

Children's reasoning about honest versus polite speakers

Erica J. Yoon, Michael C. Frank

Department of Psychology, Stanford University

Author Note

The Author Note, containing contact information, acknowledgements, etc

Abstract

Abstract text.

Keywords: If provided, keywords will be displayed on a line beneath the abstract.

Children's reasoning about honest versus polite speakers

Introduction

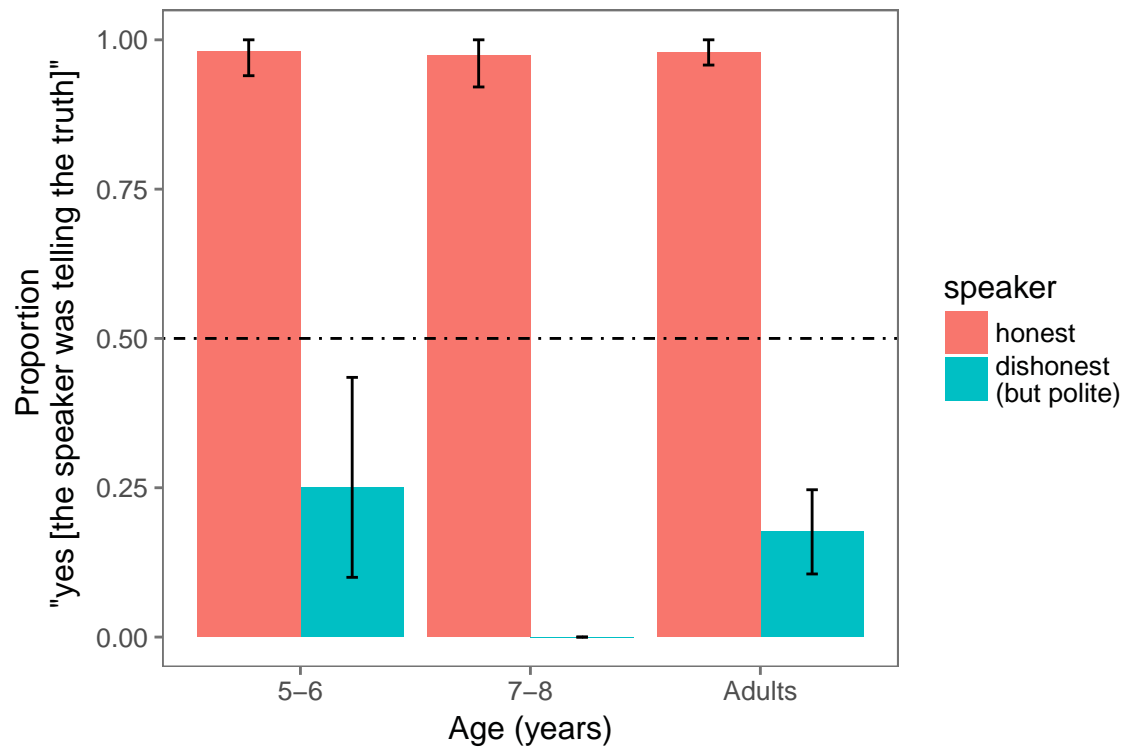
Experiment 1A

Method

Participants. Parents and their 5-6- and 7-8-year-old children visiting Children's Discovery Museum in San Jose, CA, were invited to participate in a short study. ...FIXME... These exclusion criteria led to a final sample of 26 5-6-year-olds and 19 7-8-year-olds.

Adult participants were recruited through Amazon Mechanical Turk. ...FIXME... These exclusion criteria led to a final sample of 50 adult participants that were included in the analysis.

Results and Discussion



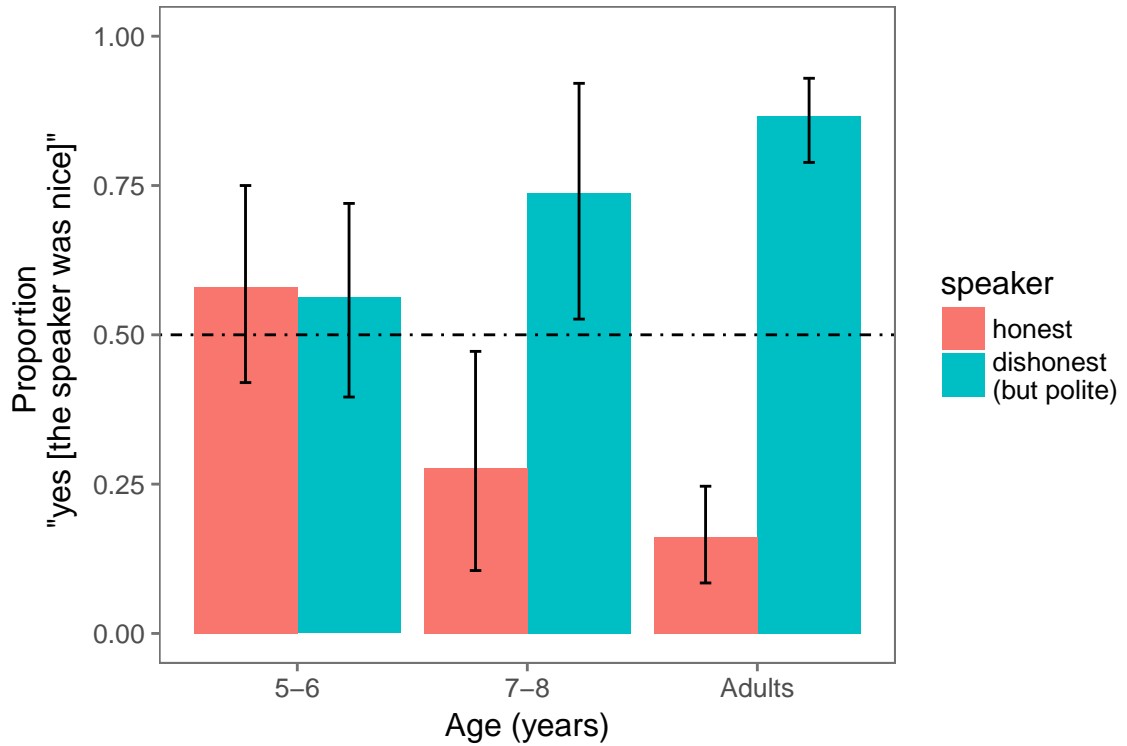
Predictor	Estimate	Std. Error	z value
Intercept	4.35	1.28	3.40
8-year-olds	-0.21	1.83	-0.11
Adults	0.00	1.48	0.00
Polite speaker	-5.95	1.32	-4.50
8-year-olds * Polite speaker	-111.26	11032629.28	-0.00
Adults * Polite speaker	-0.37	1.53	-0.24

Table 1

Predictor estimates with standard errors and significance information for a generalized linear mixed-effects model predicting speaker truth-telling judgments

Across all age groups, adults and children correctly judged the honest speaker to

be telling the truth, and the polite speaker as not telling the truth. A generalized linear mixed-effects model predicting truth-telling judgment based on age and speaker type showed a significant main effect of speaker type ($\beta = -5.95$, $p < .001$). There was no main effect of age, and no interaction between age and speaker type. Thus, even the youngest group of participants we tested were able to correctly reason that the honest speaker was telling the truth, whereas the polite speaker was lying.



There was a clear developmental trend in judgments of speaker niceness. Whereas adults and 7-8-year-olds judged the polite speaker to be nice and the honest speaker to be not nice ($|t| > -2.77$, $p < 0.009$), 5-6-year-olds did not judge either speaker to be nice or not nice ($|t| < 1.04$, $p > 0.302$), not differentiating between the two speaker types. A generalized linear mixed-effects model predicting niceness judgment based on age and speaker type revealed a significant interaction between age and speaker type (6- vs. 8-year-olds: $\beta = -2.59$, $p = .002$; 8-year-olds vs. adults: $\beta = 2.17$, $p = .005$). These

Predictor	Estimate	Std. Error	z value
Intercept	-1.21	0.55	-2.19
6-year-olds	1.63	0.72	2.26
Adults	-1.01	0.64	-1.57
Polite speaker	2.56	0.65	3.92
6-year-olds * Polite speaker	-2.59	0.82	-3.16
Adults * Polite speaker	2.17	0.78	2.79

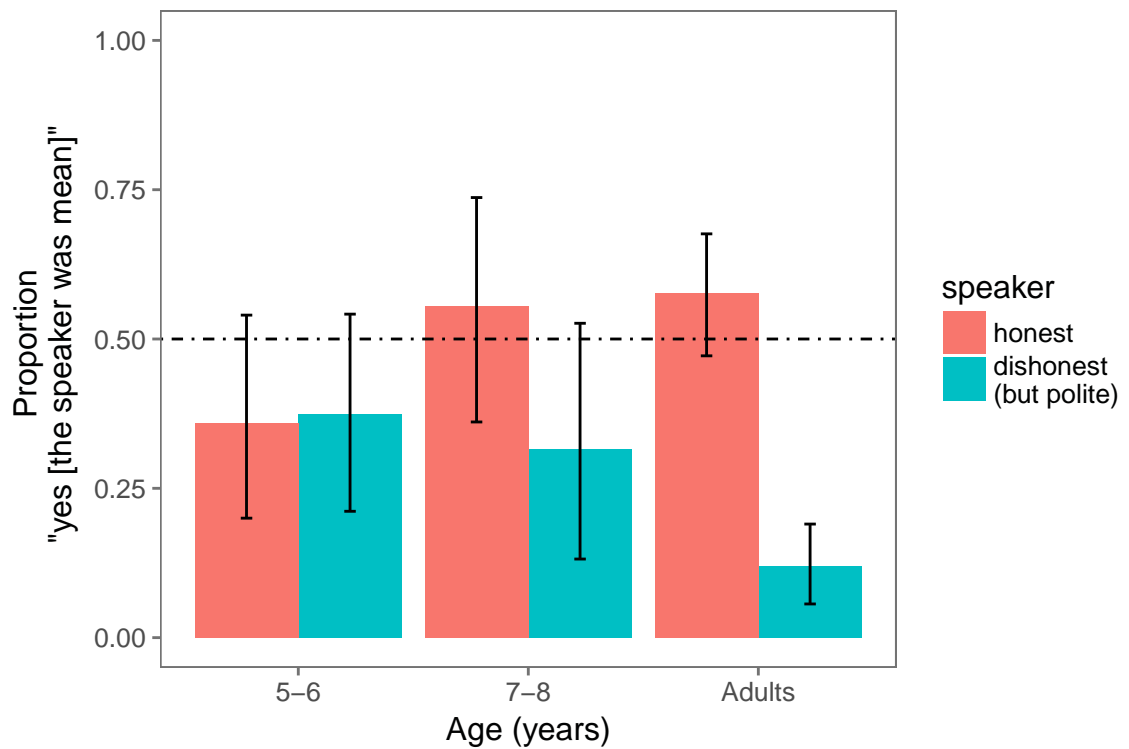
Table 2

Predictor estimates with standard errors and significance information for a generalized linear mixed-effects model predicting speaker niceness judgments

findings show that as children grow older, they become more adult-like in their judgment of the polite but dishonest speaker as “nice”.

Then what underlie these changes in judgments as children grow older? There are two possible interpretations: One possible explanation is older children are more proficient at inferring other people’s mental states (Wellman & Liu, 2003), leading them to place more weight on the addressee’s feelings in evaluating a white lie or blunt truth. Since a white lie would make the addressee feel good, older children may have reasoned that the polite lie-teller was being nice, whereas younger children did not reach that level of reasoning.

Another possibility is that younger and older children use different communicative goals; younger children may prioritize honesty, which caused them to judge lie-tellers as not nice relatively more often, whereas older children value politeness more.



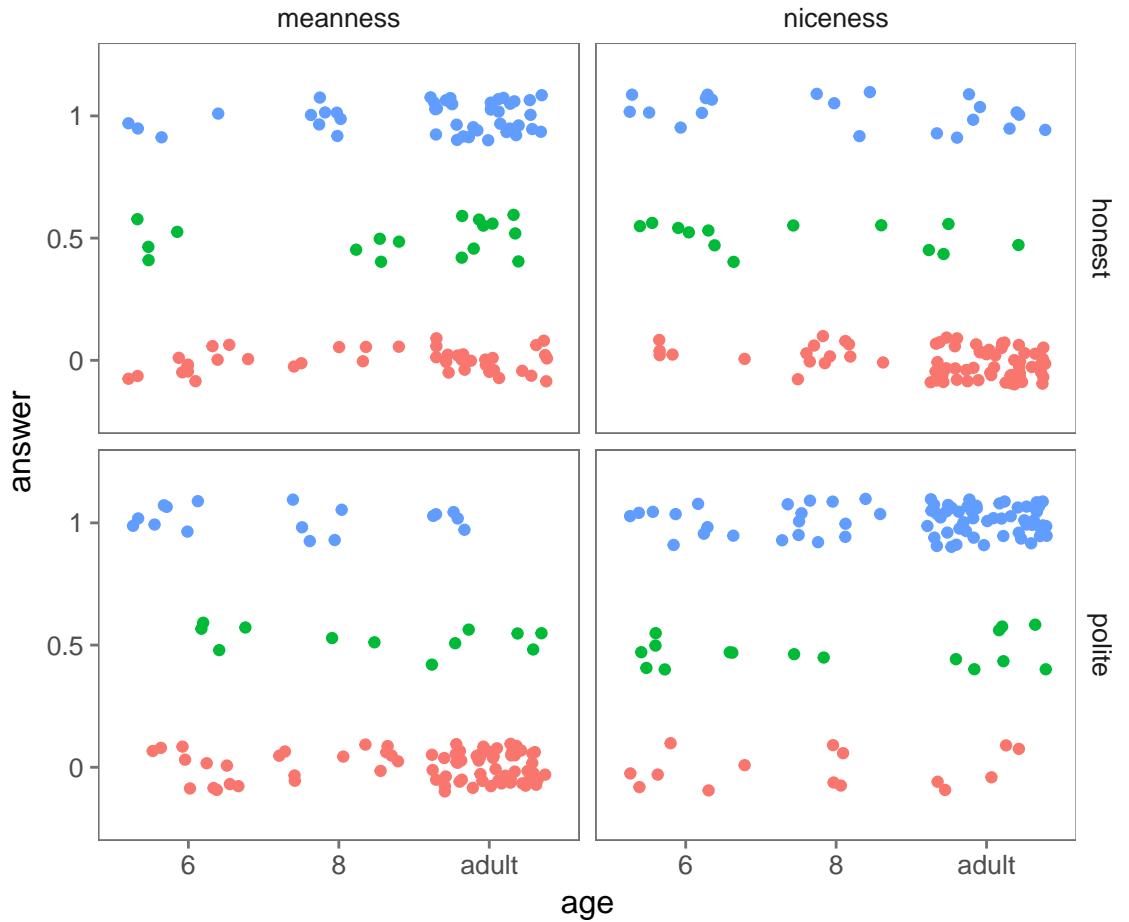
Predictor	Estimate	Std. Error	z value
Intercept	0.21	0.53	0.40
6-year-olds	-1.19	0.73	-1.64
Adults	0.25	0.60	0.42
Polite speaker	-1.21	0.58	-2.10
6-year-olds * Polite speaker	1.57	0.78	2.02
Adults * Polite speaker	-2.03	0.71	-2.85

Table 3

Predictor estimates with standard errors and significance information for a generalized linear mixed-effects model predicting speaker meanness judgments

The judgments of speaker meanness also revealed a developmental trend that resembled that for the niceness judgment, though to a lesser extent. Whereas adults

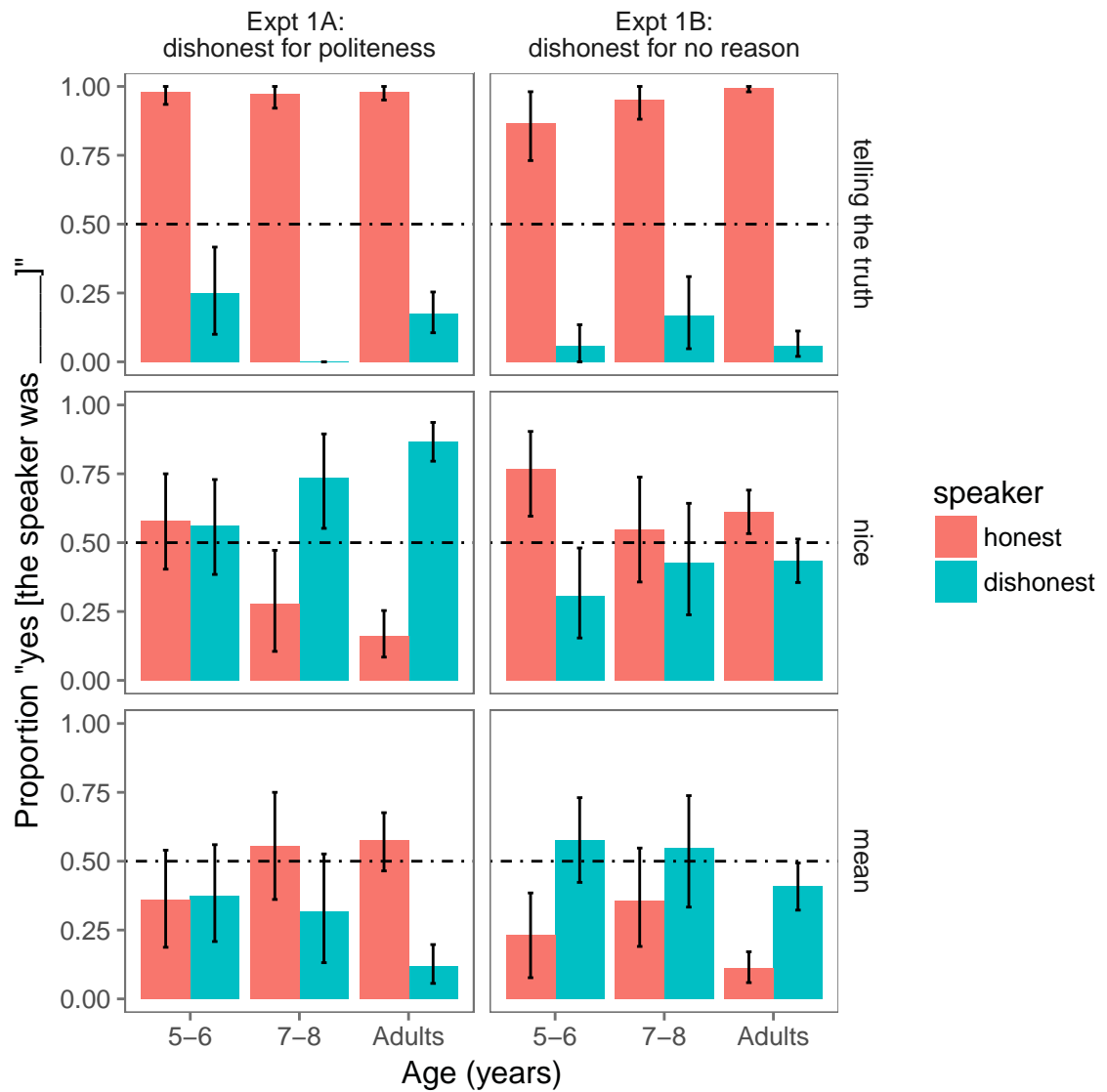
tended to judge the honest speaker (i.e. blunt truth-teller) to be mean ($t(141) = 1.86$, $p = 0.065$) 5-6-year-olds tended to judge in the opposite direction ($t(44) = -2.35$, $p = 0.024$). 7-8-year-olds' judgments did not differ from chance ($t(34) = 0.5$, $p = 0.619$). On the other hand, adults and 7-8-year-olds tended to judge the polite speaker to be not mean (7-8-year-olds: $t(36) = -2.25$, $p = 0.031$), whereas 5-6-year-olds' judgments did not differ from chance. Thus, older participants tended to judge the blunt truth-teller to be mean and the white lie-teller to be nice, whereas 5-6-year-olds did not, if not leaning toward the opposite direction.



Experiment 1B

Method

Results and Discussion



For the truth-telling judgments in Experiment 1B, children and adults showed similar response pattern to Expt 1A: they judged the honest speaker as truth-telling and dishonest speaker as not truth-telling. For the niceness judgments, however, the results were the reverse of the findings in Expt 1A: whereas adults and 7-8-year-olds overall

Predictor	Estimate	Std. Error	z value
Intercept	0.21	0.35	0.60
6-year-olds	1.17	0.51	2.28
Adults	0.28	0.39	0.72
Polite speaker	-0.52	0.46	-1.13
6-year-olds * Polite speaker	-1.78	0.67	-2.65
Adults * Polite speaker	-0.26	0.52	-0.50

Table 4

Predictor estimates with standard errors and significance information for a generalized linear mixed-effects model predicting speaker niceness judgments for Expt 1B

tended to judge neither speaker to be nice or not nice (with the exception of adults judging the honest speaker to be nice above chance), 5-6-year-olds judged the honest speaker to be nice and dishonest speaker to be not nice ($|t| > -3.06$, $p < 0.004$).

References

Predictor	Estimate	Std. Error	<i>z</i> value
Intercept	-0.70	0.41	-1.72
6-year-olds	-0.96	0.60	-1.61
Adults	-1.68	0.51	-3.31
Polite speaker	0.93	0.49	1.89
6-year-olds * Polite speaker	1.16	0.71	1.64
Adults * Polite speaker	1.00	0.59	1.71

Table 5

Predictor estimates with standard errors and significance information for a generalized linear mixed-effects model predicting speaker meanness judgments for Expt 1B