

Exploring Culture, Race, and Ethnicity in Early Childhood Mental Health Consultation: The Role of the Consultative Alliance

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Abstract

Young boys of color are at disproportionate risk for suspension and expulsion from child care indicating that race and culture may influence disciplinary decisions. It is therefore necessary to investigate efforts to mitigate expulsion risk as well as the potential role of race and culture in these efforts. Early Childhood Mental Health Consultation (ECMHC) has been shown to be associated with reduced rates of expulsion. Prior research indicates that the positive effects of ECMHC are influenced by a strong positive relationship between a consultant and an educator—a construct referred to by Davis (2018) as the Consultative Alliance (CA). The current study sought to expand upon these findings to assess whether variables related to race and culture affected the CA, ECMHC outcomes, and/or the link between the two. Participants were young children ($n=316$, average age=42 months), early educators ($n=289$) and MHCs ($n=62$) from child care centers in a southwestern state. Results of moderation analyses conducted within multilevel models indicated that, for some outcomes, the predictive power of CA was stronger when the focus child for mental health consultation was a boy of color, the consultant had self-reported expertise in cultural diversity, and the educator and consultant were racially/ethnically matched. Taken together, these results suggest that adding a cultural lens to our exploration of the effectiveness of ECMHC may enhance our understanding of how racial disparities in child care programs might be mitigated.

Early childhood education (ECE) is grounded in the ideal that all young children deserve access to equal, high-quality early learning opportunities to prepare them to succeed in school (Magnuson & Shager, 2010). While there has been marked progress in this effort in recent decades, there are still disparities based on race and gender with regard to children's experiences in early care and education settings as well as access to quality child care. For instance, African American children are least likely to be enrolled in ECE programs that are considered high quality (Barnett, Carolan, & Johns, 2013) and are rated lower on their school readiness at age four (Barbarin, 2007; Reardon & Portilla, 2016).

One of the most glaring examples of disparities in early care and education settings is in exclusionary discipline (suspensions and expulsions). Research to date has demonstrated that children of color experience harsher discipline for the same behaviors as their White peers (Kirwan Institute, 2015; Raible & Irizarry, 2010). Specifically, African American and Latino boys in preschool have disproportionately higher rates of expulsion than their same age White and Asian peers (Gilliam, 2005; Department of Education, Office of Civil Rights, 2016). Of note, consistent with recent publications, the terms "children of color" and "boys of color" will be used in this article to describe ethnic minority youth in a way that is inclusive of a wide range of cultural and ethnic backgrounds (Barbarin, Murry, Tolan, & Graham, 2016; My Brother's Keeper Task Force, 2016).

When children experience harsh disciplinary practices, they are at risk for further and, perhaps, compounding negative developmental outcomes. Expulsion may exacerbate early academic and social-emotional disparities and predict disengagement from school, diminished educational opportunity, and eventual dropout—all of which may increase the risk for unemployment and lack of economic self-sufficiency (Academy of American Pediatrics, 2013; American Psychological Association Zero Tolerance Task Force, 2008; U.S.

Department of Health and Human Services and the U.S. Department of Education, 2014).

Researchers have identified some the following drivers of child care suspension and expulsion: low program quality, inadequate knowledge of child development, racial discipline disparities, and early childhood trauma (Meek & Gilliam, 2016; McCann, Shivers, & Means, 2018). Some scholars and policy makers hypothesize that implicit and explicit bias are some of the mechanisms leading to these discipline disparities (Adamu & Hogan, 2015; Okonofua & Eberhardt, 2015; U.S. Department of Health and Human Services and U.S. Department of Education, 2014). Other factors that may contribute to preschool discipline disparities include: cultural mismatches between educators and children, low expectations based on deeply rooted racial socialization history in the United States, and misguided preparation for a world filled with bias (Adamu & Hogan, 2015; Gilliam, Maupin, Reyes, Accavitti, & Shic, 2016; Tenenbaum & Ruck, 2007; U.S. Department of Health and Human Services and U.S. Department of Education, 2014).

Early Childhood Mental Health Consultation (ECMHC) is an approach shown to predict reductions in rates of expulsions from child care (Gilliam, 2005; Hepburn et al., 2013). In the first national study of preschool expulsion, researchers found that expulsions were significantly lower when there was an early childhood mental health consultant present (Gilliam, 2005). In ECMHC, mental health consultants (MHCs) work within childcare centers (as well as licensed family child care settings) to build staff capacity to address challenging behaviors and promote a healthy social-emotional climate (Cohen & Kaufmann, 2000; 2005; Substance Abuse Mental Health Services Administration, 2014). While each case is tailored to the needs of the educator and center, MHCs typically consult individually with educators to align goals, discuss strategies, provide empathy and validation, and create space for self-reflection (Hunter, Davis, Perry,

& Jones, 2016; Johnston & Brinamen, 2012). In addition to reduced expulsion, other positive impacts of ECMHC include improved educator-child relationships, lower externalizing behavior, and reduced educator stress (Gilliam, Maupin, & Reyes, 2016; Hepburn, Perry, Shivers, & Gilliam, 2013).

Given the existing research quantifying the overall positive impacts of ECMHC, it is important to move beyond the main effects and expose moderators that may attenuate or enhance these outcomes. The Harvard Center for the Developing Child, Frontiers of Innovation initiative, emphasizes the importance of a strong theory of change, well-articulated targets and outcomes, and explicit tests of variables that may moderate the main effects of an intervention on outcomes. (Harvard University Center on the Developing Child, 2018). In terms of a theory of change, there is theoretical and empirical support for the idea that the MHC-educator relationship may be an important mechanism of change in ECMHC. This relationship, termed the "Consultative Alliance (CA)" by Davis (2018), reflects the extent to which the educator and MHC perceive that they are partners in the work of consultation, and includes the warmth and positive emotional tone of their interactions. Stronger CA is thought to be facilitated by consistency in availability, mutually agreed upon goals and plans, perspective-taking, clear communication, respect for the unique culture of each child care center, and willingness to explore potentially difficult topics (Green, Everhart, Gordon, & Gettman, 2006; Johnston & Brinamen, 2006; Sheridan, Rispoli, & Holmes, 2014).

In preliminary studies, CA has been shown to have a main effect on teacher perceptions of consultation's impact, educator-child closeness, child-attachment behaviors, classroom climate, educator self-efficacy, and educator job resources (Davis, 2018; Green et al., 2006). Moving beyond main effects, it is not yet known for whom this mechanism of change is most impactful. Importantly, there is some indication that ECMHC may have a larger positive effect for the educators of African American and Latino boys than for educators of their White peers (Shivers, Farago, Guimond, &

Steier, manuscript in preparation). It is therefore possible that the stronger impact for boys of color relates to the role of the CA in the consultation process. Given the critical role of race and culture in child care settings, disciplinary decisions, and ECMHC, this study sought to explore potential interconnections among CA, race/culture, and various ECMHC outcomes to refine our understanding of how and for whom mental health consultation works and whether it is working for young boys of color. Specifically, this study investigated the following questions: 1) Do race and culture variables, including child race/ethnicity, MHC's self-reported expertise in cultural diversity, and MHC-educator racial/ethnic match, predict the strength of the CA? 2) Do outcomes of ECMHC depend upon these same race/cultural variables? and 3) Does the strength of the link between CA and positive ECMHC outcomes depend upon these same variables? The race/cultural variables were chosen because of their relevance for early childhood educational policy and practice, and as targets for future refinements of a culturally responsive ECMHC approach.

Methods

Participants

Participants were children ($n=316$), educators ($n=289$), and MHCs ($n=62$) who engaged in Early Childhood Mental Health Consultation (ECMHC) in a southwestern state between 2010 and 2014. The data were nested, such that MHCs worked with multiple educators ($M=8.11$ educators, $SD=6.89$, range=1-36), and educators reported on one (90.7%) or two (9.3%) focus children. The average child age was 42 months ($SD=12$ months, range=5-73 months). Approximately half of the children were White (54.5%) and approximately three-quarters (73.6%) were boys. The other races/ethnicities in the sample included Latino (22.8%) and African American (12.5%). Less than one in ten (7.3%) had a diagnosed disability.

Educators' racial/ethnic backgrounds roughly paralleled the children's. Almost all educators were female (98.3%), and their ages and levels of education were variable. MHCs were also mostly

female (93.5%), and they were more likely to be White (74.2%) and to have a Master's degree (95.2%). Educators and MHCs worked in licensed child care centers, approximately half of which served low-income communities or a combination of low- and middle-income communities (59.6%). Additional information about educator and MHC demographics can be found in Table 1.

Procedures

These data were gathered as part of the longitudinal program evaluation for a statewide system of ECMHC, which was provided free of charge upon request from centers. Consultation was programmatic, classroom-focused, child-focused, or some combination of the three. MHCs' work was tailored to each center, but typically included classroom observations, individual meetings with educators, staff trainings, meetings with families, and consultations with center directors. Some centers were also served concurrently by other quality improvement staff.

Respondents provided data at baseline and 6 months. While additional data were collected at 12 and 18 months, these data were excluded from analyses given high levels of missing data. Missing data mostly reflected the challenge of maintaining the same educator-child dyad in the program because children move classrooms often. The full report of the program's impact and effectiveness was completed by Shivers (2015).

Measures

Consultative Alliance. To measure CA, a single item from the 6-month MHC satisfaction survey was used. The item asked MHCs to rate the "Quality of their relationship with this educator" from 1 (low) to 10 (high). The item was log-transformed to correct for skew. This is a common statistical procedure for non-normal distributions (McDonald, 2014). Educator perspectives on the relationship could not be included in analyses because they were so negatively skewed

(i.e., scores were consistently high such that there was a ceiling effect) that they could not be corrected by data transformations.

Classroom Climate. The Preschool Mental Health Climate Scale (PMHCS; Gilliam, 2008) was designed to assess the aspects of the classroom climate targeted in ECMHC. It is an observational measure that was completed by MHCs. Items are rated on a 5-point Likert scale from “Never/Not True” to “Consistently/Completely True.” Observations are summarized into subscales for Positive Indicators (50 items) and Negative Indicators (9 items). Positive Indicators include positive educator-child interaction, cooperation among staff, and support for classroom transitions. Negative Indicators include harsh discipline and over-stimulating physical environments. Pilot data indicated that there was solid internal consistency (Cronbach’s $\alpha = 0.75-0.98$) and inter-rater reliability (Cohen’s Kappa = 0.71-0.75) for each subscale.

Student-Educator Relationship. The Student-Teacher Relationship Scale-Short Form (STRS-SF; Pianta, 2001) is a 15-item educator-report scale. Educators report the extent to which each statement applies to their relationship with a specific child on a 5-point Likert scale. This scale has two subscales: Closeness and Conflict, each with acceptable psychometric properties (Cronbach’s alphas $\alpha = .86, .92$; test-retest reliability $r = .88, .92$; Pianta, 2001).

Educator Self-Efficacy. The Teacher Opinion Survey, Revised (TOS) was used to measure educators’ self-efficacy and hopelessness (Geller & Lynch, 1999). Educators rated the extent to which they agreed with statements about themselves on a 5-point Likert scale. The Self-Efficacy subscale captured educator perceptions that they were capable of making a difference for children, while the Hopeless/Overwhelmed subscale captured the extent to which educators felt that child outcomes were “out of their hands.”

Child Resilience Factors. The Devereux Early Childhood Assessment (DECA; LeBuffe & Naglierie, 1999; 2003; Mackrain & LeBuffe, 2007) is an educator-report measure of child protective

factors. Educators rate on a 5-point Likert scale the frequency of a series of child behaviors over the span of the past 4 weeks. The three subscales are Attachment, Initiative, and Self-Control. Initiative measures a child's ability to act in a manner that gets his/her needs met. Attachment measures a child's adaptive abilities to form healthy bonds with adults, and Self-Control measures a child's ability to regulate his/her behavior. To be developmentally sensitive, there are separate forms for infants, toddlers, and preschoolers. Psychometric analyses indicated that the DECA subscales have solid internal consistency and reliability (Brinkman, Wigent, Tomac, Pham, & Carlson, 2007).

Background Information. Demographic questionnaires were completed for MHCs, educators, and children to gather information including age, race/ethnicity, and gender. In addition, MHCs completed the Consultant Background Questionnaire, which asked about their professional backgrounds, perceived areas of content expertise, and perceptions of their role. These two background measures were used to gather information for the three moderators used in the current analysis: child race/ethnicity, MHC expertise in cultural diversity, and MHC-educator ethnic match. The dichotomous variable for "boy of color" indicated whether a child was both male and belonging to an ethnic minority group (i.e., any race/ethnicity other than White). MHC expertise in cultural diversity was a self-reported, dichotomous item. MHC-educator ethnic match indicated whether educators and MHCs both selected the same race/ethnicity category for themselves (e.g., both White, both Latino).

Data Analysis

SPSS version 22 was used to conduct all analyses. The research questions were addressed using t-tests, random intercepts multilevel models (MLM), and moderation analyses within MLM. MLM was used because the data were nested and therefore violated the assumption of independence for linear models. The MLMs constructed in this study were random intercepts models. Continuous predictor and

control variables were grand mean centered for ease of interpretation.

This modeling took place in a series of steps. First, to evaluate the link between the three race/culture variables and CA, three separate MLMs were created with CA as the dependent variable. Then, t-tests were used to explore change from baseline to 6 months in all outcome measures. Next, intraclass correlations (ICCs) were calculated for each dependent variable to determine if, in fact, outcomes variables were clustered by educator and/or MHC. Subsequently, the differences between baseline and 6-month values for each outcome measure were calculated to create change scores. Again, the three race/culture variables were entered as the independent variables, and the scores at 6 months were entered as dependent variables.

Finally, potential moderation was explored, again within MLMs. CA was added as the predictor variable, and the baseline value of the dependent variable was added as a control variable. Building upon this framework, separate models were then created to test each combination of dependent variable and moderator by building models that included an interaction term. If the interaction term was significant, simple slopes analyses were used to determine the direction of the effect. Because the moderators were binary, a simple slopes analysis was conducted by running the model separately at both values of the moderator (zero and one).

Results

To address research question 1, multilevel models were created to assess whether the three race/culture variables predicted the strength of CA. Three separate models, one for each of the binary predictors, were created with CA as the dependent variable and MHC as the grouping variable. Results indicated that none of the three variables significantly predicted the strength of CA (p -values $>.05$). Of note, the educator-MHC racial/ethnic match variable was marginally significant ($b = .04$, $p=.073$), such that matched dyads had somewhat higher CA ratings.

To address research question 2, analyses were conducted to investigate whether the three binary race/culture variables predicted each outcome measure after 6 months of consultation. Initial explorations of the data with dependent t-tests indicated that all scores significantly changed from baseline to 6 months (see Table 2). Next, each combination of binary race/culture and outcome variables was analyzed in a series of multilevel random intercepts models. Each model included one of the binary race/culture variables as an independent variable, 6-month scores on an ECMHC outcome as the dependent variable, and baseline scores on the same outcome as a control variable. Because intraclass correlations (ICCs) demonstrated that child-level variables were meaningfully clustered at the educator level (ICCs ranged from 0.15-0.32, all statistically significant), two-level MLMs were created to account for non-independence of children nested within educators. Results for all models were non-significant. Specifically, the effects of the three variables did not predict 6-month scores for: educator-child closeness, educator-child conflict, classroom climate, educator self-efficacy, educator hopelessness, child attachment behaviors, child self-control, or child initiative.

To address research question 3, the three race/culture variables were analyzed as potential moderators of the impact of CA on outcomes. Separate MLMs were constructed for each combination of moderator and dependent variable, resulting in twelve total models. All models had two levels; some had child data on Level 1 and educator data on Level 2, while others had educator data on Level 1 and MHC data on Level 2. Each model controlled for baseline values of the dependent variable. Results are presented in Table 3 for educator/classroom outcomes after 6 months of the ECMHC intervention and in Table 4 for child-level outcomes after 6 months of the ECMHC intervention. Significant moderation effects are described below.

One moderator variable, which we referred to as “boy of color,” was significant for two outcomes: educator-child closeness and

educator self-efficacy. The direct link between CA and improvement in educator-child closeness was moderated by whether the focus child was a boy of color. Specifically, when the focus child was a boy of color, a stronger CA between MHC and educator predicted significantly greater gains in educator-child closeness, while this link was non-significant for focus children who were not boys of color. Working with a focus child who was a boy of color also significantly moderated the direct link between CA and educator self-efficacy, such that there was a significant positive link between CA and growth in educator self-efficacy if the focus child was a boy of color.

Self-reported MHC cultural expertise moderated the association between CA and improvement in three outcomes: child attachment behaviors, negative indicators of classroom emotional climate (e.g., harsh discipline, over-stimulating physical environment), and educator self-efficacy. Among MHCs who rated themselves as experts in cultural diversity, there was a significant positive link between CA and improvement in the focus child's attachment behaviors. Additionally, MHC expertise in cultural diversity significantly moderated the relationship between CA and decline in negative indicators of classroom emotional climate, such that there was a stronger negative association between CA and negative climate when MHCs were experts in cultural diversity. Specifically, when MHCs were experts in cultural diversity, they appear more effective in using the alliance to produce larger reductions in negative classroom climate. Finally, MHC's cultural expertise was a marginally significant ($p=.056$) moderator of the link between CA and growth in educator self-efficacy. For MHCs who described themselves as having content expertise in cultural diversity issues, there was a significant positive direct link between CA and educator increases in self-efficacy. It is important to note that there were no statistically significant correlations between racial/ethnic background of MHC and whether they had self-reported expertise in topics related to culture and race.

MHC-educator match was a significant moderator for only one model. When MHCs and educators were racially/ethnically

matched, there was also a significant positive link between CA and improvement in the focus child's attachment behaviors.

Discussion

The imperative and impetus to fund and establish Early Childhood Mental Health Consultation (ECMHC) interventions across the country was based on racialized expulsion rate data (Gilliam, 2005; U.S. Department of Health and Human Services and U.S. Department of Education, 2014). However, until as recently as (2015), much of the work in ECMHC had not dealt explicitly with targeting disparities that exist in the emotional well-being, expulsion rates and disciplinary practices for young children of color—especially African-American and Latino children. As a field, we have yet to fully understand whether and how ECMHC closes the gap in discipline disparities for young children who are at risk of marginalization. This study attempted to explore these trends by investigating the interconnections between the CA, race and culture, and ECMHC outcomes.

The results of this study enhance our understanding of how ECMHC works and for whom. Prior theoretical and empirical work highlighted the role of the CA in eliciting positive changes for educators and children (Davis, 2018; Duran et al., 2009; Green et al., 2006). ECMHC may yield a greater impact when educators and MHCs have a warm, collaborative alliance where both parties contribute expertise. In related research, when main effects were calculated for all participants, CA predicted improvements in child attachment behaviors, educator-child closeness, classroom climate, and educator self-efficacy (Davis, 2018). The current study expands upon that idea by incorporating moderator variables related to race and culture.

The current study found that the main effects of the CA on child-and educator-level outcomes varied depending on some racial and cultural considerations. The CA was related to changes in specific outcomes for some subgroups of the full sample, while for others this alliance was not a meaningful predictor of change.

The subgroups were defined by the racial and cultural context of ECMHC: 1) whether the focus child was a boy of color, 2) whether the MHC considered herself to have expertise in cultural diversity, and 3) whether the MHC and educator were racially/ethnically matched. Of note, these three variables were also explored as direct predictors of CA and of outcomes. But these associations were not supported by our analyses; rather, these cultural variables meaningfully impacted the extent to which CA predicted outcomes.

Whether the focus child was a boy of color significantly moderated the link between the CA and improvements in educator-child closeness, and between the CA and improvements in educator self-efficacy. In other words, the CA significantly predicted those outcomes only when the focus of ECMHC was a boy of color. The alliance between the educator and MHC had a significant impact on the bond between the educator and child, and the educator's confidence in her abilities, again only when the focus child was a boy of color. These findings are striking in the light of the literature regarding educator relationships with boys of color that may be impacted by implicit biases: cultural mismatches between educators and children, low expectations based on deeply rooted racial socialization history in this country, and misguided preparation for a world filled with bias (Adamu & Hogan, 2015; Clark & Zygmunt, 2014; U.S. Department of Health and Human Services and U.S. Department of Education, 2014). Other research reported that early educators working with a MHC feel more supported and efficacious in the classroom (Brennan, Bradley, Allen, & Perry, 2008; Shivers, 2015), which may in turn increase educators' confidence that they can retain a child in that setting whom they may otherwise have recommended for suspension or expulsion. In addition, in consultation with MHCs, early educators may gain insight into that child's cultural background and/or contextual influences (Gilliam, Maupin, Reyes, Accavitti, & Shic, 2016), perhaps expanding educator understanding and empathy and facilitating the increases in closeness.

The impact of the CA also depended on whether the MHC was an expert in cultural diversity. When MHCs considered themselves experts, a strong CA predicted greater improvement in child attachment behaviors as well as a steeper reductions in negative classroom practices. In other words, CA was a driver of changes in attachment behaviors and negative classroom climate for the subgroup of dyads in which the MHC was also highly skilled in culturally responsive practices. Finally, when educators and MHCs were racially/ethnically matched, CA significantly predicted improved child attachment behaviors. To our knowledge, no research currently exists that has directly measured the influence of a MHC's previous expertise in race- and culture-related topics or even how their racial and ethnic background might influence the development of relationships with early educators.

Researchers are in the nascent stage of exploring and testing hypotheses for why ECMHC is particularly effective at reducing disparities in suspensions, expulsions and other discipline practices (Gilliam, Maupin, Reyes, Accavitti, & Shic, 2016; Shivers et al., manuscript in preparation). Experts in ECMHC have theorized that central to the ECMHC theory of change (see Duran et al., 2009; Hunter et al., 2016) is the focus on changes in adults' knowledge, attitudes, and behaviors, in contrast with a focus on pathology within an individual child or family. This stance then leads to improved communication among child care staff and parents. It also facilitates educator and administrator exploration regarding the meaning of individual children's behaviors as well as the developmental appropriateness of their expectations. National leaders in ECMHC have hypothesized that this combination of approaches works to minimize micro-aggressions and bias toward all children and especially children of color.

Limitations

As with all research endeavors, the current study has strengths and weaknesses. In terms of measurement, some variables were assessed using tools of unknown psychometric properties. The

decisions to use these measures reflected clinical utility as well as the evolution of the research questions after data collection was complete. Specifically, a single-item indicator was used for measuring the complex constructs of CA and MHC cultural expertise. The Preschool Mental Health Climate Scale, while used widely in the ECMHC evaluation literature, has not had extensive psychometric testing done. Hence, these results should be interpreted as exploratory and should be replicated using other validated measures.

Next, all of the multilevel models had significant levels of unexplained variance in the dependent variables, above and beyond the variance accounted for by the parameters. Because educator and child functioning have many influences, only some of which were measured here, it is unsurprising that these models did not account for all of the variance in these constructs. For instance, a child's attachment behaviors cannot be fully understood without including multiple parameters, including their attachment to their parents and other caregivers. It is also important to note that, by creating a series of separate models to test specific relationships, there was an increased risk for Type 1 error. In addition, there was not sufficient power to run MLMs with random slopes, which would have provided additional information regarding variation among educators or MHCs in the strength of the relationships detected between independent variables, dependent variables, and moderators.

Further, these results most likely reflect, to some extent, the impact of the specific context. For instance, the structure of child care, the demographics, and local policies/regulations may all be unique to this southwestern state. So, these results cannot be expected to generalize across all locations. Finally, these results reflect data gathered from educator-child dyads that were intact after 6 months of consultation—a subset of the initial sample of dyads in the study at baseline. Although there were missing data from dyads that were no longer in the sample, there were no significant differences between the initial sample and the 6-month sample on baseline characteristics.

Future Directions

The findings in this study as well as other emerging ECMHC research agendas indicate that applying a racial equity lens in ECMHC research and evaluations will allow us to gain deeper understanding of the mechanisms, predictors, and pathways to more equitable results in our ECMHC programs. Racial equity-informed research and evaluations are also necessary to ensure accountability at the systems-level. Future research directions include improving measurement of CA to capture its nuances and address different aspects of alliance, including mutual goals, trust, and collaboration. In addition, a racial equity informed research agenda for ECMHC should seek to answer questions such as how to attract and retain a diverse and culturally competent workforce of MHCs, and how to promote MHC relationship-building capabilities. Finally, it is critical to specify empirically whether the observed changes for boys of color translate into reductions in expulsion, as suggested by prior research. Additionally, research and data should be designed to help ensure accountability that the impact of ECMHC systems and programs is equitable for children and families of diverse racial, ethnic, cultural, and linguistic backgrounds and for families of diverse socio-economic statuses. Overall, it is necessary to continue to build upon this study to determine how best to prevent early childhood expulsion to enhance the ideal of early education as a driver of equity.

Tables

Table 1.

Participant Characteristics, n(%) or Mean (standard deviation)

| | | <u>Educator (n=289)</u> | <u>MHC (n=62)</u> |
|------------------|--------------------------|---|-------------------|
| Age (years) | | $M=37.29$ ($SD=12.36$) $M=40.37$ ($SD=10.58$) | |
| Years experience | | $M=11.00$ ($SD=8.38$) $M=6.08$ ($SD=6.89$) | |
| Gender | | | |
| | Female | 284 (98.3%) | 58 (93.5%) |
| | Male | 5 (1.7%) | 4 (6.5%) |
| Race/ethnicity | | | |
| | White | 172 (59.7%) | 46 (74.2%) |
| | Hispanic/Latino | 79 (27.4%) | 9 (14.5%) |
| | African American/Black | 18 (6.3%) | 4 (6.5%) |
| | Asian | 6 (2.1%) | 2 (3.2%) |
| | Native American | 6 (2.1%) | 0 |
| | Other | 7 (2.4%) | 1 (1.6%) |
| Education | | | |
| | Some high school | 2 (0.7%) | 0 |
| | High School graduate/GED | 156 (54.2%) | 0 |
| | CDA | 27 (9.4%) | 0 |
| | AA | 37 (12.8%) | 0 |
| | BA/BS | 52 (18.1%) | 0 |
| | MA/MS | 11 (3.8%) | 59 (95.2%) |
| | Doctoral degree | 0 | 3 (4.8%) |
| | Other | 3 (1.0%) | 0 |

Table 2.

Dependent T-Test of Primary Outcome Measures from Baseline to Six Months

| <u>Measure</u> | <u>Means</u> | | <u>T-value</u> |
|-------------------------------|-----------------|-------------------|----------------|
| | <i>Baseline</i> | <i>Six months</i> | |
| PMHCS positive indicators | 3.36 | 3.76 | -12.71** |
| PMHCS negative indicators | 1.76 | 1.58 | 7.43** |
| Educator self-efficacy | 4.07 | 4.19 | -5.21** |
| Educator hopeless/overwhelmed | 2.06 | 1.82 | 8.84** |
| Child attachment | 2.63 | 2.94 | -9.09** |
| Child self-control | 1.78 | 2.23 | -10.54** |
| Child initiative | 2.11 | 2.47 | -9.07** |
| Educator-child closeness | 3.84 | 4.25 | -11.68** |
| Educator-child conflict | 2.95 | 2.61 | 7.17** |

Table 3.
Multilevel Moderation Models for Educator/Classroom Outcomes

| | <u>Educator</u> <u>Self-efficacy</u> | <u>Hopeless/</u> <u>over-</u> <u>whelmed</u> | <u>Negative</u> <u>classroom</u> <u>climate</u> | <u>Positive</u> <u>classroom</u> <u>climate</u> |
|-------------------------------|---|--|---|---|
| Intercept | 4.19** | 1.80** | 1.63** | 3.67** |
| IV: | .17 | -.16 | -.53** | .99** |
| Control: | | | | |
| Consultative Alliance | | | | |
| Baseline DV | .37** | .58** | .36** | .54** |
| Moderator: | | | | |
| Boy of color | -.05 | .02 | .02 | -.06 |
| Interaction: | | | | |
| CA*BOC | .37* | -.07 | -.08 | .253 |
| Intercept | 4.17** | 1.82** | 1.64** | 3.63** |
| IV: | .06 | -.25 | -.29* | .85** |
| Control: | | | | |
| Consultative Alliance | | | | |
| Baseline DV | .37** | .60** | .36** | .53** |
| Moderator: | | | | |
| MHC cultural expertise | -.00 | -.02 | -.00 | .00 |
| Interaction: | | | | |
| CA* MHC cultural expertise | .35 | .08 | -.40* | .23 |
| Intercept | 4.20** | 1.86** | 1.62** | 3.63** |
| IV: | .25* | -.32 | -.43** | 1.0** |
| Control: | | | | |
| Consultative Alliance | | | | |
| Baseline DV | .37** | .60** | .37** | .54** |
| Moderator: | | | | |
| Ethnic Match | -.06 | -.08 | .03 | .01 |
| Interaction: | | | | |
| CA*EM | .12 | .23 | -.21 | .10 |

Table 4.
Multilevel Moderation Models for Child Outcomes

| References | <u>Educator Self-efficacy</u> | <u>Hopeless/ over- whelmed</u> | <u>Negative classroom climate</u> | <u>Positive classroom climate</u> |
|-------------------------------|-----------------------------------|--|---|---|
| Intercept | 4.26** | 2.99** | 2.53** | 2.26** |
| IV: | .23 | .27 | .01 | .25 |
| Consultative Alliance | | | | |
| Control: | .48** | .53** | .59** | .55** |
| Baseline DV | | | | |
| Moderator: | .03 | -.07 | -.12 | -.09 |
| Boy of color | | | | |
| Interaction: | .52* | .23 | .42 | .20 |
| CA*BOC | | | | |
| Intercept | 4.29** | 2.95** | 2.55** | 2.27** |
| IV: | .30 | -.12 | .05 | .23 |
| Consultative Alliance | | | | |
| Control: | .47** | .53** | .62** | .59** |
| Baseline DV | | | | |
| Moderator: | -.03 | .01 | -.08 | -.07 |
| MHC cultural expertise | | | | |
| Interaction: | .07 | .62* | .27 | .11 |
| CA* MHC cultural expertise | | | | |
| Intercept | 4.27** | 2.90** | 2.47** | 2.21** |
| IV: | .26 | .03 | .23 | .13 |
| Consultative Alliance | | | | |
| Control: | .47** | .55** | .60** | .56** |
| Baseline DV | | | | |
| Moderator: | -.03 | .10 | .03 | .01 |
| Ethnic Match | | | | |
| Interaction: | .20 | .54* | .11 | .31 |
| CA*EM | | | | |

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