Yale Child Study Center

FROM GENERATION
TO GENERATION

A RESEARCH STUDY BRIEF[1]

Do Early Educators' Implicit Biases Regarding Sex and Race Relate to Behavior Expectations and Recommendations of Preschool Expulsions and Suspensions?

Walter S. Gilliam, PhD
Angela N. Maupin, PhD
Chin R. Reyes, PhD
Maria Accavitti, BS
Frederick Shic, PhD

Yale University Child Study Center // September 28, 2016

Agenda Item XIII A-6 (EDUCATION)
Meeting Date: 04-20-18

Abstract

Preschool expulsions and the disproportionate expulsion of Black boys have gained attention in recent years, but little has been done to understand the underlying causes behind this issue. This study examined the potential role of preschool educators' implicit biases as a viable partial explanation behind disparities in preschool expulsions. Participants were recruited at a large conference of early educators and completed two tasks. In Task 1, participants were primed to expect challenging behaviors (although none were present) while watching a video of preschoolers, balanced by sex and race, engaging in typical activities, as the participants' eye gazes were tracked. In Task 2, participants read a standardized vignette of a preschooler with challenging behavior and were randomized to receive the vignette with the child's name implying either a Black boy, Black girl, White boy, or White girl, as well as randomized to receive the vignette with or without background information on the child's family environment. Findings revealed that when expecting challenging behaviors teachers gazed longer at Black children, especially Black boys. Findings also suggested that implicit biases may differ depending on teacher race. Providing family background information resulted in lowered severity ratings when teacher and child race matched, but resulted in increased severity ratings when their race did not match. No differences were found based on recommendations regarding suspension or expulsion, except that Black teachers in general recommended longer periods of disciplinary exclusion regardless of child gender/race. Recommendations for future research and policy regarding teacher training are offered.

Preschool expulsions and suspensions cause young children to lose their early educational placement or time in care, directly undermining their access to educational opportunities. This "push out" phenomenon has become increasingly concerning to the field especially given the disproportionate rates of early childhood expulsions for boys, Blacks, and particularly Black boys. Black preschoolers are 3.6 times as likely to receive one or more suspensions relative to White preschoolers.[1] This is particularly concerning as Black children make up only 19% of preschool enrollment, but comprise 47% of preschoolers suspended one or more times. Similarly, boys are three times as likely as girls to be suspended one or more times.

Sex and race disparities in early expulsions and suspensions may be associated with several factors related to stress-tolerance[2] and poor access to high-quality early learning environments and supports.[3] Yet, no research exists to explain why boys and Black preschoolers are at greatest risk for expulsion, making it difficult to inform anti-exclusionary practices and complicating efforts to address disparities in expulsions and suspensions. Studies demonstrating similar disparities in K-12 students, however, have found that potential contributors may include uneven or biased implementation of disciplinary policies, discriminatory discipline practices, school racial climate, under-resourced programs, and inadequate education and training for teachers, especially in self-reflective strategies to identify and correct potential biases in perceptions and practice.[4]

The Potential Role of Implicit Biases

Implicit bias refers to the automatic and unconscious stereotypes that drive people to behave and make decisions in certain ways.[5] A 2012 report from the American Psychological Association's Task Force on Preventing Discrimination and Promoting Diversity found that biases – including implicit biases – are pervasive across people and institutions (Jones et al., 2012).[6] Although the behaviors of children may impact adult decision-making processes, implicit biases about sex and race may influence how those behaviors are perceived and how they are addressed, creating a vicious cycle over time exacerbating inequalities.[7]

In one study university undergraduate students, given a vignette of a child with a challenging behavior that was randomly assigned to a picture of an approximately 10-year-old child, rated the Black child as being significantly less innocent and more culpable.[8] They also estimated that the Black children in the pictures were on average 4.5 years older than they really were. Prior research shows that a major predictor of a teacher's plans to expel a preschooler is the degree to which that teacher feels the child may pose a danger to the other children.[9] Therefore, the degree to which Black children are viewed as more culpable or older than they really are may have significant implications for race disparities in expulsion rates.

Although there is no research examining this phenomenon in early education settings, studies of school-aged children have identified concerning trends. In a recent study, researchers presented school teachers with two fictional male student disciplinary records.[10] The records were randomly labeled with either stereotypical Black names or stereotypical White names. Both fictional students had engaged in minor school violations (e.g., classroom disturbance). Teachers reported that they felt more "troubled" by the offenses of the Black student and were more likely to recommend severe punishment for the Black student after the second infraction, including suspension, compared to the White student with the same record.

These tendencies to view child behaviors differentially based on the race of the child may be a manifestation of more generalized implicit biases regarding race and criminal or delinquent behavior.[11] This automatic association between race and perceived threat of aggression has been shown even when the Black face presented was that of a five-year-old boy.[12] There is evidence that empathic responses are dampened when the observer is of a different race than the observed,[13] suggesting that teachers may be less likely to respond with empathy when a child of a race different to her own is exhibiting challenging behaviors or challenging home experiences.

Expectations and shifting standards. Biases in expectations may also influence which children teachers feel are most likely to pose significant classroom behavioral challenges. Teachers often hold higher expectations for White students than for Black students, and are more likely to recommend Black students for special education or disciplinary action.[14] In a recent study, White middle school and high school English teachers were each provided a poorly-written essay to grade.[15] The student name on the essay was randomized to suggest it was authored by either a Black, White, or Latino student. Students of color were assigned significantly higher grades. This suggested that teachers may have been demonstrating biases in their expectations, whereby Black and Latino students were expected to be capable of only lower quality essays and were, therefore, given a higher grade, while White students were expected to write better essays and were, thereby, given a lower grade.[16] Indeed, other research has suggested that Black teachers are more likely to have higher expectations for Black children that those typically held by White teachers.[17]

Teacher–child racial match and teacher appraisals. The shifting standards hypothesis may be highlighted best in studies that account for racial matching of teachers and students. Data obtained from nationally representative datasets (Early Childhood Longitudinal Study-Kindergarten cohort and National Education Longitudinal Study) have shown that Black students are rated as less disruptive and are suspended less often when they are rated by Black teachers than when they are rated by other-race teachers[18] In that study, Black teachers rated Black students as having better work habits than did White teachers, but they also rated Black students as being more disruptive than did White teachers.[19] The effect size was very large, and the authors surmised that Black teachers may have held Black students to much higher standards of conduct, which resulted in more negative evaluations of their behavior.

More specific to preschoolers, the relationship between teacher-child racial and ethnic match and teacher assessments of children was studied in a large data set of 701 prekindergarten classes across eleven states.[20] Results indicated that at the beginning of the academic year there were no differences in ratings of social skills or behavior problems in either Black or Latino preschoolers based on the race of their teacher. However, Black boys showed greater increases in teacher-rated behavior problem ratings from Fall to Spring when their teacher was White than when their teacher was Black. This finding was consistent with previously discussed findings that suggest that White teachers are more likely than Black teachers to escalate their disciplinary responses (and therefore perhaps their severity appraisals of challenging behaviors) to Black children over time.[21] Downer and colleagues hypothesized that perhaps Black teachers are better equipped to understand the needs of Black boys and that

this understanding may lead to more culturally-aligned and effective early education pedagogy.

The current study sought to address these key questions. Is it possible that teachers' implicit sex and race biases may impact their behavioral expectations, leading them to expect and anticipate more challenging behaviors from some children and therefore pay more attention to those children and scrutinize them more closely? If so, what is the nature of these biases, and how might they change over time as teachers gain more knowledge of the contextual family and community factors that may be explanatory of these behaviors?

Methods and Results

Participants

Participants were recruited from the exhibit hall at a large annual conference of early care and education professionals (*N*=135). Participants met inclusion criteria if they were: a) current teachers or student teachers in an early childhood or preschool classroom or worked directly with young children and early childhood classrooms in an administrative or consultative role; b) lived and worked in the United States; and c) fluent in English. One teacher withdrew her data following debriefing and two teachers were removed because they were not available for debriefing, resulting in a final sample of 132 participants. Data for 15 participants were lost for Task 1 (described below) due to software malfunction.

The majority of participants were female (93.9%), and identified as White (66.7%) or Black (22%), 77% of whom are non-Hispanic/non-Latino origin. Most (68.2%) were classroom teachers, whereas the rest were student teachers, center directors, and other classroom staff. On average, participants were in the field of early education for 11.0 years (*SD* = 9.1). Participants worked in a variety of settings, including faith-affiliated centers (22.7%), school-based prekindergarten (17.4%), non-profit centers (11.4%), Head Start (8.3%), for-profit centers (7.6%), and other settings (31.8%). Also, in this sample, Black teachers worked in zip codes with a median income much lower than the rest of the sample, as well as worked in neighborhoods with much higher proportions of Black households and households below the federal poverty level.

Task 1: Eye-Tracking Study

Procedures: Participants were seated facing a 15" laptop computer screen in front of a large blue tarp and used headphones during the task to minimize distractions. Once these initial equipment calibration tasks were completed, a
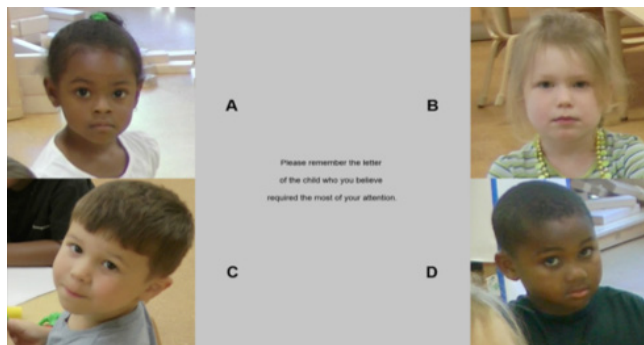
research assistant provided participants with the following instructions:

> "Now you are ready to view a series of video clips lasting 6 minutes. We are interested in learning about how teachers detect challenging behavior in the classroom. Sometimes this involves seeing behavior *before* it becomes problematic. The video segments you are about to view are of preschoolers engaging in various activities. Some clips may or may not contain challenging behaviors. Your job is to press the *enter key* on the external keypad every time you see a behavior that could become a potential challenge [experimenter demonstrates]. Please press the keypad as often as needed."

Although participants were instructed to press the enter key every time they perceived a potential problem, none of the videos contained challenging behavior, and instead incorporated pre-selected preschoolers engaging in traditional classroom activities. Deception was used to elicit participants' unconscious behavioral tendencies and therefore potentially address implicit biases regarding sex and race of the child.

A total of 12 30-second clips composed the six-minute video, and were displayed in semi-randomized order, with a pattern of one free-play clip occurring following two balanced clips (structured activities). Following the administration of the video clips, participants were shown a screen with photos of the four children they had previously seen in the balanced clips (a Black boy, a Black girl, a White boy, and a White girl). Each photo was assigned a letter (A-D) and participants were asked to select the letter of the child who they felt required the most of their attention while viewing the six-minute video clip (Fig. 1). To examine the distribution of attention, the video stimuli were divided into four areas of interest (AOIs; Fig. 2) for the

Figure 1

Figure 2

balanced clip: Black boy, Black girl, White boy, and White girl, and similar AOIs were defined for the free-play clips. The AOIs were defined within each clip by creating a tight perimeter of movable points around each child's body and manipulating the points by the millisecond to follow all movements. The percentage of attention given to children of each race-sex profile was calculated by taking the percentage of time spent scanning within each AOI divided by the total time spent scanning the entire scene, averaged over the 12 clips. To determine if child sex or race was associated with the amount of time participants spent gazing at each child (i.e., dwell time), we calculated the percentage of dwell time on each child over the percentage of dwell time across all children. Gaze trajectories were recorded at a sampling rate of 60 Hz using a SensoMotoric Instruments (SMI) iView REDn device, with eye tracking data processed and analyzed using SMI BeGaze 3.5.[22]

Results. Results of linear mixed effects modeling with restricted maximum likelihood revealed main effects for sex and race such that participants spent more time gazing at boys, $F(1, 3405)=9.39$, $p=.002$, $d=.57$, and at Black children, $F(1, 3405)=9.64$, $p=.002$, $d=.57$, than at girls and Caucasian children. We also found a significant sex × race interaction effect such that teachers spent more time gazing at Black boys, $F(1, 3405)=6.36$, $p=.002$, $d=.47$, than other children. Upon closer inspection of results, however, it appeared that it may be the sex × race interaction effect driving the findings. We therefore applied more conservative statistics (i.e., repeated measures ANOVA) to test whether findings were robust. Results revealed a main effect for race such that participants spent more time gazing at Black children, Wilks' $\Lambda=.693$, $F(1, 115)=50.87$, $p<.001$, $d=1.33$. No significant main effect was found for sex, Wilks' $\Lambda=.987$, $F(1, 115)=1.57$, $p=.213$. We also found a significant sex × race interaction effect such that teachers spent more time gazing at Black boys, Wilks' $\Lambda=.925$, $F(1, 115)=9.36$, $p=.003$, $d=.57$. Participant race predicted dwell time such that Black participants spent more time gazing at Black boys and spent less time gazing at other children compared to White participants (ts $(96)>2.20$, ps$<.05$). Additionally, when teachers were asked explicitly which of the children required most of their attention, 42% indicated that the Black boy required the most of their attention, followed by 34% (White boy), 13% (White girl), and 10% (Black girl; $\chi^2(3)=39.09$, $p<.001$). Participant race was not significantly associated with child choice ($\chi^2(3)=5.33$, $p=.149$).

Task 2: **Vignette Study**

Participants were presented with a standardized vignette detailing a preschool student with behavioral challenges in a preschool classroom and were instructed to pretend that the child was in their classroom. We standardized the vignette but manipulated child sex and race by selecting stereotypical Black and White girl and boy names (Latoya, Emily, DeShawn, Jake) based on prior research using similar paradigms.[23] Additionally, to understand whether teachers knowing family background might influence behavioral ratings and implicit biases, we included a brief paragraph detailing the child's home environment to provide a context for the behavioral challenges.

Standardized Vignette

[CHILD] (DeShawn, Jake, Latoya or Emily) is a four-year-old in your classroom with unpredictable and challenging behaviors. He/she has daily difficulties napping, following instructions and waiting his/her turn, and his/her challenging behaviors escalate quickly. When other children are playing with toys he/she is interested in, he/she yanks the toys away from them. When asked to return the toy and wait his/her turn, he/she often pushes and hits either you or the other child. During circle time activities, [CHILD] blurts out answers before questions have been asked, does not respond to redirection, and taunts other children whose turn it is to speak, calling them inappropriate names. When you attempt to provide other children with one-on-one attention, [CHILD] often disrupts the classroom by throwing objects and/or bursting into loud laughter. On the playground, [CHILD] interacts roughly with other children, sometimes leaving visible scratches on their arms, and ignores the rules for safe use of equipment. When staff members try to intervene, he/she screams and runs away.

Background Information

[CHILD] lives with his/her mother, his/her 8- and 6-year old sisters, and his/her 10-month-old baby brother. His/her home life is turbulent, between having a father who has never been a constant figure in his/her life, and a mother who struggles with depression but doesn't have the resources available to seek help. During the rare times when his/her parents are together, loud and sometimes violent disputes occur between them. In order to make ends meet, [CHILD's] mother has taken on three different jobs, and is in a constant state of exhaustion.

[CHILD] and his/her siblings are left in the care of available relatives and neighbors while their mother is at work.

We randomized whether participants received the background information vs. no background information. Thus, we used a 2 (child sex: male vs. female) × 2 (child race: Black vs. White) × 2 (background vs. no background) design in which teachers were randomly assigned to one of eight conditions. Subsequently, a 2×2×2×2 design was used, adding participant race (White vs. Black).

After participants read the vignette, they rated the severity of the child's behavior on a 5-point scale ranging from *1* (*not at all severe*) to *5* (*very severe*). Next, participants rated the degree to which they felt that nothing could be done to improve the behaviors, using the Hopelessness subscale of the Preschool Expulsion Risk Measure[24] that is based on a scale ranging from *1* (*strongly disagree*) to *5* (*strongly agree*). Finally, participants were also asked to provide an overt rating on a scale of *1* to *5* of their likelihood of recommending that the child in the vignette be suspended or expelled, and if recommending suspension or expulsion, the number of days that they believed would be appropriate disciplinary action. Values were recoded to allow for meaningful analyses (*0*=never considered to expel or suspend the child, *1*=0.5-2 days, *2*=3-5 days, *3*=more than 5 days). Using a 2×2×2 factorial design, we tested for the main and interaction effects of sex, race, and background information (i.e., no family background and with family background) on severity of behavior, hopelessness, and likelihood and extent of suspension or expulsion.

Results. For severity of behavior, we found a main effect trend for child race using a 2x2x2 factorial design, where participants rated White children's behavior as more severe than Black children's, $F(1, 124)=3.39$, $p=.068$, $\eta^2=.03$, $d=.33$. No main effects were found for the single indicator item assessing participant's recommendations regarding suspension and expulsion or the number of days to suspend or expel the child. However, there was a participant race main effect, such that Black participants recommended expelling or suspending children more days than White participants, $F(1, 78)=8.99$, $p=.004$, $\eta^2=.10$, $d=.30$. One main effect was found for family background information, such that teachers perceived the behaviors of children in general to be more hopeless when presented with family background information than when presented with no background, Fs>4.00 in both full and sub-samples, ps <.05. All other statistically significant effects for background were interaction effects and described below.

For severity of behavior, a child race × background × participant race effect was found, $F(1,78)=8.99$, $p=.004$, $\eta^2=.10$ (Fig. 3). White participants presented with no family background rated White children's behavior as more severe than
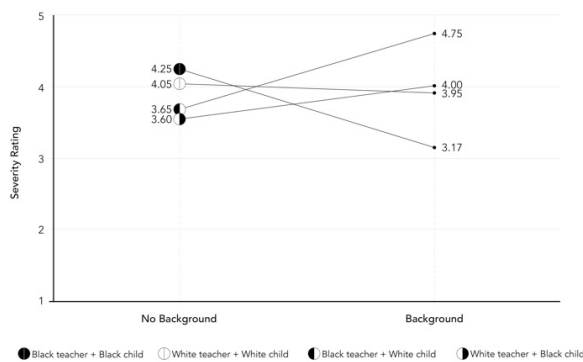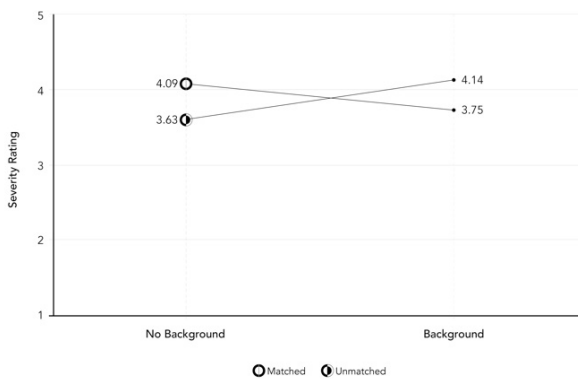
Figure 3

Figure 4

Black children's (d=.51), but when presented with family background White participants rated White and Black children's behaviors as equally severe (d=.07). Black participants presented with no family background rated Black children's behavior as more severe than White children's behavior (d=.62), but when presented with family background Black participants rated White children's behavior as more severe than Black children's (d=2.53).

Closer examination of the estimated marginal means presented in Figure 3 show that when Black teachers were provided background information on Black children, severity ratings were depressed. However, teachers having access to background information resulted in increased severity ratings when the teacher was of a race different than the child (Black teacher with White child or White teacher with Black child). This relationship between background information and severity ratings depending on whether the teacher-child race were matched or unmatched is more parsimoniously depicted in Figure 4, F(1,90)=5.69, p=.019, η^2=.06. Results showed that in-group participants (participants randomly assigned a same-race child vignette) presented with no family background rated the child's behavior as more severe, but with family background their rating of the child's behavior was less severe (d=.41). In contrast, out-group participants (participants randomly assigned a different-race child vignette) presented with no family background rated the behavior as less severe, but with family background their rating of the child's behavior was more severe (d=.57).

Discussion

Do early educators expect boys, Blacks, and Black boys to misbehave?

Our findings demonstrate that early education staff tend to observe more closely Blacks, and especially Black boys when challenging behaviors are expected. These findings are important to consider given that no behavioral challenges were present in the videos, suggesting, in part, that preschool teachers may hold differential expectations of challenging behaviors based on the race of the child. This is consistent with the robust literature that evidences disproportionate rates of disciplinary referrals and exclusionary practices for Black boys that are not better accounted for by other factors.[25] Of note, these eye-tracking results closely corresponded with participants' conscious appraisal of which child they felt required the most of their attention, with Black boys being endorsed as requiring the most attention by 42% of early education staff (68% more than expected by chance alone). Additionally, boys in general, were endorsed as requiring the most attention by 76% of early education staff (52% more than expected by chance alone), consistent with research showing that boys (regardless of race) are at greater risk for classroom removal. Regardless of the nature of the underlying biases, the tendency to observe more closely classroom behaviors based on the sex and race of the child may contribute to greater levels of identification of challenging behaviors with Black preschoolers and especially Black boys, which perhaps contributes to the documented sex and race disparities in preschool expulsions and suspensions.

Are behavioral expectations by early educators related to biases regarding boys, Blacks and Black boys?

The nature of these implicit biases appears to differ based on the race of the early educator. When family background information was withheld, White teachers appear to hold Black preschoolers to a lower behavioral standard, whereas Black teachers hold these Black preschoolers to very high standards, pay particularly high amounts of attention to the behaviors of Black boys, and in general tend to recommend harsher exclusionary discipline.

For White early educators, these findings regarding appraisals of severity are consistent with "shifting standards theory,"[26] where an underlying stereotype bias (i.e., Black preschoolers being viewed as more likely to exhibit the challenging behaviors that result in expulsion and suspension) results in a tendency for White teachers to appraise children primarily in contrast with their stereotype (i.e., Black preschoolers compared to expectations for Black preschoolers; White preschoolers compared to expectations for White preschoolers). In other words, perhaps White early education staff tend to hold an implicit bias that Black preschoolers are more likely to engage

in challenging classroom behaviors, so a vignette about a Black child with challenging behaviors is not appraised as being unusual, severe, or out of the ordinary resulting in lower behavioral ratings. In the case of the present study, a vignette describing pronounced challenging classroom behaviors, in the absence of any potentially explanatory family background information, may not seem very severe at all *for a Black child*.

These potentially lower expectations held for children based on race can have detrimental consequences over time, with low expectations, particularly for minority children, being linked to less favorable outcomes.[27] As an alternative explanation, perhaps White educators simply are reluctant to express negative appraisals of performance for students of color. However, if the White participants were simply displaying an avoidance of negative appraisals of Black children on the vignettes, it remains puzzling why those same White participants would display a clear tendency to gaze longer at the Black children and endorse the Black boy at a higher rate during the eye-tracking task.

In contrast, for Black early educators, these severity findings may represent higher expectations held by Black educators for Black students. These findings might suggest that more severe behavior ratings could reflect higher standards by Black educators for Black children.[28] For both Black and White early educators, these differing biases may be based on an expectation of Black children engaging in more frequent challenging classroom behaviors, consistent with what was found during the eye-tracking task across all participants, especially Black participants in relationship to their expectations regarding Black boys.

What impact might teacher knowledge of child familial stressors have on their ratings of behavioral severity?

When Black teachers rating Black children were provided with background information that included familial stressors that may be explanatory of child behavior problems (as might be learned during the course of a year of interacting with the child and family), ratings of perceived severity significantly decreased. However, when the same background information for Black children was provided to White teachers, severity ratings increased in ways consistent to the overall finding that background information regarding familial stressors may lead to feelings of hopelessness that the behavior problems can improve. These findings are consistent with studies showing a tendency for raters (applied here to teachers) to show greater empathy for the misfortunes of others (applied here to a challenging set of home circumstances) when rating someone of their own race.[29] Furthermore, the strength of same-race empathic responses in individuals has been shown to be related to the strength of their underlying implicit racial biases.[30] Perhaps Black teachers are better equipped

to use this background information regarding familial stressors to empathize with Black children,[31] whereas the same information regarding family stressors for Black children tends to overwhelm White teachers. Of note, background information about familial stressors also caused the Black teachers to increase dramatically severity ratings for White children, as well as for White teachers to rate Black and White children similarly.

Recent findings[32] show that although preschool teacher ratings of child behavior problems at the beginning of an academic year show no significant differences based on teacher-child racial match, significant differences do emerge by the end of the year such that White teachers (relative to Black teachers) identify more challenging behaviors in Black boys. Downer and colleagues speculated, with support from the published literature, that this may be due to Black teachers' increased ability to understand the cultural context of Black children's lives and to use that knowledge to better understand and respond to their educational needs. Results of the current study provide support to this speculation while also raising the question of whether same-race teacher empathy may also be contributory. The current findings may provide insight into why White preschool teachers are more likely to report increased behavioral challenges in Black preschoolers over the course of a school year, whereas Black teachers do not.

Are early educators more likely to recommend expulsion or suspension or more days of exclusion for boys, Blacks, and Black boys?

Contrary to hypotheses, child sex and race showed no relationship to early education staff's recommendations to expel or suspend, or to the recommended number of days of exclusion. However, Black early education staff recommended more days of disciplinary exclusion across all children than did White early educators. More needs to be learned about the extent to which Black teachers may be more likely to exclude Black children, and specifically Black boys, given that Black early education staff showed tendencies to (a) watch Black Boys especially closely when expecting a challenging behavior, (b) rate the behaviors of Black preschoolers more severely in the absence of family background information, and (c) recommend harsher disciplinary exclusions in general.

In grades K-12 expulsions and suspensions are more common in America's southern states[33] and in schools and school districts that have higher concentrations of students of color and students living in low-income families.[34] If Black early educators are more likely to teach in communities with higher proportions of Black preschoolers, and have less access to needed resources, then these tendencies toward greater scrutiny of Black students and harsher discipline in general observed in the current study may contribute to the

increased likelihood of preschool expulsions and suspensions with Black children and Black boys more specifically. This hypothesis seems plausible— in the current study, based on the zip codes of the location of the centers where early education staff worked, Black teachers worked in zip codes with significantly lower median household incomes and greater percentages of Black households and families living below the federal poverty level. The findings suggest that Black early educators may be more likely to work in communities with greater levels of economic need and perhaps lower levels of resources, which could contribute to expulsion and suspension rates.

LIMITATIONS

Several limitations are noted in the current study. First, although eye-tracking videos were filmed using actors and the footage was reviewed to ensure that no challenging classroom behaviors were presented, it is possible that individual children may have engaged in subtle behaviors (degree of movement, degree to which their face was aligned with the camera, proximity to other children, etc.) that may have cued the attention of the participants and led to increased gaze time on these children. Second, because only one behavioral vignette was used, it is impossible to determine what the results would have been had the vignette described behaviors of lower severity. Third, the vignette study could have been improved by having a "control" condition where the sex and race of the described child was not provided. This would have allowed better identification of the degree to which observed boy/girl and Black/White differences represented departures from a controlled center point. Fourth, it is unclear whether participants would have rated behaviors as more hopeless in the presence of the same background information with additional indications of strong parent-teacher partnerships—an important factor that appears to minimize exclusionary practices in preschools. Fifth, while the use of a standardized vignette strengthened the internal validity of the current study, we were unable to account for the developmental and transactional nature of the teacher-child relationship that unfolds in an actual classroom,[35] nor were we able to explore how other classroom or community factors influence teacher perception of challenging behavior—all considerations for future research. Sixth, although a strength of the present study is its reliance on a sample of early education staff representing the diversity of the nation and the early childhood field, there are several potential limitations to generalizability. The early educators who participated in the present study were attending an annual conference and expo of a national/international early childhood education conference. As such, the participants in this study were motivated to attend a professional conference, had the personal or employer financial means to

attend, and were perhaps in a very good mood enjoying the conference and the surrounding entertainment options.

Conclusions and Implications

Preschool expulsions and suspensions disproportionately deny access to early education to boys, Blacks, and especially Black boys.[36] The findings in the current study attempt to elucidate underlying processes that contribute to the well-documented racial disparities in school readiness and subsequent educational- and later-life achievement and opportunity. Fortunately, recent research suggests that implicit biases may be reduced through interventions designed to either address biases directly[37] or increase teachers' empathy for children.[38] Useful guiding principles by which early educators may explore and discover their own implicit biases and strive to deliver more equitable services may also prove helpful.[39]

In the course of teacher-family interactions, early educators may learn more about the struggles, and strengths, of the families they serve. However, it seems likely that teachers may benefit from increased training and ongoing guidance, perhaps through services such as early childhood mental health consultation,[40] to understand how best to use this information, increase their empathic understanding of the child, and avoid feelings of hopelessness, especially when teacher and child race do not match. Given the significance of this issue, serious consideration should be given to a potential role for evidence-based bias-reducing interventions as a core component of preservice and ongoing in-service early childhood teacher training.

Also, greater home school collaboration and parental involvement in Head Start programs has been shown to predict less harsh child discipline by parents and improved school behaviors,[41] raising the question of whether greater connections between parents and early educators may also predict less harsh discipline (e.g., expulsions and suspensions) by early educators. Indeed, very recent efforts to reduce exclusionary school discipline practices through scalable and near zero-cost interventions designed to increase middle school teachers' capacities for student empathy have yielded very promising results in terms of decreased suspension rates.[42] Future work in this area should explore the potential protective effects of better home-preschool connections and early educators' emotional connectedness to the parents and families they serve and the impact this may have on preschool expulsions and suspensions.

Biases are inherent attributes that all humans possess and form naturally through the course of everyday interactions and exposure to media.[43] These biases can become very harmful, however, when beliefs about groups lead to

unquestioned assumptions about individuals within those groups, especially when empathic responses do not engage. When these assumptions lead to important decisions regarding how we choose to educate our youngest citizen learners, or deny educational opportunities through preschool expulsions and suspensions, the potential for lasting harm is great.

ENDNOTES

[1] U.S. Department of Education, Office of Civil Rights. (2016, June). *2013-2014 Civil rights data collection: Key data highlights on equity and opportunity gaps in our nation's public schools.* Retrieved from http://www2.ed.gov/about/offices/list/ocr/docs/crdc-2013-14.html

[2] Autor, D., Figlio, D., Karbownik, K., Roth, J., & Wasserman, M. (2015, October 21). *Family disadvantage and the gender gap in behavioral and educational outcomes* [Working Paper Series 15-16]. Evanston, IL: Institute for Policy Research, Northwestern University.

[3] Barnett, S., Carolan, M., & Johns, D. (2013). *Equity and excellence: African-American children's access to quality preschool.* New Brunswick, NJ: National Institute for Early Education Research. Retrieved from http://nieer.org/sites/nieer/files/Equity%20and%20Excellence%20African-American%20Children%E2%80%99s%20Access%20to%20Quality%20Preschool_0.pdf

[4] Gregory, A., Skiba, R.J., & Noguera, P.A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? *Educational Researcher, 39*(1), 59–68.

[5] Staats, C., Capatosto, K., Wright, R.A., & Contractor, D. (2015). *State of the science: Implicit bias review 2015.* Columbus, OH: Kirwan Institute for the Study of Race and Ethnicity.

[6] Jones, J.M., Cochran, S.D., Fine, M., Gaertner, S., Mendoza-Denton, R., Shih, M., & Sue, D.W. (2012). *Dual pathways to a better America: Preventing discrimination and promoting diversity.* Washington, DC: American Psychological Association, Presidential Task Force on Preventing Discrimination and Promoting Diversity. Retrieved from https://www.apa.org/pubs/info/reports/dual-pathways-report.pdf

[7] Okonofua, J.A., Walton, G.M., & Eberhardt, J.A. (2016). A vicious cycle: A social-psychological account of extreme racial disparities in school discipline. *Perspectives on Psychological Science, 11*, 381-398. doi:10.1177/1745691616635592

[8] Goff, P.A., Jackson, M.C., Allison, B., Di Leone, L., Culotta, M., & DiTomasso, N.A. (2014). The essence of innocence: Consequences of dehumanizing black children. *Journal of Personality and Social Psychology, 106,* 526–545.

[9] Gilliam, W.S., & Reyes, C. (2016). *Teacher decision-making factors that lead to preschool expulsion: Scale development and preliminary validation of the preschool expulsion risk measure.* Manuscript submitted for review.

[10] Okonofua, J.A., & Eberhardt, J.L. (2015). Two strikes: Race and the disciplining of young students. *Psychological Science, 26*, 617-624. doi: 10.1177/0956797615570365

[11] Eberhardt, J.L., Goff, P.A., Purdie, V.J., & Davies, P.G. (2004). Seeing black: Race, crime, and visual processing. *Journal of Personality and Social Psychology, 87*, 876–893.

[12] Todd, A.R., Thiem, K.C., & Neel, R. (2016). Does seeing faces of young black boys facilitate the identification of threatening stimuli? *Psychological Science*, *27*, 384-393. doi:10.1177/0956797615624492

[13] Cikara, M., Bruneau, E.G., & Saxe, R.R. (2011). Us and them: Intergroup failures of empathy. *Current Directions in Psychological Science, 20*, 149-153. doi: 10.1177/0963721411408713

[14] Tenenbaum, H.R., & Ruck, M.D. (2007). Are teachers' expectations different for racial minority than European American students? A meta-analysis. *Journal of Educational Psychology*, *99*, 253-273.

[15] Harber, K.D., Gorman, J.L., Gengaro, F.P., Butisingh, S., Tsang, W., & Ouellette, R. (2012). Students' race and teachers' social support affect the positive feedback bias in public schools. *Journal of Educational Psychology, 104*, 1149–1161.

[16] Biernat, M. (2003). Toward a broader view of social stereotyping. *American Psychologist, 58*, 1019–1027. doi:10.1037/0003-066X.58.12.1019

[17] Bates, L.A., & Glick, J.E. (2013). Does it matter if teachers and schools match the student? Racial and ethnic disparities in problem behaviors. *Social Science Research, 42*, 1180-1190; Murray, C., Murray, K.M., & Waas, G.A. (2008). Child and teacher reports of teacher-student relationships: Concordance of perspectives and associations with school adjustment in urban kindergarten classrooms. *Journal of Applied Developmental Psychology, 29*, 49-61; Tenenbaum & Ruck, 2007.

[18] Dee, T.S. (2005). A teacher like me: Does race, ethnicity, or gender matter? *The American Economic Review*, *95*, 158-165; Downey, D.B., & Pribesh, S. (2004). When race matters: Teachers' evaluations of students' classroom behavior. *Sociology of Education*, 77, 267-282; Wright, A.C. (2015). *Teachers' perceptions of students' disruptive behavior: The effect of racial congruence and consequences for school suspension*. Unpublished manuscript, University of California, Santa Barbara.

[19] Farkas, G., Grobe, R.P., Sheehan, D., & Shuan, Y. (1990). Cultural resources and school success: Gender, ethnicity, and poverty groups within an urban school district. *American Sociological Review*, *55*, 127-142.

[20] Downer, J.T., Goble, P., Myers, S.S., & Pianta, R.C. (2016). Teacher-child racial/ethnic match within pre-kindergarten classrooms and children's early school adjustment. *Early Childhood Research Quarterly, 37*, 26-38.

[21] Okonofua & Eberhardt, 2015.

[22] SensoriMotor Instruments. (2015). REDn Scientific [Computer software]. Boston: Author.

[23] Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *American Economic Review, 94*, 991-1013; Levitt, S.D., & Dubner, S.J. (2005). *Freakonomics: A rogue economist explores the hidden side of everything.* New York: William Morrow; Okonofua & Eberhardt, 2015.

[24] Gilliam & Reyes, 2016

[25] Skiba, R.J., Horner, R.H., Chung, C.G., Rausch, M., May, S.L., & Tobin, T. (2011). Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline. *School Psychology Review, 40*, 85–107.

[26] Biernat, 2003.

[27] Egalite, A.J., Kisida, B., & Winters, M.A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review, 45*, 44-52; Okonofua, Walton et al., 2016.

[28] Farkas et al., 1990.

[29] Cikara et al., 2011.

[30] Azevedo, R.T., Macaluso, E., Avenanti, A., Santangelo, V., Cazzato, V., & Aglioti, S.M. (2013). Their pain is not our pain: Brain and autonomic correlates of empathic resonance with the pain of same and different race individuals. *Human Brain Mapping, 34*, 3168-3181.

[31] Irvine, J.J. (Ed.). (2002). *In search of wholeness: African American teachers and their culturally specific classroom practices*. New York: Palgrave.

[32] Downer et al., 2016.

[33] Smith, E.J., & Harper, S.R. (2015). *Disproportionate impact of K–12 school suspension and expulsion on black students in southern states*. Philadelphia: Pennsylvania University, Center for the Study of Race and Equity in Education. Available: http://www.gse.upenn.edu/equity/sites/gse.upenn.edu.equity/files/publications/Smith_Harper_Report.pdf

[34] Ramey, D.M. (2015). The social structure of criminalized and medicalized school discipline. *Sociology of Education, 88,* 181-201. doi:10.1177/0038040715587114

[35] Rudasill, K.M., & Rimm-Kaufman, S.E. (2009). Teacher-child relationship quality: The roles of child temperament and teacher-child interactions. *Early Childhood Research Quarterly, 24,* 107-120.

[36] Gilliam, W.S. (2005). *Prekindergarteners left behind: Expulsion rates in state prekindergarten systems.* New Haven, CT: Yale University Child Study Center. Retrieved from http://www.ziglercenter.yale.edu/publications/National%20Prek%20Study_expulsion_tcm350-34774_tcm350-284-32.pdf; U.S. Department of Education, 2016

[37] Devine, P.G., Forscher, P.S., Austin, A.J., & Cox, W.T.L. (2012). Long-term reduction in implicit race bias: A prejudice habit-breaking intervention. *Journal of Experimental Social Psychology, 48,* 1267–1278; Jones et al., 2012; van Nunspeet, F., Ellemers, N., & Derks, B. (2015). Reducing implicit bias: How moral motivation helps people refrain from making "automatic" prejudiced associations. *Translational Issues in Psychological Science, 1,* 382–391.

[38] Okonofua, J.A., Paunesku, D., & Walton, G.M. (2016). Brief intervention to encourage empathic discipline cuts suspension rates in half among adolescents. *Proceedings of the National Academy of Sciences, 113*, 5221–5226. doi: 10.1073/pnas.1523698113.

[39] St. John, M.S., Thomas, K., Noroña, C.R. (2012). Infant mental health professional development: Together in the struggle for social justice. *Zero to Three, 33*(2), 13–22.

[40] Gilliam, W.S., Maupin, A.N., & Reyes, C.R. (2016). Early childhood mental health consultation: Results from a statewide random-controlled evaluation. *Journal of the American Academy of Child and Adolescent Psychiatry, 55*, 754-761.

[41] Ansari, A., & Gershoff, E. (2016). Parent involvement in Head Start and children's development: Indirect effects through parenting. *Journal of Marriage and Family, 78*, 562–579. doi:10.1111/jomf.12266

[42] Okonofua, Paunesku, & Walton, 2016.

[43] Jones et al., 2012.