

Supplemental Materials for

**Children's social preference for peers engaged in brilliance-required activities:  
The impact of gender and race**

This file includes:  
Tables S1-S4  
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**Table S1.**

*The descriptions of the two novel games*

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**Blick**

I want to tell you about this game that I ask children to play sometimes. It's called Blick, and it's a lot of fun. In this game, what you have to do is to put a shoelace through the green end and make stars in each bubble until you get to the yellow end. But you also need to make sure not to cross the shoelace more than 3 times in each bubble.



Oh, and here is something else about the Blick game, and this is important so make sure you're paying attention. This game is not for everyone. It's only for children who are really, really smart [who try really, really hard]. Only smart [hardworking] children can be good at this game.

**Lorp**

I want to tell you about this game that I ask children to play sometimes. It's called Lorp, and it's a lot of fun. In this game, what you have to do is to bounce an eraser from the left end of the stick to the right end and into the green tube. But you also need to flip the eraser 2 times before it goes into the green tube.



Oh, and here is something else about the Lorp game, and this is important so make sure you're paying attention. This game is not for everyone. It's only for children who are really, really smart [who try really, really hard]. Only smart [hardworking] children can be good at this game.

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*Note.* Each of the games was presented in the “brilliant” format to half of the children and in the “hardworking” format to the other half. The pictured novel games and their names were sourced from the NOUN database (Horst & Hout, 2016).

**Table S2.**

*Sample test trial.*

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Let's look at the girl on the left. She likes to play Lorp.

Let's look at the girl on the right. She likes to play Blick.

Who do you like more? The girl on the left, or the girl on the right?



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*Note.* The sample test trial presents pictures of child targets that were not used in the actual study and are blurred due to copyright reasons. All pairs of child targets were gender- and race-matched. The actual child pictures used in our study were drawn from the Child Affective Facial Expression Set (Lobue & Thrasher, 2015). The pictured novel games were sourced from the NOUN database (Horst & Hout, 2016).

**Table S3.**  
*Mixed-effects logistic regression*

<i>Predictors</i>	<i>b</i>	<i>SE</i>	<i>z</i>	<i>p-value</i>
Intercept	-0.03	0.17	-0.20	0.843
Age	0.20	0.12	1.75	0.081
Target Gender: Girl	0.12	0.22	0.53	0.593
Target Race: Black	-0.07	0.22	-0.31	0.757
Target Race: Asian	0.04	0.22	0.19	0.846
Age x Target Gender: Girl	-0.32	0.15	-2.14	0.033 *
Age x Target Race: Black	-0.36	0.15	-2.39	0.017 *
Age x Target Race: Asian	-0.21	0.15	-1.37	0.172
Target Gender: Girl × Target Race: Black	0.13	0.31	0.43	0.664
Target Gender: Girl × Target Race: Asian	-0.26	0.31	-0.85	0.395
Age x Target Gender: Girl × Target Race: Black	0.68	0.21	3.19	0.001 *
Age x Target Gender: Girl × Target Race: Asian	0.51	0.21	2.41	0.016 *

*Note.* The reference group for Target Gender is “Boy” and Target Race is “White”. \* *p-value* < .05 \*\**p-value* < .01

**Table S4.**  
*Analysis of Deviance Table*

	$X^2$	<i>df</i>	<i>p-value</i>
Age	0.69	1	0.408
Target Gender	0.29	1	0.589
Target Race	0.42	2	0.812
Age x Target Gender	0.76	1	0.383
Age x Target Race	0.45	2	0.797
Target Gender x Target Race	1.62	2	0.445
Age x Target Gender x Target Race	11.06	2	0.004 **

\* *p-value* < .05 \*\**p-value* < .01

## Supplementary Analyses

### ***Socioeconomic Status (Primary Caregiver's Educational Attainment + Household Income)***

We conducted analysis to examine whether children's own socioeconomic status (SES) influenced their social preference towards "brilliant" or "hardworking" targets across target gender and race. We created a composite measure of children's SES by (1) converting children's primary caregiver's educational attainment to years of schooling (i.e. less than high school = 10; high school diploma = 12; Associate's degree = 14; Bachelor's degree = 16; Master's degree = 18; and Professional degree = 20), (2) standardizing this variable as well as children's household income, and (3) averaging these two scores into a composite SES score. We then conducted a mixed-effects logistic regression model with participant age (continuous), target race (i.e., Asian, Black, White), target gender (i.e., girl, boy), and child SES (continuous), as well as all possible interactions as predictors of social preference. The results suggested that children's own SES did not significantly moderate the key three-way interaction among participant age, target gender and target race,  $X^2(2) = 1.05, p = .592$ . After controlling for children's SES, we found a significant three-way interaction between participant age, target gender, and target race,  $X^2(2) = 10.16, p = .006$ .

### ***Participant Race***

We examined whether children's own racial/ethnic identity influenced their social preference towards "brilliant" or "hardworking" targets across target gender and race. Because each of the racial/ethnic minority groups in our sample (e.g., Black/African American, Latinx/Hispanic) was small, we combined them into a single group for purposes of this analysis. We submitted participant racial/ethnic identity (i.e., White children vs. children of color) into our overall mixed-effects logistic regression model with participant age (continuous in years), target race (i.e., Asian, Black, White), and target gender (i.e., girl, boy) as well as all possible interactions as predictors of social preference. Children's own race did not significantly moderate the key three-way interaction among participant age, target gender and target race,  $X^2(2) = 3.66, p = .160$ . The three-way interaction among participant age, target gender, and target race remained significant,  $X^2(2) = 9.70, p = .008$ .

### ***Participant Gender***

We tested whether children's own gender influenced their social preference towards "brilliant" or "hardworking" targets across target gender and race. We submitted participant gender (i.e., boy vs. girl) into our overall mixed-effects logistic regression model with participant age (continuous), target race (i.e., Asian, Black, White), and target gender (i.e., girl, boy) as well as their interactions as predictors of social preference. Participant gender did not significantly moderate the key three-way interaction among participant age, target gender and target race,  $X^2(2) = 0.13, p = .935$ . The three-way interaction between participant age, target gender, and target race was still significant,  $X^2(2) = 10.98, p = .004$ .

### ***Robustness Check***

We also assessed the robustness of our main model by including the 25 participants who failed both comprehension check questions (total  $N = 232$ ). We conducted a mixed-effects logistic regression model with participant age (continuous), target race (i.e., Asian, Black, White), and target gender (i.e., girl, boy) as well as their interactions as predictors of social preference, with

participant as a random intercept. The three-way interaction between participant age, target gender, and target race remained significant,  $X^2(2) = 8.25, p = .016$ .