

An Age Penalty in Racial Preferences

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Abstract

The authors document an age penalty in racial discrimination: Charitable behavior toward African American children decreases—and negative stereotypical inferences increase—with the age of those children. Using data from an online charity that solicits donations for school projects, the authors found that proposals accompanied by images of older African American students (Grades 6–12) led to fewer donations than proposals with images of younger African Americans (pre-K-Grade 5), with the opposite pattern for proposals with images of multiples races or of all White students. A laboratory experiment demonstrated that negative stereotypical beliefs about African Americans (e.g., that they are lazy) increased with age more for African American children than for White children, a pattern that predicted decreases in giving.

Keywords

stereotyping, charitable giving, prejudice, prosocial behavior

By nearly any measure—from employment to education, police treatment, and loan rates—statistics continue to indicate poorer treatment of African Americans than White Americans (Bertrand & Mullainathan, 2004; Knowles, Persico, & Todd, 2001; Krueger, Rothstein, & Turner, 2006; Munnell, Tootell, Browne, & McEneaney, 1996). Discrimination, however, does not affect all members of a given minority group equally; skin tone and Afrocentric facial features, for example, moderate stereotypical inferences because they serve as cues for categorizing individuals and their presumed behaviors (Blair, Judd, Sadler, & Jenkins, 2002; Maddox, 2004). In one investigation, the darkness of Black defendants' skin predicted their likelihood of being sentenced to death for homicide (Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006). However, despite decades of research documenting Americans' perceptions of nearly every racial and ethnic group (e.g., Devine & Elliot, 1995; Gaertner & Dovidio, 1986; Katz & Braly, 1933; Nosek, Banaji, & Greenwald, 2002), one potential—and we suggest consequential—moderator of racial bias has received little attention: age. With the exception of one investigation of stereotypes of elderly African Americans (Kang & Chasteen, 2009), research in stereotyping has almost exclusively examined perceptions of adults of different racial groups without consideration of their age group.

This focus on adults is particularly noteworthy because there are many domains in which judgments of and behaviors toward children and adolescents have large societal consequences, such as education, adoption, immigration, and criminal sentencing. In the present research, we explore people's perception of and behavior toward African American children of different ages. We expected that beliefs about African Americans (which are frequently negative in tone) might conflict with

beliefs about children (frequently positive), such that both negative stereotypes and negative behavior might be less evident with regard to younger African American children compared to older African American children.

Theoretical Background

Stereotypes often contain conflicting elements—some positive and some negative (Cuddy, Fiske, & Glick, 2007; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). For example, elderly individuals are viewed as warm in spite of stereotypes that they are absentminded and rude (Cuddy, Norton, & Fiske, 2005). We suggest that the social group “African American children” also likely evoke mixed stereotypes. African Americans are perceived as less warm than Caucasian Americans (Fiske, Cuddy, Glick, & Xu, 2002), making them less susceptible to an empathic response; in addition, African Americans have been stereotyped as lazy and unmotivated (Devine, 1989) and people resist helping others whom they perceive not trying to help themselves even when they are able (Weiner, 1980). On the other hand, children, as a group, are seen as kind, innocent, and harmless (Cuddy et al., 2007)—traits highly conducive to helping (Small & Verrochi, 2009). As a result, social policies

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and humanitarian aid directed toward children tend to be far more benevolent than those directed toward adults. Indeed, United States law holds juvenile offenders less culpable than adults—treating juveniles more leniently even for the very same offenses (*Roper v. Simmons*, 2005).

Are African American children perceived as members of their race, age, or both? Early theories proposed that multicategorizable groups endured consequences of all stereotypes in an additive manner—the “double-jeopardy hypothesis” (e.g., Beale, 1970; Blakemore & Boneham, 1994). This account is less applicable, however, when different stereotypes about a social group are in direct conflict, as is the case with African American children; it is likely difficult to perceive a group as hostile and innocent at the same time. Other theories suggest a more complex picture. For example, stereotypes may blend together into a new, unique stereotype containing elements of both groups (Weber & Crocker, 1983), and some research suggests that the stereotype of one group may selectively or completely inhibit the stereotype of the other group (Kang & Chasteen, 2009; Macrae, Bodenhausen, & Milne, 1995).

We predicted that the positive stereotypes associated with children would serve as a countervailing force against the negative stereotypes associated with African Americans, such that younger African American children would be perceived more positively than older African American children. Indeed, merely *appearing* young—as opposed to actually being young—can evoke positive feelings: Livingston and Pearce (2009) demonstrated that baby-faced African American chief executive officers (CEOs) are perceived as warmer than mature-faced African American CEOs, because childlike facial features serve as a cue of warmth that attenuates stereotypes about African Americans. Children of all races lose their childlike essence as they approach adulthood. Therefore, all teenagers are likely to be viewed as less warm than younger children. However, we theorize that with age, African American children will be penalized more than White children: Positive stereotypes about young children should offset negative African American stereotypes, but as African American children get older and the effect of the countervailing force of stereotypes about children dissipates, negative stereotypes about African American adults should exert more weight in judgment. Indeed, a similar inhibition of negative African American stereotypes can occur at the other end of the age spectrum. In one recent investigation, elderly African Americans were perceived as less angry than adult African Americans (Kang & Chasteen, 2009); like children, the elderly are stereotyped as harmless and likable, which mitigates negative stereotypes associated with African Americans.

The Present Research

We examined race- and age-related preferences in the domain of donations to public school classrooms, using both a large nonprofit organization’s data set and a laboratory experiment. Charitable giving is an interesting but complex domain in

which to study racial preferences. Prejudice against African Americans might depress donations to them relative to Whites, but race may serve as a proxy for poverty or neediness, which might increase donations relative to Whites. Regardless of any main effect of race, however, we hypothesized that the age of children would serve as a critical moderator of charitable behavior. Whereas older African American children will be perceived in accordance with negative stereotypes of African Americans, we expected that such inferences will be less strong for younger African American because their childlike qualities counteract these negative perceptions. We further predicted that the difference in perception across age groups would be linked to decreased charity toward older African American students. In contrast, we predicted that there would be less of an age penalty for White children; because stereotypes about White adults are generally positive, there should be less of a corresponding decrease in positive perceptions for older White children.

Study I

We first seek evidence for the race-related age penalty using data from an online charity that allows individuals to donate directly to classrooms in need. The charity supports a website through which public school teachers submit proposals soliciting money for classroom needs (e.g., microscope slides for biology class or paint for art class). Donors browse through proposals and decide on donations.

Method

All proposals include information about grade range (pre-K-2, 3-5, 6-8, 9-12) and other class and project attributes, including requested material costs, project and discipline type, poverty level (determined by the percentage of free/reduced lunch students), and whether the teacher participated in Teach for America or the New York (NY) Teaching Fellows program. We obtained all project proposals from April to November of 2008 ($N = 28,634$). Of these, 9,449 contained a classroom photo; of these, 5,975 depicted students. Overall, 70% of the projects featuring student photos were fully funded.

We used a crowd-sourcing technique to code all photos on a variety of dimensions, including the race of the students.¹ Coders first assessed objective aspects of the pictures: The presence of a teacher and students, the number of students, the ethnic representation in the class (White, African American, multiple races, other/unclear), and the gender representation in the class (male, female, multiple genders). In addition, coders judged the pictures on several subjective dimensions designed to assess mechanisms that might affect donations: Does the picture tug at your heart strings? (0 = *not at all* to 2 = *a lot*); would this class benefit from small donations? (0 = *not at all* to 2 = *a lot*); how cute are the students in the picture? (0 = *not at all cute* to 2 = *very cute*); as a whole, how attractive are the students in the picture? (0 = *not attractive* to 2 = *very attractive*); how baby-faced are the students in the

Table 1. Summary Statistics

| Variable | All Project Proposals | | | Proposal With Student Photo | | |
|---------------------------------|-----------------------|------------|--------|-----------------------------|------------|-------|
| | Funded | Not Funded | All | Funded | Not Funded | All |
| Photo included | 0.36 | 0.28 | 0.33 | .1 | .1 | .1 |
| Student photo included | 0.23 | 0.17 | 0.21 | .1 | .1 | .1 |
| Project funded | .1 | 0 | 0.64 | .1 | 0 | 0.70 |
| Free lunch students | 0.67 | 0.57 | 0.64 | 0.72 | 0.64 | 0.69 |
| Teach for America | 0.07 | 0.03 | 0.06 | 0.10 | 0.06 | 0.09 |
| New York Teaching Fellow | 0.03 | 0.01 | 0.02 | 0.04 | 0.02 | 0.04 |
| Material price (\$) | 360 | 599 | 447 | 370 | 690 | 465 |
| Classroom Type | | | | | | |
| Grades K-5 | 0.66 | 0.70 | 0.67 | 0.71 | 0.76 | 0.73 |
| Grades 6-12 | 0.34 | 0.30 | 0.33 | 0.29 | 0.24 | 0.27 |
| Project Type | | | | | | |
| Books | 0.28 | 0.19 | 0.25 | 0.28 | 0.18 | 0.25 |
| Supplies | 0.40 | 0.33 | 0.37 | 0.42 | 0.38 | 0.41 |
| Technology | 0.22 | 0.36 | 0.27 | 0.20 | 0.32 | 0.24 |
| Other | 0.10 | 0.12 | 0.11 | 0.10 | 0.12 | 0.10 |
| Discipline Type | | | | | | |
| Literacy | 0.46 | 0.48 | 0.46 | 0.47 | 0.49 | 0.47 |
| Art and Music | 0.09 | 0.08 | 0.09 | 0.10 | 0.09 | 0.10 |
| Math and Science | 0.23 | 0.20 | 0.22 | 0.22 | 0.17 | 0.21 |
| Applied learning | 0.07 | 0.09 | 0.08 | 0.08 | 0.11 | 0.08 |
| Special Needs | 0.06 | 0.06 | 0.06 | 0.05 | 0.07 | 0.06 |
| Health and Sports | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.03 |
| History | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 |
| Student Race | | | | | | |
| White | | | | 0.18 | 0.21 | 0.18 |
| African American | | | | 0.14 | 0.10 | 0.13 |
| Multiple races | | | | 0.55 | 0.57 | 0.56 |
| Other/Unclear | | | | 0.13 | 0.12 | 0.13 |
| Gender | | | | | | |
| Male | | | | 0.12 | 0.10 | 0.11 |
| Female | | | | 0.13 | 0.15 | 0.14 |
| Multiple genders | | | | 0.75 | 0.75 | 0.75 |
| Subjective measures (0-2 scale) | | | | | | |
| Tugs at heart | | | | 0.79 | 0.81 | 0.80 |
| Would benefit | | | | 0.84 | 0.34 | 0.34 |
| Cute | | | | 1.26 | 1.29 | 1.27 |
| Attractive | | | | 1.20 | 1.18 | 1.19 |
| Baby face | | | | 1.06 | 1.09 | 1.07 |
| Other picture characteristics | | | | | | |
| Teacher present | | | | 0.24 | 0.26 | 0.24 |
| Posed | | | | 0.74 | 0.74 | 0.74 |
| Total number of students | | | | 7.45 | 7.61 | 7.60 |
| Observations | 18,244 | 10,390 | 28,634 | 4,196 | 1,779 | 5,975 |

Note. This table provides summary statistics for all project proposals in our data (first three columns) and (or the project proposals that contained a picture with at least one student in it (last three columns). These data were separated by whether or not the project was fully funded. Unless otherwise noted, the numbers provided indicate fractions. For example, the first line indicates that .36 of funded proposals included a photo, .26 of nonfunded proposals included a photo, and .33 of all proposals (funded and nonfunded) included a photo.

picture? (0 = *not at all baby-faced* to 2 = *very baby-faced*). Table 1 reports descriptive statistics about the proposals' objective and subjective qualities.

Results and Discussion

The data indicated whether the project had been fully funded, but not how much funding was received for those not fully

funded. We used Probit regression analyses to fit a model of project funding and report marginal effects. Table 2 displays funding rates by age and race. Table 3 reports several models that all include an indicator of age of the children, race, and the interaction between those two variables. We build on the base model by adding a variety of control variables in subsequent model specifications. Because proposals with photos of students of multiple races is the most common proposal type

Table 2. Percent Funded by Race and Age

| Age Group | African American (%) | Race White (%) | Multiple Race (%) | All Races (%) |
|----------------|----------------------|----------------|-------------------|---------------|
| Pre-K-Grade-5 | 78.3 | 66.0 | 67.8 | 68.3 |
| Grades 6–12 | 75.5 | 69.6 | 74.7 | 74.2 |
| All age groups | 77.4 | 67.0 | 69.6 | |

Note. This table presents the percent of project proposals that were funded by the race and age of the students in the project proposal's picture. The last column and the last row present the average funding rate across races and age groups, respectively. These averages are weighted by the number of observations in each race and age category.

Table 3. The Impact of Picture Characteristics on the Probability of Funding

| | Dependent Variable: Indicator for Whether or not the Project was Funded | | | | | |
|---------------------------------|---|----------------|----------------|----------------|----------------|----------------|
| | Probit (Marginal Effects) | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| African American | .116** (.024) | .076** (.021) | .074** (.021) | .072** (.021) | -.023 (.056) | -.023 (.062) |
| Grade 6–12 | .070** (.018) | .103** (.017) | .105** (.017) | .100** (.018) | .095** (.018) | .095** (.021) |
| African American × Grade 6–12 | -.105** (.041) | -.100** (.037) | -.102** (.037) | -.102** (.037) | -.082** (.040) | -.082** (.045) |
| White | -.011 (.019) | -.002 (.017) | -.005 (.017) | -.005 (.017) | -.136** (.046) | -.136** (.056) |
| White × Grade 6–12 | -.032 (.035) | -.016 (.032) | -.016 (.032) | -.016 (.032) | .006 (.033) | .006 (.038) |
| Other/Unclear Race | .006 (.022) | .020 (.019) | .023 (.019) | .021 (.019) | -.0291 (.051) | -.029 (.059) |
| Other/Unclear Race × Grade 6–12 | .018 (.041) | .001 (.036) | .000 (.036) | .000 (.036) | .019 (.039) | .019 (.041) |
| Only Boys | .009 (.021) | .026 (.018) | .020 (.020) | .020 (.020) | .013 (.021) | .018 (.023) |
| Only Girls | -.032* (.019) | -.031* (.016) | -.037** (.018) | -.038** (.018) | -.039** (.018) | -.039** (.021) |
| Project and Class Controls | | X | X | X | X | X |
| Other Picture Controls | | | X | X | X | X |
| Subjective Measure Controls | | | | X | X | X |
| Subjective Measure Controls* | | | | | | |
| Race Variables | | | | | X | X |
| Clustered Standard Errors | | | | | | X |
| Pseudo R ² | .007 | .200 | .201 | .201 | .203 | .205 |
| Observations | 5,975 | 5,975 | 5,975 | 5,975 | 5,975 | 5,975 |

Note. Coefficient values and robust standard errors are presented from Probit regressions of whether or not each project was funded. The primary independent variables include race (base group = multiple races), age (base group = Grade K-5), gender (base group = multiple genders), and Race–Age interactions (base group = multiple races and Grade K-5). The sample is all proposals that included a picture with at least one student. Column 2 includes all of the control variables indicated in the summary statistics in Table 1 (except the subjective measures and other picture characteristics). Column 3 adds in other picture controls. Column 4 includes all project; and picture controls along with subjective measure controls. Column 5 includes all previously discussed controls and subjective measure controls interacted with the race dummy variables. Column 6 includes all previously discussed controls and clusters the standard errors by teacher ID.

*Significant at 10%.

**Significant at 5%.

(56%), we chose these photos as the base group to which photos with only White or only African American students were compared. The base group for age is “elementary school (pre-K-5)” and the base group for gender is “multiple genders.” Although data are not available on the specific donors in the study sample, a survey conducted by the organization reveals that its donors are largely female (75.1%), highly educated (89.5% have a college or graduate degree), and relatively wealthy (41.6% of donors report household income greater than \$100,000).

Likely reflecting an inference that African Americans are needier than Whites even when controlling for objective poverty level, the overall percentage of proposals with photos of African American students that are funded (77.4%) is

significantly higher than the percentage of proposals with students from multiple races (69.6%) and photos of White students (67.0%) that are funded ($ps < .01$). In addition, proposals with older children were significantly more likely to be funded (74.2%) than proposals featuring younger children (68.8%, $p < .05$). These main effects, however, were qualified by our predicted interaction between student race and student age ($p < .05$). As can be seen in Table 2, funding rates increased with age for proposals featuring White students and multiple race students, however, funding rate *decreased* with age for proposals with African American students.

Column 1 of Table 3 uses a regression framework to report the simple interaction effects between age and race using our most basic specification. Of course, project proposals may

systematically differ on other dimensions. For example, proposals that request more money may be less likely to be funded; if this were true, and proposal size covaries with race and age, we could infer a spurious correlation between race, age, and the probability of being funded. To address this issue, we also provide results with detailed project proposal controls in our analysis. Column 2 in Table 3 includes the project and classroom controls that are available in the administrative data set that was provided to us: polynomial for poverty level, teach for America indicator, NY Teaching Fellow indicator, polynomial for material price (the total amount of money requested in the proposal), project type indicators, and discipline type indicators. Column 3 includes additional controls for picture characteristics that were coded: Teacher present in photo, posed photo, and total number of students. Importantly, the African American \times Age interaction effect remains significant when including these controls ($p < .01$), consistent with our predicted age penalty in charity for African Americans.²

Not surprisingly, younger students are seen as more cute, attractive, and baby-faced than older students ($M_s = 1.42$ and $.86$, $p < .01$; $M_s = 1.25$ and 1.04 , $p < .01$; $M_s = 1.26$ and $.56$, $p < .01$). In addition, proposals depicting African American students are viewed as more likely to benefit from donations ($M_s = .88$ and $.81$, $p = .02$), which likely explains the overall higher funding rates for African American classrooms reported above. Most importantly, however, none of the subjective measures indicated a significant African American \times Age interaction effect (all $p_s > .05$). Thus, it is unlikely that correlations between these subjective measures with race and age can explain our key interaction effect. Indeed, column 4 shows that when we control for these subjective measures, the critical African American \times Age interaction again remains statistically significant ($p < .05$).

One may further wish to control for these subjective measures (cute, attractive, baby-faced, would benefit, and tug at heart strings) by including not only their main effects but also by interacting them with the key independent variables (see Yzerbyt, Muller, & Judd, 2004, for a discussion of this issue). We combine the three measures related to cuteness (cute, attractive, and baby-faced) into an overall cuteness score. This variable along with the other two subjective variables are strongly correlated with age; therefore, we interact each of these variables with race only (African American, White, and other race). Including these interactions in the analysis—column 5—has only a small impact on the African American \times Age interaction effect: -0.082 ($p = .037$).³

Study 2

Study 1 offers initial evidence for an age penalty in racial preferences. It is still possible, however, that unobserved variables correlated with our variables of interest contributed to our effects, such as school quality (Fryer & Levitt, 2004). While differences in school quality would likely result in an overall effect of race on donations, rather than the interaction we observe, we conducted an experiment that held school characteristics constant and manipulated only student race and grade

level to address this possible concern. Most critically, we sought evidence for the mechanism we believe underlies the age penalty in racial discrimination: negative beliefs about older but not younger African American students.

Method

We presented 304 White participants from an online panel with descriptions of four fictitious public school classrooms. In a counterbalanced design, participants read a short description of four classrooms that varied by race and age group: (1) African American students in pre-K-Grade 5, (2) White students in pre-K-Grade 5, (3) African American students in Grades 6–12, and (4) White students in Grades 6–12. Participants rated each classroom on nine different traits that are stereotypically associated with African Americans, adapted from Devine (1989): reliable, lazy, hard-working, intelligent, hostile, motivated, dumb, good-natured, and irresponsible. As in previous investigations (Cuddy et al., 2007; Fiske et al., 2002), participants used a 7-point scale (1 = *not at all* to 7 = *extremely*) to answer the question: “As viewed by society, how [trait] are members of this group?” That is, they did not report their own perceptions; rather, they reported their knowledge about culturally shared beliefs. A stereotype index was created by reverse coding the positive traits, and then taking the average across the nine stereotype descriptors (Cronbach’s $\alpha = .91$), such that higher scores indicate more negative perceptions.

After rating the four classroom groups on each of the nine stereotype descriptors, all participants were asked to divide a hypothetical donation of \$50 among the four different classrooms. Participants were told that all money could be allocated to just one classroom or that it could be split among two or more. The online survey ensured that all allocations totaled \$50.

Results and Discussion

Participants’ repeated responses were submitted to a multilevel analysis using African American, Grades 6–12, and African American \times Grades 6–12 as fixed effects and including random intercepts for each subject. Scores on the composite measure of negative traits were higher overall for African American than for White children ($b = .56$, $p < .01$) and higher for older than for younger children ($b = .25$, $p < .01$). More importantly, we again observed the predicted interaction between age and race ($b = .18$, $p = .03$), such that the difference in negative stereotypic attributes was larger between African American age groups ($M_{\text{Younger}} = 3.74$, $M_{\text{Older}} = 4.17$) than White age groups ($M_{\text{Younger}} = 3.18$, $M_{\text{Older}} = 3.43$), further evidence of a greater age penalty for African Americans. The interaction effect between age and race that we observe is robust to controlling for question-order effects ($b = .17$, $p = .04$). We can also restrict the sample to responses given by participants to the first group that they judged, to obtain a between-participants estimate. With this restriction, we find a Race \times Age interaction effect of $b = .25$ ($p = .27$). Although statistical power is limited, given the restricted sample,

Table 4. Least Squares Results for Mediated Moderation

| | Dependent Variable | | | | | |
|-------------------------------------|--------------------|----------|------------------|----------|-----------------|----------|
| | Donation Amount | | Stereotype Index | | Donation Amount | |
| | <i>b</i> | <i>t</i> | <i>b</i> | <i>t</i> | <i>b</i> | <i>t</i> |
| Grades 6–12 | –1.34 | –2.50* | .25 | 5.01* | –1.24 | –2.32* |
| African American | 1.22 | 2.27* | .56 | 11.12* | 1.56 | 2.86* |
| African American × Grades 6–12 | –1.57 | –2.07* | .18 | 2.48* | –1.02 | –1.30 |
| Stereotype Index | | | | | –.392 | –1.57 |
| Stereotype Index × African American | | | | | –1.14 | –.51* |

Note. The table provides coefficient values and *t* statistics for the test of mediated moderation as outlined in Muller, Judd, and Yzerbyt (2005). The dependent variable for columns 1, 2, 5, and 6 is amount donated and the dependent variable for columns 3 and 4 is the centered stereotype index value.

*Significant at 5%.

resulting in a less significant *p* value, the point estimate on the Race × Age interaction covariate is actually larger in size than the previously reported point estimates.

As in Study 1, people allocated more to African American than to White children overall ($p < .02$). However, this main effect of race was qualified by the interaction with age ($p = .04$); once again, the gap in donations was significantly larger between younger and older African Americans ($M_{\text{Younger}} = \$14.17$, $M_{\text{Older}} = \$11.26$) than between younger and older Whites ($M_{\text{Younger}} = \$12.96$, $M_{\text{Older}} = \$11.61$).

We tested for mediated moderation to determine whether the race moderation that we found in donation rates was mediated by differences in stereotypical beliefs, following the procedures outlined in Muller, Judd, and Yzerbyt (2005). The first two sets of columns in Table 4 illustrate the two results that we discussed in the earlier paragraphs. The final set of columns shows that the residual direct effect of age on donation rates is moderated by race to a lesser extent once the mediator and its interaction with race are included, and the interaction coefficient is reduced from -1.57 ($p < .05$) to -1.02 (*ns*).

While these results suggest that stereotypes partially mediate the African American × Age interaction on donations, we note that stereotypes are certainly not the only mechanism driving donations. Indeed, the main effect of race on the stereotype index is negative—indicating that participants judged African Americans more negatively as a group—while the main effect of African American on donations is positive—indicating that people donated more to them, perhaps, due to perceived neediness or lack of opportunity. These results suggest that distinct additional factors may influence stereotypic beliefs and donations, and further research is needed to document their respective influence. Our data, however, show that even when controlling for the likely role that other factors play, the increase in negative stereotypes of African American children is partially responsible for the decrease in charitable behavior toward them.

General Discussion

Taken together, our observational and laboratory results offer both encouraging and discouraging messages. On the encouraging side, in both Studies 1 and 2, African American children

overall elicited a great deal of charitable behavior, even more than White children; Study 1 offers some evidence that the perceived neediness of African American children may drive this main effect. At the same time, however, both studies offer evidence for our predicted race-related age penalty in charitable giving, such that this charitable behavior toward African Americans appears to diminish sharply once African Americans enter adolescence—a penalty that was less steep for their White counterparts. In Study 2, younger African American students were seen as less prototypical of their ethnic group, but once they approached adulthood, they were more imbued with negative stereotypes, and penalized accordingly. Importantly, we observed the same pattern in the consequential real-world domain of online donations to classrooms in Study 1.

Although our results offer evidence in support of our proposal that positive stereotypes about young children attenuate the otherwise negative stereotype of African Americans—leading to increased charitable behavior—an alternative explanation might suggest that children are born without *any* stereotypic associations and grow into them with age. Such an account would suggest that rather than stereotypes about children conflicting with stereotypes about African Americans, young African American children—for example, babies—simply do not have any negative African American stereotypes associated with them. We conducted a simple study on stereotypic associations with babies as a more conservative test. We expected that, in line with our account, we would observe differences in African American stereotypical associations between African American and White babies, as opposed to this alternative explanation which would suggest we would observe no difference between African American and White babies. Participants ($N = 50$) were recruited using mTurk and were randomly assigned to rate the stereotypic associations of either White or African American babies, using the same set of African American stereotype terms as in Study 2. Results revealed that African American babies were viewed more negatively ($M = 4.08$, $SD = .97$) than White babies ($M = 2.90$, $SD = .68$), $t(48) = 4.83$, $p < .001$. These results offer support for our account that age moderates the impact of stereotypical beliefs about African Americans rather than the account that people are born without stereotypical associations.

Finally, we have focused on the impact of age and race on charitable giving; more broadly, public support and policy decisions that affect disadvantaged children may hinge on a similar interaction between age and race. To the extent that a policy is viewed as benefiting African Americans, our results suggest that support is likely to be greater when the focus is on younger children. As children approach adulthood, however, racial stereotyping may decrease support. As a result, framing policies as benefiting younger African Americans and using imagery and narratives of younger children in appeals for support may help disarm the racial stereotypes that can reduce support.

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Notes

1. Specifically, crowdflower.com posted an open call on Amazon's Mechanic Turk and the Give Work iPhone application to workers in the United States; unfortunately, we do not have additional demographic information for workers. For 50 cents, a worker coded two different pictures. Three different workers were assigned to each photo. Prior to coding, two trained research assistants coded a subset of the pictures. From their coding, the company created a set of "gold" answers to objective coding dimensions such as, "how many students are in the picture?" The gold answers were then hidden in the tasks as checkpoints to ensure the workers accuracy. If workers failed at any gold questions, they could not continue at the task.
2. Table 3 uses multiple race classrooms as the base (control) group in the regression analysis. Alternatively, African American classrooms, White classrooms, or other race classrooms could have been chosen as the base group. Readers interested in comparing the African American \times Age Effect using a different base group can difference the coefficients reported in Table 3; for example, the African American \times Age interaction effect when using the White classrooms as a base group is -8.6% ($p < .05$).
3. Because teachers may post more than one project—which can violate the classic independence assumption—we correct for this possible interdependence by clustering the standard errors at the teacher ID level in column 6 of Table 3.

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