the ability of self and others: A developmental study. *Child Development*, *55*, 1990–1999.

Nielsen, M., Haun, D. B. M., Kaertner, J., & Legare, C. H. (2017). The persistent sampling bias in developmental psychology: A call to action. *Journal of Experimental Child Psychology*, *162*, 31–38.

Nielsen, M., Mushin, I., Tomaselli, K., & Whiten, A. (2014). Where culture takes hold: "Overimitation" and its flexible deployment in Western, Aboriginal, and Bushmen children. *Child Development*. https://doi.org/10.1111/cdev.12265

Nielsen, M., & Tomaselli, K. (2010). Overimitation in Kalahari Bushman children and the origins of human cultural cognition. *Psychological Science*, *21*, 729–736. https://doi.org/10.1177/0956797610368808

Peck, J. G., & Gregory, R. J. (2005). A brief overview of the old new Hebrides. *Anthropologist*, *7*, 269–282.

Poole, F. J. P. (1985). *Coming into social being: Cultural images of infants in Bimin-Kuskusmin folk psychology*. Berkeley, CA: University of California Press.

Raina, M. K. (1975). Parental perception about ideal child: A cross-cultural study. *Journal of Marriage and Family*, *37*, 229–232. https://doi.org/10.2307/351047

Raval, V. V., Raval, P. H., & Deo, N. (2014). Mothers' socialization goals, mothers' emotion socialization behaviors, child emotion regulation, and child socioemotional functioning in urban India. *Journal of Early Adolescence*, *34*, 229–250. https://doi.org/10.1177/0272431613485821

Rhodes, M. (2012). Naïve theories of social groups. *Child Development*, *83*, 1900–1916. https://doi.org/10.1111/j.1467-8624.2012.01835.x

Schmidt, M. F. H., & Tomasello, M. (2012). Young children enforce social norms. *Current Directions in Psychological Science*, *21*, 232–236. https://doi.org/10.1177/0963721412448659

Serpell, R. (1993). *The significance of schooling: Life-journeys in an African society*. Cambridge, UK: Cambridge University Press.

Serpell, R. (2011). Social responsibility as a dimension of intelligence, and as an educational goal: Insights from programmatic research in an African society. *Child Development Perspectives*, *5*, 126–133. https://doi.org/10.1111/j.1750-8606.2011.00167.x

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. Feldman & G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 255–276). Cambridge, MA: Harvard University Press.

Steinberg, L., & Cauffman, E. (1996). Maturity of judgment in adolescence: Psychosocial factors in adolescent decision making. *Law and Human Behavior*, *20*, 249–272.

Sternberg, R. J., & Grigorenko, E. L. (2004). Intelligence and culture: How culture shapes what intelligence means, and the implications for a science of well-being. *Philosophical Transactions of the Royal Society B*, *359*, 1427–1434. https://doi.org/10.1098/rstb.2004.1514

Strachan, J., Samuel, J., & Takaro, M. (2007). Ni Vanuatu women graduates: What happens when they go home? *Development in Practice*, *17*, 147–153. https://doi.org/10.2307/25548187

Suizzo, M.-A. (2007). Parents' goals and values for children dimensions of independence and interdependence across four U.S. ethnic groups. *Journal of Cross-Cultural Psychology*, *38*, 506–530. https://doi.org/10.1177/0022022107302365

Tobin, J. J., Hsueh, Y., & Karasawa, M. (2009). *Preschool in three cultures revisited: China, Japan, and the United States*. Chicago, IL: University of Chicago Press.

UNICEF. (2013). *Vanuatu statistics*. Retrieved from https://www.unicef.org/infobycountry/vanuatu_statistics.html

Walker, P. O. (2013). Storians: Building on indigenous knowledge to enhance Ni-Vanuatu mediative capacity. *Conflict Resolution Quarterly*, *30*, 309–328. https://doi.org/10.1002/crq.21065

Walker, M. B., & Andrade, M. G. (1996). Conformity in the Asch task as a function of age. *The Journal of Social Psychology*, *136*, 367–372. https://doi.org/10.1080/00224545.1996.9714014

Watson-Jones, R. E., & Legare, C. H. (2016). The social functions of group rituals. *Current Directions in Psychological Science*, *25*(1), 42–46. https://doi.org/10.1177/0963721415618486

Watson-Jones, R. E., Legare, C. H., Whitehouse, H., & Clegg, J. M. (2014). Task-specific effects of ostracism on imitative fidelity in early childhood. *Evolution and Human Behavior*, *35*, 204–210. https://doi.org/10.1016/j.evolhumbehav.2014.01.004

Watson-Jones, R. E., Whitehouse, H., & Legare, C. H. (2016). In-group ostracism increases high-fidelity imitation in early childhood. *Psychological Science*, *27*(1), 34–42. https://doi.org/10.1177/0956797615607205

Wen, N. J., Herrmann, P. A., & Legare, C. H. (2016). Ritual increases children's affiliation with in-group members. *Evolution and Human Behavior*, *37*, 54–60. https://doi.org/10.1016/j.evolhumbehav.2015.08.002

White, G. M. (1985). Premises and purposes in a Solomon Islands ethnopsychology. In G. M. White & J. Kirkpatrick (Eds.), *Person, self, and experience: Exploring Pacific ethnopsychologies* (pp. 328–366). Berkeley, CA: University of California Press.