# Eliminating the Racial Disparity in Classroom Exclusionary Discipline

Anne Gregory
*Rutgers University*, annegreg@rutgers.edu

Joseph P. Allen
*University of Virginia*, allen@virginia.edu

Amori Yee Mikami
*University of British Columbia*, mikami@psych.ubc.ca

Christopher A. Hafen
*University of Virginia*, cah3wy@eservices.virginia.edu

Robert Pianta
*University of Virginia*, rcp4p@eservices.virginia.edu

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## Acknowledgements

## Eliminating the racial disparity in classroom exclusionary discipline

Improving teaching is arguably one of the greatest challenges facing public education in the United States. Novice and veteran teachers need supports to help them be successful with their students. Teacher professional development programs provide one avenue of supports. Yet, selecting a program can be daunting. Selecting the right type of professional development is especially important for schools trying to reduce high rates of suspension through mandated systematic teacher supports (Losen, 2011). We need a greater understanding of the types of supports for teachers that can produce documented change in teacher behavior—specifically, reductions in teachers' use of exclusionary discipline. This is one of the few studies to test a professional development program's effect on lowering the use of exclusionary discipline with all students, and especially with African American students—a group particularly at-risk for being excluded from class for perceived misbehavior. The professional development program under examination is characterized by its sustained, focused, and rigorous approach—an approach that may be promising for a broad array of professional development programs. Central to the program is its focus on improving how teachers interact with adolescents—a focus that could be key for leveraging change for a range of positive student outcomes.

The My Teaching Partner-Secondary (MTP-S) professional development program was originally developed for Pre-K and early elementary classrooms (Pianta et al., 2003; Pianta, Mashburn, Downer, Hamre, & Justice, 2008; Pianta, 2011). The secondary version of the program (MTP-S) is a developmentally-sensitive extension of the younger version. Both programs offer teachers ongoing, personalized coaching and feedback. Despite the empirical support for the program and its ongoing dissemination, as of yet no studies have tested whether MTP-S reduces teachers' reliance on traditional disciplinary approaches to handle perceived misbehavior. Namely, as of yet, we do not know if the MTP-S program reduces how often teachers exclude students from the classroom, especially African American students for perceived misbehavior. If the chain of events that often begin when a student is sent out of the classroom for perceived misbehavior and culminate in suspension can be disrupted, there is potential to narrow the entrenched racial discipline gap.

### The sustained, focused, and rigorous approach of My-Teaching Partner-Secondary

Efforts to build teacher capacity usually take the form of single session professional development workshops, which have little follow-up (Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos, 2009; Klingner, 2004). The lack of evidence of one-shot workshops for changing teacher practice has led to calls for more sustained programs that are integrated into school hours (Darling-Hammond et al. 2009, Pianta, 2011). MTP-S employs a *sustained* approach—teachers reflect on videorecordings of their instruction with their assigned coach throughout the school year. The program also has a *focused* and *rigorous* approach. Each submission of video leads to a multi-stepped "coaching cycle." For each cycle, the coaches examine the videorecording and isolate illustrative examples of one or more dimensions of the Classroom Assessment Scoring System-Secondary (CLASS-S; Pianta et al., 2008). Broadly, they direct the

teachers' attention to moments in the classroom when they had high quality interactions with the students. The coaches also select videoclips of teacher behavior which could be altered in future instruction to better reflect a CLASS-S dimension. The teachers then view the clips and answer written prompts to help them observe how their interactions do or do not align with the CLASS-S dimensions. The coaches meet with the teachers one-on-one (via the phone or computer) to discuss the feedback and observations. Together, they develop an action plan to build on strengths and address challenges. Specifically, they identify strategies to implement new behaviors that embody a targeted CLASS-S dimension in their upcoming instruction (My Teaching Partner Consultancy Manual, 2010).

Given that the CLASS-S is a primary driving force in the MTP-S intervention and reflects the research-based rigor of the program, it is necessary to describe it in more detail. CLASS-S was originally designed for systematic observation of middle and high school classrooms. [1] It helps observers identify ten dimensions of high quality instructional environments. Dimensions are typically grouped into three overarching domains, Emotional Support, Classroom Organization, and Instructional Supports (Pianta & Hamre, 2009). See Table 1 for a list of the CLASS-S dimensions. The aim of MTP-S is to improve teacher-student interactions as seen through the through the lens of the CLASS-S. In fact, past research has demonstrated teachers in the program improve on CLASS-S dimensions. One study showed that MTP-S teachers, compared to control teachers, made improvements in: positive climate, teacher sensitivity, teacher regard for adolescent perspectives, instructional learning formats, and analysis and problem-solving (Allen et al., 2011). In other words, when outside observers coded videotaped instruction of the MTP-S teachers, their patterns of relating with students were characterized by warmth and responsiveness to students' academic, social, and emotional needs. They engaged youth in a developmentally-appropriate way that allowed for student leadership, peer sharing, and autonomy. They facilitated student engagement using novel materials and a variety of teaching strategies and activities. Finally, they pushed students to engage in synthesis, higher-order thinking, and problem-solving of appropriately challenging material.

Already, there is evidence that the MTP program results in positive student change. For instance, students in classrooms with teachers assigned an MTP Pre-K coach scored 4 to 5 percentile points higher on standardized tests than students in the other conditions (Pianta et al., 2008; Pianta, 2011). The secondary version of MTP has also received empirical support. A recent randomized controlled trial of MTP-S was conducted with 78 middle and high school teachers and over 1400 of their students, 22% of whom were African American students. For MTP-S intervention teachers, end-of-course, standardized state exam scores for their students were higher (0.22 *SD*) compared to the students in control teachers' classrooms following 1 year of the intervention (Allen, Pianta, Gregory, Mikami, & Lun, 2011). This equates to an average increase in student achievement from the 50th to the 59th percentile for a student moved from the control condition to the intervention condition. MTP-S was also associated with increases in observed student engagement (Gregory, Allen, Mikami, Hafen & Pianta, 2012) and positive peer interactions (Mikami, Gregory, Allen, Pianta, &

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[1] Validation studies of CLASS have shown observed types of teacher behavior are linked to positive student outcomes (Allen et al., 2012; Mashburn et al., 2008).

Lun, 2011).[2] Findings in the three outcome studies held for all teachers in the intervention, no matter the racial composition of the classroom, the percentage of classroom students who qualified for free or reduced priced lunch (an indication of low income status), and the number of low achieving students in the classrooms at the start of the year. Given the findings held across these different classrooms with a diverse group of students (including African American students), MTP-S appears to be beneficial for all students' achievement, engagement, and prosocial peer relations, regardless of their racial and ethnic group membership.

The program has been adopted in large-scale efforts to improve the impact and quality of preschool education throughout the nation including by Head Start, and in states such as Georgia, California, and Florida and is used in k-12 in selected districts across the country. It has garnered the support of professional organizations and local union groups in part because it is so focused on providing teachers support to improve their classroom interactions. Rigorous experimental studies show MTP-S produces positive changes in teacher behavior and student performance. School districts throughout the nation have begun implementing the program. As of yet, however, no studies have examined whether MTP-S relates to teachers' disciplinary practice, specifically their use of exclusionary discipline. MTP-S targets the quality of interactions in the classroom—a promising target to alter teachers' utilization of exclusionary discipline.

**Improving teacher-student interactions to leverage change in discipline practices**
Many teachers rely on exclusionary discipline when they react to perceived student misbehavior—this reliance is particularly pronounced for African American students (Gregory & Thompson, 2010). Exclusionary discipline is when teachers issue office discipline referral and send students to the administrators' office for perceived misbehavior. Administrators will typically assign a consequence, usually in the form of suspension (in-school or out-of school) which results in the student missing more instructional time (Skiba et al., 2002). Lost instruction time can accrue, making it harder for students to keep up with their peers in coursework (Scott & Barrett, 2004). In addition, exclusion from class can initiate a harmful and escalating pattern of negative student-adult interactions or contribute to students' psychological disinvestment from schooling, culminating in their dropping out of school altogether. The frequency with which teachers use exclusionary discipline is not trivial. One study showed that teachers excluded students from the classroom for perceived misbehavior over 2,000 times in a single semester in a school with 3,000 enrolled students. Noteworthy is that 70% of the exclusionary discipline that semester was issued to African American students who comprised 38% of the student body (Gregory, Nygreen, & Moran, 2006). The over-representation of African American students in classroom exclusion directly feeds into the more well-known and well-documented disparities in out-of-school suspensions (Skiba et al., 2002).

There are strong reasons to believe that MTP-S could reduce teachers' reliance on exclusionary discipline (particularly with African American students). MTP-S focuses on improving the quality of interactions between teachers and their students. This may be particularly important for teachers and their African American students given clear

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[2] Reliable observational codes were used to measure student engagement and peer interactions.

indications that their classroom interactions with one another could be improved. Specifically, from the students' point of view, African American students tend to experience less support and more unfair treatment from their teachers, compared to White students (Thompson, 2012; Wald & Kurlaender, 2003). From the teachers' point of view, teachers hold more negative perceptions of African American students. They view African Americans as more defiant and disruptive and apply harsher disciplinary consequences to perceived misbehavior (Bradshaw, Mitchell, O'Brennan, & Leaf, 2010; Fabelo et al., 2011; Gregory & Weinstein, 2008; Horner, Fireman, & Wang, 2010; Skiba et al. 2002). A program that targets improving interactions could reduce the likelihood of mutually held negative perceptions and serious conflicts leading to exclusion from class for possible suspension. In other words, with stronger relationships and more engaging instruction, negative interactions might be *prevented* in the first place. When a student breaks the classroom rules, stronger relationships could increase the likelihood that disputants give eachother the benefit of the doubt and disrupt any preconceived notions or unconsciously held stereotypes. With trust and good will, conflict could be diffused and cooperation elicited (Gregory & Ripski, 2008).

## Summary

MTP-S aims to improve teacher-student interactions in middle and high school classrooms. By targeting interactions, the program has the potential to reduce teachers' reliance on exclusionary discipline practices. Given the need to strengthen teacher-African American student interactions in particular, the program may ultimately help reduce racial disparities in school discipline. The results of the randomized controlled trial of MTP-S will offer new empirical support for the potential of teacher professional development programs –particularly those with a sustained, focused, and rigorous approach to supporting teachers.

## METHOD
### Participating students and teachers

Teacher participants came from five middle and high schools in a mid-sized city in the southeastern region of the US. The schools ranged in the percentages of low income students—20-40% qualified for free and reduced priced meals (FRPM).The schools also ranged in African American student enrollment—they made up 40% to 79% of the student body depending on the school.

In August of 2010, 95 teachers from within the 5 schools were randomly assigned to the MTP-S intervention versus control condition. Intervention teachers received a 1-day introductory workshop, followed by coaching cycles every two weeks, all targeting a focal classroom for each teacher (the lowest academic level regular course they taught for which standardized course-mastery tests were given). Control teachers also identified their lowest academic level classroom from which we gathered data. Otherwise the control teachers were exposed only to business-as-usual in-service training. Teachers collected student consent forms in their focal classroom.[3] The 979 participating students were racial and ethnically diverse (59% African American, 30% White, 8% Hispanic, and 3% Asian).

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[3] Thirteen teachers were not included in the current research given their students did not return consents to obtain their school records.

Thirty-nine teachers were in the intervention condition and forty-three teachers were in the control condition ($N$ = 82). The teachers did not significantly differ on personal or classroom characteristics (see Table 2). For instance, in both groups over 30% of the teachers were African American and a majority of the teachers were male. The average teacher was in his 40's, taught 10th grade, and had around 9 years of teaching experience. Classroom composition was similar across intervention condition with the average classroom comprised of two-thirds African American students and a third low-income students (those who qualified for FRPM).[4]

**Measures**

*Teacher covariates.* Teachers completed surveys about their own characteristics and the characteristics of their focal classroom. Analyses included teacher gender, race, years of teaching experience, and course subject area. The teacher covariates in the analyses enabled us to understand if the MTP-S effects held above and beyond these teacher characteristics. The selection of teacher covariates was driven by prior research findings. For instance, African American teachers tend to perceive African American students in a more positive light compared to White teachers (Downey, & Pribesh, 2004; Pigott, & Cowen, 2000; Zimmerman, Khoury, Vega, Gil, & Warheit, 1995). In addition, female teachers and teachers with fewer years of teaching tend to see more negative interactions among students (Gregory et al., 2010).

We also wanted to ascertain whether the effect of MTP-S on exclusionary discipline held for teachers no matter their course subject area. If so, we would corroborate previous findings that showed MTP-S benefitted students regardless of the classroom subject area (Allen et al., 2011). For analytic purposes, we grouped teachers into two areas—math/science (45%) and English/humanities (55%). Teachers varied in the semester or yearlong length of their focal classroom which we accounted for in our analyses.[5] Finally, we included the percentage of African American students in the classroom as a covariate in all analyses. This was based on the finding that racial composition has been linked to rates of suspension. Specifically, the racial gap in suspensions is higher in schools that have more African American students (Gregory, Cornell & Fan, 2011).

*Student covariates.* By including student characteristics as covariates in the statistical analyses, it allowed us to identify whether teachers used exclusionary discipline with fewer or greater numbers of African American students compared to other students, regardless of the student being male, low achieving, or from a low income family—which are known risk factors for students' receiving such discipline (Wallace, Goodkind, Wallace, & Bachman, 2008; Wehlage & Rutter, 1986). We used

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[4] Intervention and control teacher classrooms did not significantly differ on the number of participating African American students ($M$ = 7.46, $M$ = 6.71, respectively) compared to participating students in other racial/ethnic groups ($M$ = 5.26, $M$ = 4.79, respectively). That said, the number of participating students in some of the classrooms was quite low. Specifically, six control teachers and seven intervention teachers had only one or two participating students who were not African American. And, two intervention teachers had only one or two participating African American students.

[5] Fifteen percent of teachers instructed students for long class periods each semester and changed students at midyear. They were called "block" teachers. In contrast, a majority of teachers (85%) taught the same students for shorter class periods across the whole school year. They were called "traditional" teachers.

school records to identify gender and low income status.[6] We also included students' prior performance on Standards of Learning (SOL), end-of-course exams in a similar subject matter to the MTP-S teachers' subject matter (e.g., math, science, English).[7]

*School records.* We obtained school records of the participating students' receipt of exclusionary discipline in the teachers' focal classrooms for the year of the project, meaning the student had received an office discipline referral (ODR) for perceived misbehavior from the project teacher's classroom. Teachers issued exclusionary discipline mostly for reasons related to disrespect, disruption, and fighting/bullying. Typically, when a teacher issues such discipline, the student leaves the classroom and meets with an administrator who determines the consequence (e.g., suspension). Irvin and colleagues (2004) synthesized empirical studies and found that higher levels of school-wide use of exclusionary discipline (i.e., ODRs) were associated with classroom disorderliness and with student and teacher perceptions of unsafe school conditions. They concluded that reductions in the use of such classroom discipline are a valid indictor of intervention success.

**Data analytic plan**

We applied well-established statistic techniques to increase the rigor of the findings (See appendix for methodological details). Analyses took into account student characteristics (e.g., gender, achievement on SOL) and teacher characteristics (e.g., race, years of teaching experience). Results from the statistical models answered a) whether being African American increased the likelihood of receiving exclusionary discipline, b) whether intervention versus control teachers tended to use less exclusionary discipline with all students, and c) whether the probability of an African American versus a non-African American student being given exclusionary discipline was less in the intervention teachers' classrooms compared to the control teachers' classrooms.

It is important to note that we decided to compare African American receipt of exclusionary discipline compared to all other students, which combined White, Hispanic and Asian student groups. This decision was based on the small percentage of Hispanics (8%) and Asians (3%) in the sample. That said, we re-ran analyses comparing only African American and White students and the magnitude of the effects was similar to the presented results.

**Results**

*Program effects.* On average, 13.7% of participating African American students and 5.1% of all other participating students in control teachers' classrooms received at least one exclusionary discipline referral. Using a risk ratio, this means African American students were 2.69 times as likely as other students to receive exclusionary discipline. In intervention teachers' classrooms, 6.0% of participating African American students and 5.8% of all other participating students received at least one exclusionary

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[6] Student eligibility for FRPM was used as a proxy for family low income status. The meal program is offered to families with incomes up to 185% of the federal poverty line, and eligibility is typically used in research to reflect students' low income status (Harwell & LeBeau, 2010).

[7] The Commonwealth of Virginia SOL standardized testing system has demonstrated good reliability and validity (Hambleton et al., 2000).

discipline referral. The risk of receiving exclusionary discipline was similar for African Americans and other students (risk ratio = 1.03).

*Program effects accounting for classroom, teacher, and student characteristics.* Table 3 displays the HGLM results.[8] Statistical models showed that the program was beneficial, when accounting for a range of classroom, teacher, and student characteristics. Specifically, students in MTP-S intervention teachers' classrooms had a *lower* probability of receiving exclusionary discipline than students in control teachers' classrooms. This is clearly shown in Figure 1. The program effects were due to the decreased referrals of African American students. This is depicted in Figure 1. African American students had a similar probability of receiving exclusionary discipline compared to other students in the intervention classrooms. In contrast, the gap between African American and other students persisted in the control classrooms such that African American students were about two times more likely than other students to receive exclusionary discipline. It is important to note that the statistical models isolated the effects of the program on student race given we had rigorous controls in the model. For instance, this means African American students of equivalent achievement, income, and gender in an intervention classroom, compared to the control classroom, had a lower probability of exclusionary discipline.

*Classroom, teacher, and student characteristics and exclusionary discipline.* The statistical models also revealed some noteworthy relationships among variables, independent of the effects of the MTP-S intervention. In this sample, teacher race, years of teaching experience, the percentage of African American students in the classroom, and course subject area were not significant predictors of the probability of a student receiving exclusionary discipline. However, students in classrooms with traditional course scheduling (same students across the school year) were more likely to receive exclusionary discipline than were students in courses that only met for half the year as a group. In terms of student covariates, prior student achievement and low income status (i.e., FRPM eligibility) were not related to exclusionary discipline. In contrast, if a student was male or African American, he was more likely to receive exclusionary discipline when taking into account the student's income status and prior achievement.

## Discussion

This is one of very few studies to draw on the strengths of a randomized controlled trial to demonstrate the promise of a teacher professional development program to reduce the racial discipline gap. We found that African American students had a similarly low probability of receiving exclusionary discipline, compared to all other students in the classrooms where teachers received the MTP-S program. Their probability was about two times higher in the classrooms where the teachers did *not* receive the program. The findings could have noteworthy policy implications if replicated with larger samples.

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[8] Table 3 displays the HGLM results with the estimates presented for predictors when they were entered as a block. The estimates (Beta weights) and confidence intervals (CI) are presented. If the estimate for a predictor is statistically different from 1.00, then the 95% CI does not contain 1.00. We also calculated odds ratios using the exponentiated logistic regression coefficients from the HGLM analysis. To interpret the odds ratio, if the estimate is larger (or smaller) than 1.00, it depicts the increase (or decrease) in the chance of receiving exclusionary discipline for a unit increase (or decrease) on the scale of the predictor. For example, an estimate of 2.0 means that for each unit increase in the predictor, the risk of exclusionary discipline doubles.

Current disciplinary approaches in school—namely the widespread use of suspension as a consequence—are largely ineffective (APA Task Force, 2008). Therefore, the MTP-S research-based approach is a highly promising practice for reducing racial disparities with known benefits for improving instruction and no anticipated negative consequences. Therefore, schools and districts struggling to reduce racial disparities might consider this sustained, focused, and rigorous approach to teacher professional development. Interventions that directly work with teachers on their interactions with students through a videorecorded coaching model may have the potency to shift the long-enduring racial disparity in the use of exclusionary discipline. The benefits of MTP-S for African American students held whether the student was male, low income, or low achieving. We have confidence in this finding because: (a) we utilized an experimental design and randomly assigned teachers to the intervention or control condition, and (b) the two teacher groups were comparable at the start of the intervention.

The content of the MTP-S program is driven by theory and research that can help explain why the evaluation showed reductions in teachers' use of exclusionary discipline. The program aims to strengthen the quality of teacher-student interactions. Multiple studies have reported associations between youths' sense of social connection and outcomes ranging from higher achievement scores, greater student engagement, and more positive academic attitudes (Bryk, Lee, & Holland, 1993; Bryk & Driscoll, 1988; Connell & Wellborn, 1991; Crosnoe, Johnson, & Elder, 2004; Gregory & Weinstein, 2004; Ryan & Deci, 2000; see also, NRC, 2004, for extended review of other similar findings). Moreover, at-risk adolescents report that a close and supportive relationship with a teacher is a key feature distinguishing those who succeed in school from those who do not (Resnick et al., 1997). When relationships function well, the resulting increases in motivation to comply with basic school norms also appears likely to lead to reductions in problematic behavior (Bryant, Schulenberg, Backman, O'Malley, & Johnston, 2000). Pianta, Hamre, and Stuhlman (2002) conclude that for adolescents, the dimensions of closeness, connection, and affiliation are critical features of classroom interactions.

In terms of teachers and their African American students, a supportive relationship with a teacher may be a "breath of fresh air" for many African American students who experience the school environment in an alienating or hostile way (e.g., Wald & Kurlaender, 2003). Moreover, when teachers are trained through MTP-S to better integrate opportunities for higher level problem-solving, student choice, leadership, and peer sharing, their African American students may develop trust with their teachers and feel more motivated to engage in the material. This would increase the positive interactions amongst African American students and their teachers and prevent negative interactions that could culminate in exclusionary discipline.

MTP-S coaches also attempt to increase teacher skill in attending to students' social and emotional cues and needs. This process may help teachers "individuate" students and disrupt explicit stereotyping or implicit bias. Social psychological research has shown that negative implicit attitudes (out of conscious awareness) can be triggered by racial stimuli, such as images of darker skinned faces, which can then lead to more punitive decisions (Graham & Lowery, 2004). A recent meta-analysis showed that implicit bias predicts behavior—specifically behavior characterized by differential treatment of others (Greenwald, Poehlman, Uhlmann, & Banaji, 2009). By individuating

and personalizing relationships with African American students, the program may disrupt unconscious attitudes that affect disciplinary decision-making. In the classroom, teachers with high sensitivity may have greater contextual understanding when they "read" students behavior or when they attempt to diffuse uncooperative behavior. Research and theory supports this line of reasoning. A recent intervention suggested that individuation is among a menu of successful cognitive strategies to reduce implicit bias (Devine, Forscher, Austin, & Cox, 2012). Teachers authentically getting to know students has also been identified as a way to strengthen trust with students of color (Aronson, 2008).

The range of ideas about why MTP-S may shift patterns in exclusionary discipline, especially for African American youth, requires future rigorous study. It would also be informative to ascertain if MTP-S participants demonstrate key features of culturally responsive/relevant teaching. According to Gloria Ladson-Billings (1994), cultural relevant teaching methods include teachers seeing themselves as giving back to the community, "help(ing) students make connections between their local, national, racial, cultural, and global identities," and "demonstrate(ing) a connectedness with all of their students" p. 25. Relatedly, "culturally relevant critical teacher care," as described by Roberts (2010), includes teachers having frank conversations about how race and racism affects everyday life and explicitly offering strategies to navigate racism. A model of culturally responsive classroom management also includes teachers understanding broad social, economic, and political issues facing their students and using classroom management strategies that synch with students' cultural backgrounds (Weinstein, Tomlinson-Clarke, & Curran, 2004).

## Limitations

The findings require replication with a larger sample of teachers and students. In the current study, some of the teachers in the intervention and the control conditions had very few participating students. Thus, whether these teachers referred their one or two participating students may not reflect their larger pattern of referral with the numerous other students in their focal classroom. That said, when we excluded the teachers with low numbers findings were similar. Moreover, detecting effects of MTP-S on exclusionary discipline with such a small sample size was remarkable, and offers optimism that it would hold up in future replications with larger samples.

Another limitation to consider is the range of factors that may affect whether teachers utilize the school's formal exclusionary discipline system. Morrison and colleagues (2004) describe how teacher usage may not only depend on the level of student cooperation in the classroom or teacher skills at diffusing conflict. It may also depend on teachers' perceptions of whether the administration is effective at dealing with the student after he or she is sent out. To strengthen the claims that lower use of exclusionary discipline reflects a positive shift in the classroom, future research should correlate low use with observations of high student engagement.

The MTP-S program targets change at the classroom level, as a whole. It does not focus on, for instance, reducing teachers' within-classroom differential treatment of varying student groups. Yet, decades of educational research has confirmed that teacher beliefs and behaviors can vary across students within the same classroom (e.g., Brophy & Good, 1970; Weinstein, 2002). It would be informative to observe

whether MTP-S teachers interacted similarly with students of varying racial and ethnic groups. In fact, it has been suggested that the CLASS-S could be adapted to help coaches and teachers reflect upon the differing quality of interactions with stigmatized versus nonstigmatized groups (e.g., high versus low achievers, African American versus White students; Weinstein, 2008).

The results raise some questions as to the uniqueness of our sample given several findings that differ from previous research. First, we found that African American teachers issued a similar number of exclusionary discipline referrals compared to teachers from other racial and ethnic groups. Several studies have shown that, relative to their colleagues, African American teachers tend to view their African American students in a positive light (Downey, & Pribesh, 2004; Pigott, & Cowen, 2000; Zimmerman et al., 1995). Whether racial match between teachers and students results in lower (or higher) usage of exclusionary discipline remains an area for future research. Second, student achievement level and low income status were not predictors of whether students received exclusionary discipline. This contradicts prior research which shows that low achieving students and low income students tend to receive more exclusionary disciplinary (McCarthy & Hoge, 1987; Wallace et al., 2008). Third, unexpectedly, teacher scheduling was linked to whether a student received exclusionary discipline. Students in year-long classrooms were more likely to receive exclusionary discipline than were students in half-year courses. Replicating this finding in the future would have implications about how scheduling might impact the quality of teacher-student interactions. Fourth, given the small number of participating students from each group, we were unable to examine the specific impact of the program on Hispanic and Asian students or on young men and women in differing racial and ethnic groups. In some schools districts in the US, Hispanics are over-represented in school discipline (e.g., Civil Rights Data Collection, 2012). Prior research has also shown vast gender differences in suspension (e.g., Asian females versus African American females, Civil Rights Data Collection, 2012; Wallace et al., 2008). Taken together, the current sample results in some limitations to our conclusions, which could be addressed in future research drawing on a larger pool of diverse students in different regions of the US.

## Summary

Policy makers, advocates, and school administrators are increasingly seeking recommendations for educational reform that are backed by strong empirical support. For many, a randomized controlled trial is a "gold standard" of rigorous evidence. The current study contributes to the growing, yet still sparse published results of trials that focus on intensive coaching of middle and high school teachers. The MTP-S program uses a sustained, focused, and rigorous approach to open up the "black box" of the classroom and systematically reflect upon and strengthen how teachers interact with their students in terms of their provision of emotional, organizational, and instructional supports. The current research showed that MTP-S intervention teachers tended to use less exclusionary discipline with their students compared to teachers not in the program. The benefit of MTP-S was driven by teachers' reduced use of exclusionary discipline for African American students—findings that need to be corroborated in future research. The program may have changed how African American adolescents and adults

interacted in classrooms—ultimately reducing the likelihood African American students were negatively perceived as disruptive or defiant and disproportionately issued exclusionary discipline.

Policy makers and administrators may be required to implement mandated teacher supports if schools exceed state averages in suspensions (Losen, 2011). They need guidance for the types of supports that are worthy of investment. MTP-S provides one kind of support drawing on a promising model of professional development: It requires that teachers systematically reflect upon videorecorded instruction with the aim of improving the quality of relationships in the classroom. The teachers have sustained coaching throughout the school year. The program uses a research validated tool to guide what is targeted for change (CLASS-S). This suggests policymakers and administrators might carefully scrutinize teacher support programs ensuring they include a sustained, focused, and rigorous approach. Moreover, they need to identify programs that have high yields for the investment. This means programs should affect change for a range of student outcomes. MTP-S does just that. The empirically-supported impacts include improving how peers relate to one another, student engagement in academic tasks, and performance on standardized achievement tests. Now, we can add another positive outcome to the list: teachers' reduced use of exclusionary discipline.

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Table 1

Theoretical Model of the Classroom Assessment Scoring System-Secondary
(CLASS-S)

| Domain | Dimensions | Description |
|---|---|---|
| Emotional Support | Positive Climate | The emotional tone of the classroom (e.g., warmth and connection among teachers and students). |
| | Teacher Sensitivity | The teacher's responsiveness to academic and social/emotional needs of students. |
| | Regard for Adolescent Perspectives | The extent to which the teacher offers leadership, autonomy, and content relevance to students. |
| Classroom Organization | Behavior Management | Teacher's use of effective methods to encourage desirable behavior and redirect misbehavior. |
| | Productivity | The teacher's management of time to maximize instruction. |
| | Negative Climate | The level of expressed negativity (e.g., irritability, frustration, anger). |
| Instructional Support | Instructional Learning Formats | The teacher's provision of interesting, varied lessons and materials. |
| | Content Understanding | The depth of lesson content and integration of facts, skills, concepts, and principles. |
| | Analysis and Inquiry | The degree to which the teacher facilitates higher level thinking skills, problem solving, and metacognition. |

| Quality of Feedback | The provision of feedback that expands or extends learning and understanding. |
| --- | --- |

Table 2

*Teacher and Classroom Characteristics by Intervention vs. Control Group*

| | Intervention | | Control[a] | |
|---|---|---|---|---|
| | N | | N | |
| Teacher Gender | Male: | 22 | Male: | 29 |
| | Female: | 17 | Female: | 14 |
| Teachers Education | BA: | 9 | BA: | 10 |
| | Beyond BA: | 30 | Beyond BA: | 33 |
| Teacher Race/Ethnicity | Asian: | 1 | Asian: | 1 |
| | Afr-American: | 11 | Afr-American: | 12 |
| | White: | 24 | White: | 27 |
| | | | Hispanic | 1 |
| | Multi-racial/Other: 3 | | Multi-racial/Other: 2 | |
| | *M (SD)* | | *M (SD)* | |
| Teacher age | 41.67 (11.60) | | 42.25 (10.14) | |
| Number of Years Teaching | 9.21 (7.15) | | 9.82 (6.43) | |
| Classroom Grade Level | 10th (2.35) | | 10th (2.52) | |
| % Female Gender | 52.8% (12.7%) | | 51.3% (11.8%) | |
| % African American | 60.1 (15.3%) | | 56.1 (17.2%) | |
| % Low Income[b] | 37.97% (14.99%) | | 36.68% (9.56%) | |

Note.    a. There were no statistically significant differences between the control and intervention groups.

b. % Low Income = Percentage of students qualifying for free and reduced priced meals.

Table 3
*Relation of the My Teaching Partner Intervention to African American Students Discipline Rates*

|  | $\beta^b$ | CI | OR[c] |
|---|---|---|---|
| **Main Effects:[a]** | | | |
| Teacher Race (0-AA [d], 1-Not AA) | -.09 | [-.25, .03] | 0.97 |
| Years Teaching | .02 | [-.12, .13] | 1.0 |
| Subject (Math/Science-0, English/Humanities-1) | .09 | [-.09, .24] | 1.04 |
| Teacher scheduling (0-Block, 1-Traditional) | .16* | [.02, .29] | 1.56 |
| Percentage of AA Students in Classroom | .11 | [-.03, .26] | 1.06 |
| Student Gender  (0-Female, 1-Male) | .18* | [.04, .33] | 1.59 |
| Student Prior Achievement | -.11 | [-.26, .04] | 0.96 |
| Student Free/Reduced (0-Not Qualify, 1-Qualify) | .08 | [-.07, .32] | 1.02 |
|  | .32** | [.10, .32] | 2.07** |
| Student Race (0-Not AA, 1-AA) | -.28** | [-.47, -.24] | 0.51** |
| MTP Intervention Group (0-Control, 1-Intervention) | | | |
| **Interactions:** | | | |
| Student Race X MTP Intervention Group[e] | -.16* | [-.30, -.02] | |

*Note.* a. Student outcome = exclusionary discipline by teacher (0 = no referral; 1 = 1 or more exclusionary discipline referrals)

b. The estimates are for predictors when they were entered as a block.

c. OR = Odds ratio

d. AA = African American

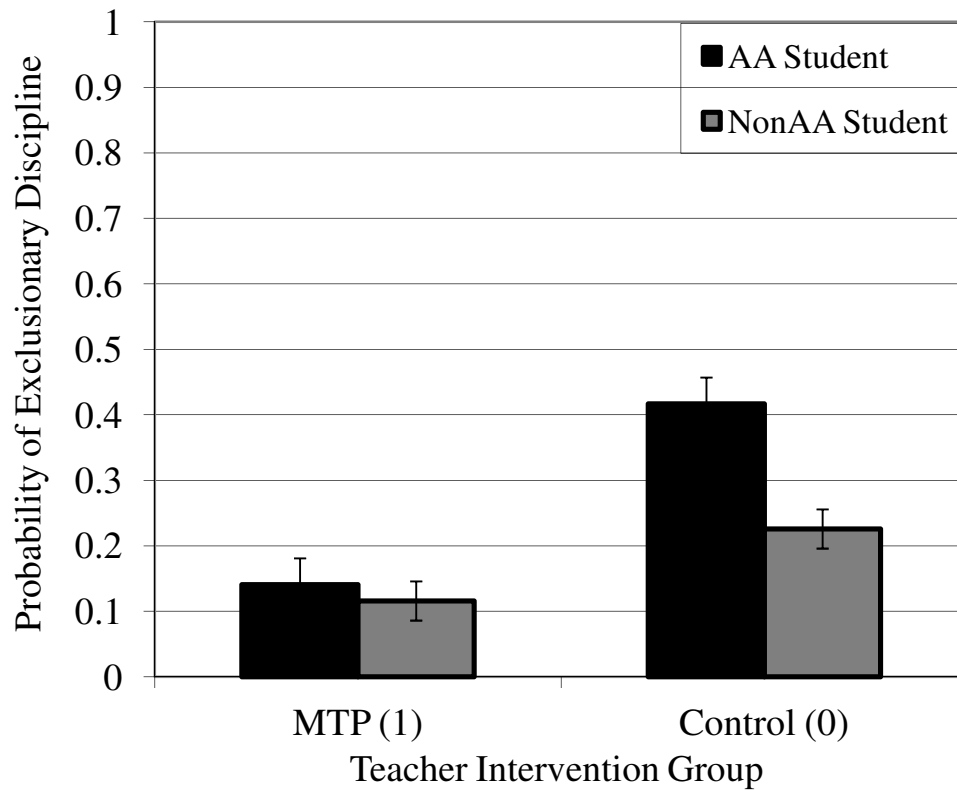e. The estimate is a cross-level interaction term in HGLM

*Figure 1.* Intervention Group and Likelihood of Exclusionary Discipline as a Function of Student Race (AA = African American)

Appendix 1 Methodological Approach

Student participants were nested within teachers' classrooms. The "nested" student exclusionary discipline data required the use of multi-level statistical analytic techniques. We created a dichotomous outcome for each student (exclusionary discipline from the participating teacher = 0 and one or more exclusionary discipline referrals = 1). Thus, we used Hierarchical General Linear Modeling (HGLM) which accounts for nested data with dichotomous outcomes (O'Connell, Goldstein, Rogers, & Peng, 2008). We built the HGLM models in the following sequence:

1). In the first HGLM model, we included student covariates at Level 1 and teacher covariates at Level 2. This model showed the relationships between our dependent variable (exclusionary discipline) and the following classroom, teacher, and student characteristics: the percentage of African American students in the classroom, and course subject area, teacher race/gender, years of teaching experience, teacher scheduling, student race/gender, low income status and prior student achievement.

2). In the next model, we included whether the student was African American (1) or not (0). This model answered whether being African American increased the likelihood of receiving exclusionary discipline.

3). The next model included teacher status in the intervention or control condition of MTP-S, and addressed whether intervention teachers had lower exclusionary discipline overall (universal benefits of MTP-S). Given the covariates in the model, results showed the effects of the program holding constant the classroom, teacher, and student characteristics.

4). Finally, we tested whether the intervention or control condition of the teacher moderated the link between student race and exclusionary discipline. In other words, we examined whether the probability of an African American versus a non-African American student being given exclusionary discipline was less in the intervention teachers' classrooms compared to the control teachers' classrooms. In the HGLM models, we examined a cross-level interaction—specifically, whether teachers' program condition (intervention or control, Level 2) was a significant predictor of the slope of the association between student race (Level 1) and the likelihood of exclusionary discipline (the dependent variable).

5). To help understand the pattern of exclusionary discipline across race and program conditions, we plotted the odds ratios calculated using the exponentiated logistic regression coefficients from the HGLM analysis. These odds ratios were calculated contrasting the likelihood of African American versus other students receiving exclusionary discipline separately for the intervention and control classrooms.