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PERCEIVED PROBLEM BEHAVIORS IN PRE-KINDERGARTEN: THE ROLE OF  
TEACHER-CHILD RACIAL MATCH AND TEACHER-CHILD RELATIONSHIP

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PERCEIVED PROBLEM BEHAVIORS IN PRE-KINDERGARTEN: THE ROLE OF  
TEACHER-CHILD RACIAL MATCH AND TEACHER-CHILD RELATIONSHIP

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## DEDICATION

This dissertation is dedicated to my parents but especially to my amazing mother, phenomenal husband and family, countless Black women in academia, and my tenacious, brilliant, and loving ancestors who held on to hope during unbearable times and cleared a path because you saw me coming. I am forever grateful. Thank you for keeping me grounded and close and uplifting me!

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## PROLOGUE

This dissertation adheres to a journal-ready format. Three journal articles prepared for submission to refereed journals comprise the first part of the dissertation. Manuscript I, Critical Race Attachment Theory: A Synthesized Framework is prepared for the journal *American Educational Research Journal*. Manuscript II, Associations Between Teacher-Child Characteristics, Moderators, and Teacher-Rated Behavioral Reports in Cross-racial Pre-K Classrooms is prepared for the journal *Early Childhood Research Quarterly Journal*. Manuscript III, Critical Reflective Practices: A Therapist's Insights into the Early Childhood Classroom with Black Children is prepared for the journal *Urban Education*.

## Dissertation Abstract

In 2020, during the height of the COVID-19 pandemic, the national enrollment rate for pre-k children ages 3 to 4 was 40% (a drop from 54% in 2019; National Center for Education Statistics, 2022). This is partly due to fewer children in the 0 – 5 age group (23.4 million of 72.8 million children in the United States in 2020; U.S. Census Bureau, 2020). With the increase of enrollment of multiracial pre-k children (National Center for Education Statistics, 2022) and the general projected population increase of children of color (U.S. Census Bureau, 2020), diversity in pre-k classrooms are expected to dominate. By contrast 79% of United States’ school teachers are White and that percentage increases to 90% at predominantly White schools (National Center for Education Statistics, 2022). Many of these teachers have little preservice training related to issues of diversity, equity, and inclusion (Brown et al., 2016; Miller & Mikulec, 2014) which can leave them unprepared once in the field. To counter this deficit, teachers can intentionally deploy critical self-reflection to examine if they are engaging in equitable teaching practices.

Unaddressed deficits can lead to misunderstandings, microaggressions, and implicit biases that can manifest in discriminatory behaviors, especially when there are extreme power imbalances between a teacher and a 3- or 4-year-old developing child of color. The disproportionality of suspensions of Black pre-k children is 2.5 times greater than other racial groups of pre-k children and 35.8% of pre-k children expelled and 45% of pre-k children suspended were Black boys outranking other pre-k children (Civil Rights Data Collection, 2021). Black girls made up 20% of pre-k girl enrollment but 54% of pre-k girls suspended (Civil Rights Data Collection, 2021). Expulsion and suspension are stressful and negative experiences for children, their families, and their providers, and can set off a negative trajectory. Research indicates that expulsion and suspension early in a child’s trajectory predicts expulsion and suspension later in life. Children

who are expelled or suspended from school are as much as 10 times more likely to drop out of high school, experience academic failure, hold negative school attitudes, and face incarceration than those who are not.

First, this study proposes a new theory, critical race attachment theory (Benabdallah, 2020), to expand teachers' knowledge base by synthesizing critical race theory (Crenshaw et al., 1995) and attachment theory (Bowlby, 1969) in addition to incorporating a self-reflective component. The convergence of these two theories into one comprehensive framework, critical race attachment theory, broadens, strengthens, and deepens the understanding of developmental and cultural intersectionality, supports authentic cultural competency, and encourages the scientific teacher method. Integrating a self-reflective model emphasizing culturally appropriate development as a guiding educational tool to understand the importance of teachers as attachment figures together with evidence-based authentic data collection plays an essential role in developing a teacher's pedagogical approach. Second, skewed, or unexamined racialized and gendered biases affect perceptions of a child's behavioral performance in the classroom, particularly when the child is Black. To explore this widely accepted phenomenon, a secondary data analysis was conducted on a large quantitative data set from the combined National Center for Early Development and Learning (NCEDL) Multi-State Study of Pre-Kindergarten and the State-Wide Early Education Programs (SWEEP) study (Early et al. 2013). The current study had a sample size of  $N = 470$  children. This sample focused exclusively on Black and White teacher-child pairings and problem behavior score measured by the Teacher-Child Rating Scale (TCRS; Hightower et al., 1986). In the current study, findings were mixed. Whereas race was not associated with problem behavior, gender was associated with problem behavior. Boys were rated much higher by their teachers, on average, than girls. Thus, critical race attachment theory

would be useful in increasing teachers' pedagogical cultural-development knowledge and self-reflective practices. Third, this dissertation provided practical strategies for implementing the critical race attachment theory as a real-world model for secure teacher-child attachment regardless of race and gender.

This dissertation is formatted as three manuscripts. The first manuscript emphasizes theory and provides a critical lens to view culturally appropriate teacher-child attachment in early childhood settings using critical race attachment theory. The second manuscript focuses on empirical evidence and utilizes a large dataset to perform secondary analysis utilizing multiple regression to support practical strategies guided by theory. The third manuscript has a practical emphasis and provides the practitioner with useful strategies based on theory and evidence.

*Keywords: Critical Race Attachment Theory, Black pre-k children, critical self-reflection, CRAT Strategies*

# MANUSCRIPT I

## Critical Race Attachment Theory: A Synthesized Framework

This manuscript is prepared for submission to the peer-reviewed journal *American Educational Research Journal* and is the first of three manuscripts prepared for a journal-ready doctoral dissertation.



## **Abstract**

This paper draws on critical race theory (CRT) and attachment theory (AT) to develop a new approach addressing anti-Blackness in early childhood education settings using a synthesized framework called critical race attachment theory (CRAT). CRAT is important because it allows for a multifaceted and comprehensive theoretical view of potential racialized problems in the teacher-child relationship, unlike CRT or AT. Given the increase of children of color in classrooms and the disproportionately high number of White teachers, it is necessary to have a proactive framework to acknowledge, assess, and to deter harm such as the teacher's manifested biases in the classroom. This paper addresses the history and limitations of previous theories, attempted policy mitigations, the significance of the study, and background and basic concepts to critical race attachment theory. CRAT establishes a link and offers an understanding between the social-emotional development of young Black children and teacher self-reflection to eliminate inequitable classroom practices.

*Keywords: critical race attachment theory, teacher self-reflection, Black pre-K children*

## **Critical Race Attachment Theory: A Synthesized Framework**

Teachers play a profound role in the holistic development of children. They influence not only children's academic growth but also their understanding and awareness of self and others, interactions with peers and adults, and explorations in the classroom and the real world, which are essential aspects of social and emotional development (Burchinal et al., 2010; Hamre et al., 2013; Magnuson et al., 2007; Mashburn et al., 2008; Yoshikawa et al., 2013). For preschool teachers, the magnitude and responsibility of these roles are more significant than for teachers of upper grades and can dramatically alter the child's trajectory in the educational system (Rajawat, 2016). Children and their teachers spend several hours every day together, cultivating a classroom community. What early childhood educators say, do, gesture, and imply affects young children and assists in co-constructing their reality and perceptions, which can have a lasting impact on the child (Gregory et al., 2010; Rajawat, 2016).

### **Overview and History of the Problem**

Teachers are influenced by and participate in larger social and institutional systems. Within these social and institutional systems, values, roles, and communication can be scaffolded by teachers in their interactions with children. Despite the intent to positively impact children, the expression of implicit biases toward certain children based on characteristics such as their race, gender, and socioeconomic status can happen (Banaji & Greenwald, 2013; Escayg, 2018). Teachers' unconscious presumptions about race can manifest as attitudes and behaviors and may affect their classroom practices and interactions with the children they serve (Okonofua et al., 2016; Staats, 2016). The literature shows that unexamined racially biased messages and interactions of teachers, whether done consciously (with awareness) or unconsciously (without

awareness), can harm a child's social and emotional development (Turetsky et al., 2021; Vittrup, 2016; Han et al., 2011; Husband, 2019).

Anti-Black perceptions of Black children being disruptive in the classroom are not new biases (Children's Defense Fund, 1975; Sabol et al., 2021). In her seminal work, Prosser (1933) places anti-Blackness in early childhood settings in a historical context and notes how Black children were experiencing inequitable treatment in predominantly White schools and equitable treatment in predominantly Black schools during their formative years. For example, the study measured personality development in children taught by Black teachers and supervised by Black principals at predominantly Black schools versus those Black children at racially diverse schools taught by White teachers and supervised by White principals. Prosser (1933) found that the Black children who experienced better support from the same race teachers at predominantly Black schools had higher self-confidence and a positive internal working model than Black children at racially diverse schools.

The discrepancies in teacher-child interactions profoundly affected Black children's social-emotional development, self-esteem, racial identity, and mental health. Prosser's (1933) findings indicated that Black children develop *superior character traits* (such as stronger confidence and identity), more racial self-respect, and more significant associations with a well-rounded education when the child is placed under the direction of Black teachers during the child's formative years. Ultimately, Black children benefit socially and emotionally from fair and equitable treatment in the classroom and a secure attachment with their Black primary teacher.

Further, one recent prominent study examining racialized perceptions of pre-K children's behaviors confirmed Prosser's (1933) study by suggesting that a teacher's racial bias and impact may differ by race or racial match with children (Gilliam et al., 2016). For example, this study

found that mostly White pre-K teachers' implicit racial bias toward Black boys may skew their perception of these children and their behaviors, leading to higher ratings of behavior problems for this group of children.

On the other hand, the study (Gilliam et al., 2016) indicated that, while Black teachers rated Black boys similarly to White teachers when Black boys did not meet expectations, Black teachers tended to take on more of a parental role with higher expectations towards Black children. When given contextual or familial information explaining the child's behavior, Black teachers were more understanding towards Black children than White teachers. Researchers have acknowledged that racially inequitable treatment by White teachers of Black children had been long experienced by Black families with children in the school system (Jones et al., 2020).

Beyond the classroom level, teachers are influenced and shaped by the school and educational systems in which they participate, putting them in the position of bidirectional conduits. Teachers can uniquely scaffold young children utilizing systemic larger systems of oppression or liberation and the teacher-child relationship based on their knowledge of perceived behaviors. Scaffolding, defined by Spadafora and Downes (2020), "is a method of teaching where a more knowledgeable individual provides a framework that allows a less knowledgeable individual to be able to think at a higher level than they would have been able to on their own" (p.1). Furthermore, the way a teacher sees and frames the behavior of a child can be problematic at the intersection of race, biases, racism, fear, and misunderstandings, given the influence of educational and social systems (Brookfield, 2017; Ladson-Billings, 2022). Impactful interventions are needed to counter problematic challenges.

## **Attempted Mitigations Through Policy**

Many local and federal organizations attempted to alleviate these issues by joining together to create policies that acknowledge the pervasiveness beyond the classroom level. In 2014, the Department of Justice and the Department of Education cooperatively wrote and issued a joint guidance package with the intent of helping public primary and secondary schools deliver discipline to students using strategies that do not racially discriminate (2014). Within that same year, the U.S. Department of Health and Human Services and the Department of Education released a joint policy statement to eliminate suspension and expulsion disparities that overwhelmingly affected Black and other children of color. Moreover, suspensions and expulsions were so prevalent in the United States that in 2014, President Barack Obama signed the Child Care and Development Block Grant Act into law, which a component of it, aimed to reduce suspensions and expulsions and promote children's social-emotional development and behavioral health (2014).

The Office of Child Care (2015) produced an informational memorandum (IM) emphasizing policy guidelines to implement instead of suspension and expulsion. Understanding that suspensions and expulsions were still continuous nationwide problems affecting Black children, the Office of Child Care (2018) released an expanded and more detailed version of the 2015 IM. Furthermore, the National Association for the Education of Young Children (NAEYC) released a joint statement in 2016 with thirty other national child-focused organizations declaring that, "We know that young children thrive in the context of stable, supportive relationships with adults who love, teach, and care for them. Expulsions and suspensions in early childhood education both threaten the development of these positive relationships and result from the lack of positive relationships between educators, families, and children" (NAEYC, 2016, p. 2).

Later, in 2016, recognizing the extensive work of federal organizations and the research work of Gilliam et al. (2016) on suspensions, expulsions, and teacher racial biases, NAEYC (2016) released its strongest statement on its stance against microaggressive practices. In its statement of implicit bias and early childhood educators, NAEYC stated, "Bias holds true in early childhood as well, where, as this research helps to show, educators of all races bring to the classroom a mix of emotion and experience that causes them to react to Black boys in particular with protection and punishment, fear and love" (p. 2).

### **Definition of the Problem (Limitations of Theory)**

The dynamics in teacher-child relationships in the classroom may often involve a child's perceived behavior and a teacher's assessment of how to respond to the behavior. Sometimes, this assessment leads to disciplining the child. The race of the child and teacher intersect with disciplining the child with potential racial disparities. Racial disparities in disciplining Black children were so alarming that they reached national attention. Attachment theory has been commonly used to explain the teacher-child bond and its influence on the child's social-emotional development (Garza-Rodriguez et al., 2023; Mata Lopez et al., 2022; Shirvanian & Michael, 2017). Attachment theory has also been applied to understand teachers' perceptions of their students (Garza-Rodriguez et al., 2023; Verschueren & Koomen, 2012). Philosophically, attachment theory's scope is at the microlevel of interpersonal interactions, while critical race theory argues the larger social macrolevel of interacting systems. There is a philosophical pull that views teacher-child relationships from an interpersonal framework emphasizing a secure base for children provided by the teacher, as in attachment theory. The other philosophical lens demands a broader approach to the teacher-child relationship connected to systems, institutions, and structures, as in critical race theory. These siloed theoretical frameworks are unable to

address specific challenges at school. However, a convergence of critical race theory and attachment theory could render a more comprehensive framework to address challenges in the pre-K classroom.

Critical race theory (CRT) is a theoretical model that explains systemic and institutional racism disparities (Ladson-Billings, 2022). HoSang (2022) clarifies that CRT is not a static framework but an evolving practical, apolitical prism of viewing, being, and doing in a democratized equitable world where Black, Indigenous, and people of color (BIPOC) are centered. On a large scale, CRT intersects with children's social-emotional development in that it firmly advocates for equitable environments for every individual to fully develop and thrive free from discrimination and racism (Ladson-Billing & Tate, 1995/2021). Adults can negatively alter children's social-emotional development through toxic stress associated with discrimination and racism (Maybank, 2021).

By contrast, attachment theory (AT) is an interpersonal theoretical model that posits the necessity of a secure child-caregiver bond. On a smaller scale, AT posits that children need a secure, routinely responsive, nurturing adult to develop a healthy internal working model and positive relationships (Ainsworth, 1989; Bowlby, 1969/1982). However, these two theories neither together nor separately embrace and explain the connection between systemic racism and its manifestations in teacher-child relationships, interactions, and implications for children's social-emotional development.

### **Purpose of the Paper**

This theoretical paper aims to introduce a synthesized theory, critical race attachment theory (CRAT), to offer a bioecological lens to address interactions between teacher racial bias, self-awareness, and child social-emotional outcomes. As a theoretical paper, it is not constricted

to a prescribed order of sections but rather presents what is pertinent by "draw[ing] from existing research literature to advance theory" (APA, 2020, p. 8). This paper examines and critiques two well-established theories while advancing a new theory. Further, the paper will contextualize and demonstrate the need for CRAT by 1) re-examining attachment theory, 2) considering critical race theory, 3) introducing CRAT's background and basic concepts, and 4) exploring the implications of all three theories.

To unpack the complex problem of teacher implicit racial bias and child outcomes, the author has proposed an integrated theoretical framework to address how individuals bring broad systemic (including negatively biased) beliefs and practices in the larger context into their individual and interpersonal relationships in the classroom. Black children can be the target of systemic racism (Iruka et al., 2021; Tiako et al., 2022) ushered into their interpersonal relationships with teachers having implicit racial biases in early childhood educational settings (Gilliam et al., 2016; Neitzel, 2018; Scott, 2021).

CRAT aims to uplift the intrinsic connectedness of consciously reflective teachers and Black children's outcomes within a hierarchical educational system, which allows for the intentional focus on wellbeing as an asset to child wellbeing and development. CRAT focuses on interrogating racist practices and beliefs present in society that seep into the classroom via colorblindness, racial microaggressions, cultural dismissiveness, and historical erasure. CRAT centers on advocating for critical self-reflection and culturally appropriate intentional engagement of Black children. It concentrates on recognizing teachers as attachment figures, leaders, agents of change or status quo, and decision-makers in their classrooms and community.



## **Theoretical and Practical Significance of the Study**

Attachment theorists analyzing cultural contexts (Stern et al., 2021) highlight the capability of attachment theory to recognize and confront racism and attachment theory's limitations. The theoretical and practical significance of the proposed theory is that it aims to integrate attachment theory with critical race theory, centering the "understanding of context and systems of power" (Spencer et al., 1997, as cited in Stern et al., 2021, p. 11).

What has also been missing from the classical attachment framework is not only the influence of systemic racism but, more importantly, the stability of culture and counter-narratives (Malda & Mesman, 2017; Mesman, 2021). Black families have pervasive systemic and individualistic racist experiences that they must navigate as they provide a secure relationship with their Black children, who may also be experiencing these ongoing forms of discrimination. Attachment scholarship does not consider attachment and child development in the context of racism and inequality. Furthermore, whereas Ainsworth (1965) conducted attachment research in Uganda (East Africa), her analysis did not advance the understanding of attachment relationships of people of African, Latin American, or Caribbean origin (Causadias et al., 2022). The lack of research examining attachment at the intersection of anti-Blackness leaves a gap in perception and research.

## **LITERATURE REVIEW**

### **Critical Race Theory as a Contextual Framework in the Educational System**

#### **Background and Basic Concepts**

Critical race theory (CRT) is described as a non-static, cross-disciplinary, non-hierarchical prism to examine and openly reject white supremacy and the "subordination" of people of color (HoSang, 2022). It is a way of being and doing, not about left or right, and takes a

critical as opposed to a noncritical approach to race. CRT is profoundly inclusive. Ladson-Billings and Tate (2021), while acknowledging the expanding direction of CRT, note that Delgado and Stefancic (2001) identify five fundamental hallmarks. The first tenet is that racism is usual and ordinary, not aberrant, in the United States, and that it is inescapable, given that it is constantly available and working. For example, race itself is a racist bioeconomic social construct that is hierarchically used for oppression and supremacy like jobs, housing, schools, and other daily.

Second, interest convergence or material determinism can intersect with power dynamics (Bell, 1980). Interest convergence is the belief that people in power will not willingly give up privileges for human betterment. Instead, power is negotiated when White people can get something out of it (Bell, 1980). Third, race is a social construction. Whereas there is no biological condition called race, people do identify with the concept of race.

Fourth, intersectionality and anti-essentialism emphasize that humans racialized in groups are not monolithic but individuals within a group who have intersecting identities. For example, a Black middle-class lesbian teacher can claim any, some, or all of these identities at a given time, yet she could not speak for all Black middle-class lesbian teachers. Last, voice or counter-narrative means giving an authentic voice or disrupting a dominant narrative with counter-stories. Context is another prominent factor in this paradigm.

Biases do not happen in a familial or social vacuum. They reflect ideas and practices of what we have been exposed to in our families, cultural traditions, media, conversations, communities, and society. Whereas individual racism is disheartening and challenging, larger structural, institutional, and systemic racism is daunting, traumatizing, and economically

debilitating (Condon et al., 2022). CRT was developed as a counter lens to these structurally massive forms of racism.

CRT emerged from juridical, social justice scholarship (Bell, 1980; Crenshaw, 2011; Crenshaw et al., 1995; Delgado & Stefancic, 2001) and is deeply rooted in cultural awareness and social transformation. Cole (2009) emphasizes the theoretical underpinnings guiding intersectionality to conceptualize the influences of multiple social constructs. Although CRT began in the legal field, focusing on the disproportionate representation of Black men in the criminal systems, it immediately became relevant to utilize this framework as an educational construct (Ladson-Billing & Tate, 1995/2021). Basic concepts of CRT in education include (a) social, cultural, and political systemic changes and (b) lived experience as legitimate and centering Black voices as an integral part of analyzing and understanding racial inequality at school. CRT's educational systemic scope acknowledges that race and racism are institutional structures. It explores fair and equitable policies, access, diverse representation in administration and staff, and comparable school equipment. CRT views educational systems in connection with other oppressive systems (such as judicial, health, and housing). The intersectionality of critical race theory and the educational system accounts for two major factors: the systemic demands in education and the lived experiences and centering Black voices to liberate education.

### ***Systemic Demands in Education***

Ladson-Billings and Tate (1995/2021) position CRT as a necessary agitator in the educational system. CRT demands fair and equitable school policies while advocating for dismantling harmful federal policies like Zero Tolerance that unfairly target children of color (COC) or, more specifically, Black boys. CRT argues that Black children, who have been the victims of a lopsided system, should have access to quality schools and education. It claims that

White flight drains income from community schools; something is missing here: racism and punishment for Black norms. Black children are not valued at their schools.

The lack of Black representation in schools' administrative staff adds to the complexity of marginalizing Black children. Emdin (2016) and Dixon (2022) argue that this absence of Black representation of authority at schools has a deflating effect. Young children are often exposed to Black adults as maintenance staff (Ladson-Billings & Tate, 1995/2021). Even at predominantly Black schools, White teachers and administrators are in charge and are allowed freedom (such as the right to exclude) not afforded to Black educators or children (Ladson-Billings & Tate, 1995/2021). Further, due to the underfunding at predominantly Black schools, children will likely have limited access to high-quality learning materials, safe playgrounds, and highly qualified teachers than in predominantly White schools (Liu, 2024; Ramsey-Jordan, 2020).

### ***Lived Experiences and Centering Black Voices to Liberate Education***

Perspective-taking is critical to understanding how Americanized racism and gross inequities toward Black people were essential to the formation of the country and systems of hierarchy. In 1619, twenty Black Angolans captured in military campaigns led by the Portuguese governor of Angola, along with three hundred other captives, sailed to Jamestown to mark the beginning of a racially based, brutally inhumane economic caste system called slavery (Gates, 2011).

Whereas slavery was formally abolished following America's Civil War in 1865, racism (the belief, attitude, and behavior based on a hierarchical discriminatory structural system) continues today. From its conception, the construction of race was solely socially based on the phenotype rather than the biological genotype (Beckwith et al., 2017). Scientists studying DNA sequences found that the genomes of any two people are about 99.5 percent matched and have

concluded that humans are practically identical to each other regardless of their socialized "race" (Feldman & Lewontin, 2008; Rosenberg et al., 2002; Templeton, 2013).

However, due to the widely accepted belief of race, the effects and associations of the color caste system flourished during the development of America. In many aspects, they still do currently. Historically, teachers and educational institutions upheld discriminatory practices under segregation laws (Murray, 2016). *Brown v. Board of Education of Topeka, KS* (1954) was a landmark U.S. Supreme Court case that struck down the standing *Separate but Equal* legal doctrine and outlawed segregation in schools (Murray, 2016). Unfortunately, remnants of racism, implicit racial bias, preferential treatment, discrimination, and microaggressive behaviors are still present in education and many other professional fields (Beneke, 2017; Delpit, 2006; Hodge et al., 2020; Martin & Brooks, 2020; Moore et al., 2018; Reynolds & Kendi, 2020; Rowley et al., 2014; Skiba et al., 2002). Consequently, racial disparities are apparent in biased school practices and disciplinary policies that surface in the disproportionate rate of Black children being pushed out of their classrooms and schools (Ladson-Billings & Tate, 1995/2021).

To address racial disparities at school and in the classroom, CRT migrated to the educational field through the works of Ladson-Billings and Tate (1995/2021), Solórzano (1997), Parker et al. (1999), Lynn (1999), Taylor (1999), Solórzano and Yosso (2001), and Delgado and Bernal (2002). Whereas elements of CRT have been discussed since the late 1970s to early 1980s (Martinez, 2014), CRT, as a formalized theoretical construct, emerged in the mid-1990s. HoSang et al. (2022) pointed out that it is mandatory to have the voice of people of color at the forefront of analyzing the educational system by examining the role of race and racism in the classroom (Dixson & Rousseau, 2005) and leadership. DeCuir and Dixson (2004) discuss the relevancy and importance of CRT in education as a tool for analyzing and interrogating anti-Black practices to

bring about equitable and systemic changes. Race and racism play a role in the classroom via lowered expectations, harsher disciplinary actions, silenced voices, and overlooked opportunities for a targeted racial group or individuals within a targeted racial group. CRT focuses on systemic racism with solutions interrogating the racist systems through policies and training, thus centering the Black voice via higher expectations, classroom engagement via classroom activities and age-appropriate discussions, and positive acknowledgment.

### **Limitations of Critical Race Theory**

Whereas critical race theory addresses the dismantling of discrimination in the school system (Taylor, 2023), it does not address specific adult-child interpersonal issues within these attachment relationships. This is one limitation in its scope. Critical race theory is unsuited for examining or explaining caregiver-child bonding or individual interactions. Its primary focus is to expose and abolish interrelated anti-Black systems of oppression and Whiteness as property (CRSEA, 2024; Ladson-Billing, 1995/2021).

Moreover, unlike AT, CRT does not explore the relationship's implication for children's social-emotional development and later relationships with others (Bowlby, 1969/1982). Ledesma and Calderon (2015) highlight the critiques of Darder and Torres (2004) that contend that CRT overemphasizes race to the point of distraction. Moreover, Darder and Torres (2004) argue that critical race theory's hyper-focus on race to the level of a theoretical construct diminishes its critique of capitalism in educational systems. Contrasting Darder and Torres' (2004) analysis regarding CRT's racialized understandings, Trevino et al. (2008) decry that CRT has a broad scope, making it difficult to define and presumably challenging to use in pre-K - 12 classroom settings and to apply in the direct social-emotional development of a teacher-child bond.

Inherent to scaffolding are systemic, institutional, and individual biases that intersect with demographics such as race and gender. *Critical race theory* is a prism that offers a way to view these intersectional issues. CRT explains how racism is involved in educational and legal institutional networks. It uses precise and aggressive terminology to act as a counterforce to racism, white supremacy, and colonial settler structures. At the systemic level, CRT interrogates (aggressively questions) racist, inequitable, and discriminatory practices.

However, CRT lacks in examining interpersonal relationships and, more specifically, significant attachment relationships between an adult, such as a primary caregiver, and a young child. It does not, as in the case of AT, explore the relationship's implication for children's social-emotional development and later relationships with others (Bowlby, 1969/1982). Additionally, CRT is a consistently evolving and complex epistemological framework, which makes it challenging to define and apply. Specifically in education, seminal scholars Ladson-Billings and Tate (1995/2021) and Solorzano (1998) have expanded the legal scholarship of Bell (1995) and Crenshaw (1995) to early childhood education and higher. Ledesma and Calderon (2015) suggest that CRT scholars (Dixson & Rousseau, 2005; Ladson-Billings, 2005; Parker & Lynn, 2002) recognize that CRT is challenging to apply to the field of educational knowledge mainly due to its complexity and intricacies. Educational CRT pioneers (Ladson-Billings & Tate, 1995/2021; Parker & Lynn, 2002; Solorzano, 1998) caution new and emerging CRT scholars of the educational field not to abandon CRT's legal foundations (Dixson & Rousseau, 2005; Ladson-Billings & Tate, 1995/2021). Ledesma and Calderon (2015) emphasize the potential diminishing of CRT's practical applications without the context of its judiciary beginnings. CRT has significant strengths in contextualization of intersectional systemic issues but is uniquely challenged by interpersonal issues.

## **Attachment Theory as An Explanatory Framework in ECE Classrooms**

### **Background and Basic Concepts**

While CRT focuses on disparities for racialized children in systems, interpersonal theories, such as attachment theory, focus on the interpersonal dynamics and developmental needs of a pre-K child. Attachment theory (AT) is a psychological, evolutionary, and child development theory concerning relationships between young children and at least one primary caregiver for conforming social and emotional development (Bowlby, 1963). In these child-adult relationships, the child seeks proximity, security, and assurance from a secure, caring, and responsive adult. The security from these initial experiences lasts a lifetime and affects future interpersonal relationships.

Attachment refers to the process by which a child attains and maintains a stable emotional connection with an identifiably reliable and responsive adult, encouraging the value and continuation of the relationship (Bowlby, 1969/1982). AT is a universalist theory and does not differentiate between the abilities or culture of children of the same age. Bowlby (1980) posited that an individual who has experienced a secure attachment with a caregiver is likely to possess a representational model of the attachment figure(s) as being available, responsive, and helpful (also known as an internal working model). In other words, an internal working model is a cognitive framework encompassing mental representations for understanding the world, self, and others. AT is based on the relationship with a primary caregiver or attachment figure (McLeod, 2017). Securely attached children feel confident that the attachment figure, such as a teacher or caregiver, will be available to meet their needs. They use a primary caregiver as a secure base to explore the environment and seek the attachment figure when in distress (Sierra, 2012). Typically, between the ages of 3 and 6, internal working models of attachment are firmly



established with a primary caregiver (i.e., mother), which dictates, via past experiences, the road map for new relationships (Bowlby, 1969/1982).

Outside of the family, school is one of the most important contexts for child development (Graham, 2022). One-third of children's waking hours are spent in school around their teachers and peers (Larson, 2001). In the educational setting, attachment between teacher and child is natural and is a natural extension of the parent-child bond; this is especially true in Black families where children may bond with multiple caregivers (Howes & Spieker, 2016; Mesman et al., 2016). In cross-racial pre-K settings, teachers must be aware of the extensive nature of attachment security, as teacher-child relationships can influence the child's understandings as to how other relationships are supposed to function (Ainsworth, 2010). For example, Escayg (2020) posits that pre-K teachers must be taught foundational principles in anti-bias/anti-racist teaching to impact the White teacher-Black child dyad positively. These principles that acknowledge the intersection of biases, racism, and Black youth development are necessary to counter the degenerative and discriminatory practices that negatively affect the educational, social, and emotional wellbeing of children of color (Escayg, 2020). However, Schaefer Riley (2022) argues that attachment theory is not racist but instead focuses on the universal human need of all children to form a secure attachment with an adult regardless of the race of the attachment figure.

Attachment theory states that children instinctively attach to their adult caregivers (Bretherton, 2013). Children with direct access to secure base adults can better regulate fear in threatening situations and benefit their socio-emotional development (Bowlby, 1969/1982; Dunbar et al., 2021). Some researchers (Colmer et al., 2011; Shirvanian & Michael, 2017; Wilson-Ali et al., 2019) have argued for applying attachment theory in early childhood settings. Two significant components of attachment principles relate to the impact on young children in

early childhood classrooms. They are secure relationships with early childhood education (ECE) teachers and self-worth and personality formation.

### ***Secure Relationships with ECE Teachers***

Children thrive from secure relationships, which help them to develop a personality, internal working model, and coping skills (Shirvanian & Michael, 2017). Bowlby (1969/1982) maintained that attachment behaviors (for example, proximity-seeking) are innate and are triggered by threats to proximity, such as separation, insecurity, and fear. Additionally, race and racism scaffold a child's development.

One of CRT's critiques of traditional AT is that it does not consider the child's race and the racial climate and how these factors influence development, attachment, and engagement (Iruka, 2022). Unlike Bowlby's monotropic theory of attachment to mainly the biological mother, contemporary attachment theorists (Greenfield & Keller, 2004; Keller, 2012; Quinn & Mageo, 2013; Thompson et al., 2022; Van IJzendoorn & Sagi-Schwartz, 2008) contend that young children regularly form secure attachments with other nurturing caregivers, including foster and adoptive parents (Farmer et al., 2013) and teachers, which is associated with social-emotional development (Cugmas, 2011; Davis, 2003; Seibert & Kerns, 2009). Healthy social-emotional development is necessary for self-worth and personality formation.

### ***Self-Worth and Personality Formation***

Self-worth and personality formation are developed through an adult-child relationship. Contemporary attachment theorists proclaim that positive, supportive, and close relationships (secure attachments) with teachers are beneficial for children and yield better behavioral, academic, and social outcomes (Buyse et al., 2009; Hamre & Pianta, 2001; Roorda et al., 2011). Moreover, researchers argue that children who experience positive teacher-child relationships

(high closeness, low conflict) appear to have more positive prosocial behavioral outcomes (Hamre & Pianta, 2001; Silver et al., 2005). A teacher with a good relationship with a child is more likely to have a good perception of that child (Hamre & Pianta, 2001). The relationship with the teacher becomes a prototype for future teacher and school relationships. It allows young children to predict, control, and manipulate interactions with peers and adults. Attachment theory is not exhaustive on adult-child bonding relationships and has some shortcomings that the theory does not adequately address.

### **Limitations of Attachment Theory**

Although attachment theory touts a universalist approach to child development through child-adult bonding (Bowlby, 1963), Keller (2018) questions the global application of attachment theory, claiming to account for children's socioemotional development across cultures. Keller (2018) argues that AT upholds a middle-class Westernized worldview, discounting healthy non-Westernized values and practices contributing to caregiver-child bonds. Also, built-in moral elitism accompanies universality, which assumes only one way to have a secure relationship (Keller, 2018). Acknowledging diversity is mandatory for robust research, generalizability, and application to diverse communities (Bauman, 2010). Bauman (2010) contends that the efficacy of attachment theory should be questioned as an essential instrument for comprehending secure-based relationships in minoritized communities.

Furthermore, attachment theory does not account for the perpetuation of systemic and institutional racism's disruption of secure relationships. In the school setting, Fanon (1952/1967) highlights the influence of colonial education on Black children. Fanon (1952/1967) makes a point applicable to the problematic (e.g., insecure or avoidant; Ainsworth et al., 1978) teacher-child bond based on Black children being trained by the educational system to identify with and

prioritize White culture while rejecting their own. He suggests that Black children be educated in a way that upholds their cultural identity and dignity (Leonardo & Singh, 2017). Although the early childhood classroom is becoming increasingly diverse, the fundamental tenets of attachment theory do not account for diversity, cultural variability in secure base relationships, and children's social-emotional development, which had been criticized from its onset (Keller, 2018).

McClelland and Cameron (2019) exemplify the attachment approach in their stance that pre-K children with established social-emotional skills and behavior management, ushered by securely bonded relationships, are more likely to have higher cognitive, language, and academic skills. Furthermore, social-emotional development has circular influences and benefits, meaning it is encouraged via secure attachments and learning and, consequently, is promoted by regular cognitively enhancing communal interactions within secure carer-child relationships (Administration for Children and Families, 2015).

Stern et al. (2022) stress that in terms of analyzing attachment theory through a critical race lens, the research shows that systemic and institutional racism perpetuates the disruption of secure relationships. These disruptions may include school suspensions and expulsions, removal from family via the child welfare system, and removal of family members through the carceral system (Barbarin, 2021; Elliott & Reid, 2019; U.S. Dept. of Education, Office for Civil Rights, 2016). Furthermore, Stern et al. (2022) emphasize that although attachment theory proclaims that children universally need warmth, love, secure relationships, and connection, neither Bowlby (1969/1982) nor Ainsworth (1995) critically examined the overwhelming impact of residual colonialism and perpetual structural inequities, such as fair housing and quality schools, has on the manifestations of attachment and caregiving.

## **Critical Race Attachment Theory as a Unifying Teacher-Child-Society Lens**

### **Background and Basic Concepts**

*Critical Race Attachment Theory* is a proposed theoretical framework that converges the interests of CRT with a focus on equitable treatment in education and AT with a focus on teacher-child secure attachment. It aims to be a social justice attachment theory that centers on race, racism, implicit bias, microaggressions, power dynamics, and the caregiver-child relationship with illuminations of caregiver awareness via reflective practices. It posits that societal, familial, and individual experiences enter the classroom environment via the teacher and children's behaviors, interactions, and ways of thinking. Table 1 illustrates a summary and comparison of critical race theory, attachment theory, and critical race theory.

However, due to the naturally unbalanced power dynamics of the teacher-child relationship, adult decision-making, understanding, perceptions, and lived experiences take precedence in ECE classrooms. Young children are particularly vulnerable to the scaffolding of adults' perceptions of and responses to them. Thus, CRAT attempts to highlight teachers' critical self-reflection as a key component of child outcomes. Critical self-reflection refers to identifying, questioning, and assessing one's deeply held assumptions, presuppositions, and meaning perspectives about one's knowledge, how lived experiences and issues are perceived, beliefs, feelings, and actions (Mezirow, 2006).

Critical race attachment theory does not situate itself as a static theory. It aims to promote action by those who have the power to change dynamic structures in the classroom. The teacher is the most influential person in the classroom and can create spaces of liberation or oppression (Freire, 1970/2005). In the case of the teacher-child relationship in early childhood classrooms,

the teacher has the power, authority, and knowledge to potentially change the dynamics in the class by engaging in critical praxis such as ensuring:

1. teacher self-awareness of implicit bias,
2. safe and culturally appropriate learning environment,
3. intentionally equitable treatment and engagement,
4. inclusionary and purposeful outreach, and
5. teacher-initiated critical self-reflections for child advocacy.

### ***Teacher Self-Awareness of Implicit Bias***

CRT addresses biases interwoven in systems, such as in a school, school district, or policies. CRT does not delve into individual, interpersonal relationships within the classroom. Attachment theory examines interpersonal relationships within the classroom but does not fully address contextual or discriminatory systemic factors impacting the classroom, as does CRT. Complementing the limitation of the two theories, CRAT states that teachers bring systemic issues (educational biases, professional training, school policies) with them in the classroom and into their relationships with young children, influencing their socioemotional development manifested as behaviors.

Early childhood classroom practices may be hindered by implicit racial bias or enriched by actively reflecting on biases (Anderson, 2014; Freire, 1998/2021; Greene, 1988; Hooks, 1998). For example, in Barbarin and Crawford's (2006) study on pre-K program quality and program outcomes, two observers of 100 randomly chosen classes noted that in many of the pre-K and kindergarten classrooms they visited, a single child was separated from the group, and placed at a desk next to the teacher's desk. These children were considered "difficult" and "disruptive" and were usually Black boys. Barabin and Crawford (2006) note that segregating

Black boys from their peers humiliated them into stigmatized pre-criminal roles. Although the specific demographics were not indicated, the qualitative study adds to the literature and confirms lived experiences. Good and Brophy (1994) added to the preponderance of literature that states negatively biased expectations and assessments of children's behaviors are likely to be based on or influenced by social class, race, and other child characteristics.

Young Black children are more at risk for harsher disciplinary actions, partly due to perceived behaviors (Goff et al., 2014). Over the past thirty years, research has shown that Black children are disciplined at rates that far exceed their statistical representation, particularly on measures of suspension and expulsion, in almost all primary school systems (Children's Defense Fund, 2020; Drakeford, 2004). Similarly, Skiba et al.'s (2002) study of racial disproportionality in school punishment further highlights a significant racial inequity in office referrals, suspensions, and expulsions. These disparities remained significant even after controlling for socioeconomic status.

CRAT pushes CRT and AT forward by acknowledging the classroom's power structure and offering an intervention of interpersonal repair where localized harm can occur. This component of critical race attachment theory, recognizing the need for the teacher's self-awareness of implicit bias, addresses the limitations of CRT (i.e. does not incorporate adult-child interpersonal issues) and AT (i.e. does not account for the perpetuation of systemic racism and anti-Blackness). This critical praxis encourages teachers to develop from a space of humility, reflection, respect, spirit of inquiry, collaboration, and openness.

### ***Safe and Culturally Appropriate Learning Environment***

The classroom is one of the primary proximal environments where children learn and practice socioemotional developmental skills (Bronfenbrenner & Morris, 1998). How teachers

model, interact, and support young children in the classroom defines the quality of the classroom's emotional climate (Daniels & Shumow, 2003; Jia et al., 2009; Pianta et al., 2008). Classroom social-emotional tone can influence behavioral outcomes for children (Hamre & Pianta, 2007). In other words, teachers who promote positive peer and teacher interactions and sociocultural awareness in the classroom communicate interest in supporting the whole child in a secure environment where Black lives matter (Graham, 2022).

In contrast, in hostile emotional classrooms, teachers and children have little to no emotional connection, appreciation, or respect for one another. In this environment, teachers may unintentionally model hostility, irritability, and microaggressive behaviors to children. Given the likelihood of cross-racial interactions for Black children, negative interactions with White teachers have the potential for additional adverse outcomes (such as ambiguous or insecure attachment, a mental representation of others being untrustworthy, self as unworthy, and self as ineffective when interacting with others; McLeod, 2017).

Having a safe and culturally appropriate learning environment is mandatory to fill in the gap where CRT does not include child social-emotional development and AT does not cover the continuance of anti-Blackness and systemic racism. This concept returns to Fanon's (1952/1967) call for decolonizing Black children's educational spaces. Stern et al. (2022) explain the following:

Decolonization has multiple layers of meaning, including (a) acknowledging the role of and racism in children's development, but also (b) interrogating cultural hegemony – the belief that one cultural group and its ways of thinking and being is superior to another, (c) allowing room for multiple perspectives, and (d) supporting the agency of marginalized people.

(p. 21)



Findings from the National Institute of Child Health and Human Development's Early Childcare (2005) study revealed that increased time in a classroom with negative emotional support was positively correlated with more significant behavior problems before school entry, lasting into early elementary school. Studies link the positive correlation between the classroom emotional climate, child engagement, and effective behavior management (Angulo, 2020; Li Grining et al., 2010; Reyes et al., 2012), situating classroom emotional climate as a critical factor in moderating negative behaviors.

### ***Intentionally Equitable Treatment and Engagement***

Multiple studies (Girvan et al., 2017; Noguera, 2017; Okonofua et al., 2016) have found that White pre-K teachers often view young Black children as displaying more aggressive behaviors than White children (such as hitting, biting, and territorial in play) and have lower expectations and tolerance of them. Consequently, these children receive high ratings on behavioral problem reports and are often suspended.

In pre-K settings, children experiencing emotional difficulties may be treated differently based on the enforcement of school behavioral codes, which can be subjective depending on the situation, teacher, teacher's attitude, and the race and socioeconomic status of the child (Gilliam, 2005). As a deterrent to teachers' negative perceptions of a minoritized pre-K child, applied CRAT advocates for authentic caring, reframing responsibility, institutional nurturing, and culturally responsive practices to center marginalized children. Moreover, the modern approach to attachment theory posits that teachers as classroom caregivers can provide secure or insecure attachments based on how they respond to the child. This intentionally equitable treatment and engagement of Black children stated in CRAT, broadens the limitations of social-emotional development in CRT and diversity inclusion in AT.

### ***Inclusionary and Purposeful Outreach***

Secure attachment may occur in the teacher-child relationship when a child is acknowledged at the appropriate developmental stage regardless of race and gender. Haslam and colleagues (2000) describe the sociocultural definition of a child as a young person who is innocent and in need of protection. Goff et al. (2014) conducted four studies examining whether Black boys are given the same protections in childhood as their peers. They found converging evidence that Black boys are seen as older and less innocent than their White peers of the same age (Goff et al., 2014).

Iruka (2022) highlights that anti-Black microaggressions in the pre-K classroom can be very damaging to the child's socioemotional development. Thus, to support young COC, teachers are encouraged to adopt an intentional interactional approach, meaning the teacher would spend time exploring who the child is and developing the child's skill set. Additionally, teachers would ground themselves in age-appropriate expectations of behaviors and communicate with the child's family and community. These inclusionary and purposeful outreach praxes of CRAT are aimed at addressing the combined child development and diversity constraints of CRT and AT, respectively.

### ***Teacher-Initiated Critical Self-Reflections for Child Advocacy***

Dewey believed that reflection was an active, disciplined, rigorous, and intentional form of thinking that moves the thinker to deeper levels of understanding and connection between and among related experiences (Dimitriadis & Kamberelis, 2006). Dewey (1933) emphasized the deliberate engagement of all children in the classroom as the teacher thought about the integrity and accountability of her teaching practices. Schon (1983/1991) further encouraged using critical reflective thinking and practices.

Critically reflective practices happen when teachers identify, examine, and critique their underlying teaching beliefs compared to how they put them into practice (Brookfield, 2017). Moreover, reflective practice aids teachers in confronting discrepancies between their thinking and their practice, which is necessary for changes in thinking, understanding, and practicing (Gibbs, 1998; Schon, 1987; Zalipour, 2015). Furthermore, CRAT asserts that teacher-initiated self-reflections is a positive form of child advocacy and converges the deficits of CRT and AT where teacher-child interpersonal relationship and anti-Black system racism are simultaneously focused on.

**Table 1***Comparison Between Three Theories Related to Early Childhood of Black Children*

<b>Dimension</b>	<b>Critical Race Theory</b>	<b>Attachment Theory</b>	<b>Critical Race Attachment Theory</b>
<b>Background</b>	CRT is a cross-disciplinary prism to examine and openly reject white supremacy and the subordination of people of color. Originally in critical legal studies (Bell, 1980; Crenshaw et al., 1995) and expanded to include educational systems (Delgado & Stefancic, 2001; Ladson-Billings & Tate, 2021; Solórzano, 1998), the goal is to abolish institutional and systemic racism.	AT is an evolutionary framework that emphasizes the importance of caregiver-child supportive relationships beginning in infancy for developing a sense of security, and the adaptive benefits of this sense. Attachment is necessary for children's psychosocial wellbeing and survival. (Ainsworth et al., 1978; Bowlby, 1968)	CRAT promotes the awareness of implicit bias and racism through critical reflective practices to improve child outcomes and avoid social-emotional shaming. CRAT acknowledges that institutions and systems consist of individuals who perpetuate racist hierarchical systems and emphasizes the bidirectional relationship.
<b>Basic Concepts</b>	The belief of social, cultural, political, and systemic changes centering Black people's and non-White people's voices.  CRT posits that BIPOC are legitimate and necessary for analyzing racial inequities.	AT emphasizes interpersonal, social-emotional relationships. AT posits that children's need for love and connection is universal and innate. A child will act out when a child's need for a secure attachment bond is unmet. A child can develop social, emotional, and cognitive problems if inconsistent attachment. AT avoids cultural issues	CRAT states that a safe and culturally appropriate learning environment where every child is treated fairly and according to the child's developmental needs; CRAT is strength-based, trauma-informed, emotional wound care-focused. CRAT the adult's well-being and inclusive outreach are significant in modeling healthy behavior, internal working models, and

		and differentiations from universalism	interpersonal relationships. CRAT extends healthy practices to teacher-initiated self-reflections to counter implicit bias, racism, and microaggressions and inform classroom management, classroom racial inequities, professional development/training, and school policies.
<b>Scope</b>	CRT primarily focuses on racism, racist inequities, and the elimination of racialized inequities and hierarchies at an institutional, structural, and societal level.	AT focuses on persistent interpersonal relationships and bonds between a child and an adult-caregiver.	CRAT focuses on what the teacher manifests and scaffolds from systems and potentially biased belief systems in the teacher-child relationship that may affect child outcomes.
<b>Aims</b>	A research framework designed to dismantle racism and its toxic effects on education and the American society (Young et al., 2023)  Uses a legal and educational theoretical lens to pushback against misinformation and racism.	AT unites several theories such as evolutionary theory, cognitive science, and object relations theory to explain the mandatory emotional bond, interactions, and protections sought by a child and the child’s caregiver, normally a parent (Ainsworth, 2010)	CRAT offers a multifaceted, synthesized, and bioecological lens with racial intersectionality to address interactions between teacher racial bias, self-awareness, and child social-emotional outcomes.
<b>Implications for Early Childhood Education (ECE)</b>	The interrelatedness of owning property, right to disposition, enjoyment, and education; storytelling as social confirmation; society	AT helps to develop a child’s internal working model, increase independence, sense of belonging, learning, trust, peer	CRAT and CRT agree upon the universal acknowledgment and understanding that Black children are children and should be treated as such.

	rewards students/children for White norms and punishes them for Black norms	interactions, social-emotional regulation in the classroom, and future relationships.	Black children need secure relationships with their teachers to ensure healthy future relationships (CRAT and AT). The success of teachers is intrinsically intertwined with the success of each student/child.
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**Discussion**

This theoretical paper critically examined critical race theory and attachment theory and proposed a synthesized new theory called critical race attachment theory (CRAT) to close framework gaps. By offering a combined macro and micro lens of the pre-K teacher-child relationship, CRAT aims to highlight, and shift identified perspectives on secure attachments for pre-K Black children with their teachers and inspire practice, training, and policy on reducing suspensions and expulsions.

Young children of color, especially Black boys, are disproportionately being suspended and expelled from American schools at an alarming rate (Gilliam, 2018). The literature implicates teachers' misunderstandings, microaggressions, and implicit racial bias as contributing factors to the excessive discipline of Black children (Nocella & Socha, 2020; Rudd, 2014). Whereas most teachers want the best learning experience for all young children, many face an internalized obstacle, implicit racial bias, that provokes the use of stereotypes, especially in stressful, high cognitive load settings (Fiske & Russell, 2010), where Black boys are perceived as older and more destructive than their White peers (Goff et al., 2014; Rowley et al., 2014). A comprehensive theoretical approach helps in understanding and deconstructing the problem while centering race, teacher decisions, and teacher-child relationships for better social-emotional

outcomes for children. Critical Race Attachment Theory allows for the nuanced examination of potentially biased perceptions influencing behavioral perceptions and actions toward Black boys while supporting teachers' self-reflection practices as a means to self-knowledge, assessment tools, professional development, and enhanced learning experiences for all children.

CRAT has roots in both CRT and AT but differs in its aim. Like a gestalt (Rock, 1986; Sternberg & Sternberg, 2012), CRAT integrates key components of CRT and AT to form new, unique holistic lens to view connectedness between social and systemic issues and interpersonal relationships and individual beliefs manifested in an early childhood education setting.

Overall, CRT addresses unfair policies, laws, hiring, and sentencing practices but does not detail individual racism and biases that impact interpersonal relationships, such as those meaningful interactions in ECE classrooms (Booren et al., 2012). CRT boldly proclaims equal justice for all, starting with Black people. In contrast, AT focuses on building a secure human via the dyadic relationship (Alamos & Williford, 2020; Williford et al., 2017) but misses the cultural and racial aspects that situate child and relationship. However, CRT and AT frameworks agree that adult decisions and behaviors affect child outcomes. CRAT integrates these converged interests and addresses the connection between teachers' potentially distorted views on children's age-appropriate development and behaviors due to implicit racial bias and the pre-K COC experiencing social-emotional development at the intersection of race and attachment.

A teacher struggling with implicit racial bias would be less likely to bond with a COC. Thus, conceivably blocking the process for a secure attachment. Shifting to the Critical Race Attachment Theory paradigm has the potential for practical implications, such as a deeper connection and impact on pre-K COC, especially Black boys. Also, training programs can integrate this theory to prepare pre-service for an increasingly diverse student population. Finally,

CRAT has the potential to be embedded in best practices policy to ensure authentic scientific practices by teachers, real-time tracking, and broader professional accountability reflected in children's socioemotional outcomes.

It is important to return the salience of the researched guidelines of Stern et al. (2022) to appreciate the significance of CRAT to the field. Regarding race and attachment, Stern et al.'s (2022) work offers both theoretical similarities and differences to CRAT. One of the fundamental similarities of these theories is that Stern et al. (2022) and CRAT constructively critique attachment theory's lack of nuance regarding Black children and their caregivers and contextual factors (such as caregiver's resources to acknowledge and counter racism) influencing a child's sense of self and child-caregiver bond. The research (Stern et al., 2022) advocates for expanding attachment theory and other theories (such as critical race theory or the anti-racism child development work of Iruka et al., 2022) and practices to explore Black youth development, which justify the need for a synthesized race-conscious bioecological relational framework like critical race attachment theory.

Moreover, the interpretation of Bowlby's (1969/1982) universality tenet presented by Stern et al. (2022) supports a tenet of CRAT that emphasizes that *Black children are children deserving of a secure teacher-child bond*. Whereas Bowlby (1969/1982) and Stern et al. (2022) promote the mandatory and evolutionary secure warm bond between caregiver and child without regard to race, CRAT boldly illuminates the necessity for Black children to be seen and experienced as children by their caregiving teachers and who are deserving of secure teacher-child attachment. Because most teachers in the United States are White, CRAT argues for a cognitive shift via ongoing and intentional critical reflection to help rid teachers of implicit biases



and *Black boy narratives* (Rowley et al., 2014) embedded in ways of scaffolding Black children in early childhood classrooms.

In Stern et al.'s (2022) research, the focus centered around Black parent-child attachment and potential protections against racism. The aims of their paper were twofold: (1) to share some of the conversations, debates, and insights generated in the exchanges among a set of authors, reviewers, editors, and commentators from diverse backgrounds involved in the 2021 special issue of *Attachment & Human Development*, "Attachment Perspectives on Race, Prejudice, and Anti-Racism;" and (2) to map several guiding considerations for working toward anti-racist perspectives in the field of attachment going forward (Stern et al., 2022b, p. 393). A major theme of these guiding research considerations offers some rationale for CRAT and that is the need for attachment theory to be more inclusive. However, CRAT uses a novel approach by addressing and offering ways to apply these considerations into the pre-K classroom focusing on the responsibility of teachers as secure bond figures.

Instead of re-imagining futuristic possibilities of racial inclusivity that should or could happen with attachment theory, CRAT emphasizes realistic ways that teachers can be on the forefront of extending attachment in early childhood classrooms (where parents are not and cannot offer natural protections). A key understanding for creating CRAT is that young children spend a lot of time with their primary teachers (an attachment figure) who are predominantly White and who have authority in the classroom, would benefit from embracing the ability to become secure base caregivers for Black children. CRAT understands this urgency in these critical times with the dismantling of Diversity, Equity, and Inclusion within educational institutions yet the growing population of young children of color entering the classrooms with teachers who are unprepared to handle diversity. Thus, unlike Stern et al.'s (2022) focus, CRAT

provides a synthesized framework that directs applied knowledge of the interplay between teacher racial bias, critical self-reflection, and child social-emotional outcomes.

### **Critical Race Attachment Theory's Implications for Early Childhood Education**

Adopting critical race attachment theory would imply the universal acknowledgment and understanding that Black children are children and should be treated as such (CRAT and CRT espouse that belief). Also, Black children need secure relationships with their teachers to ensure healthy future relationships (agreed by CRAT and AT). The success of teachers is intrinsically intertwined with the success of each student/child. CRAT can extend the understanding of AT for teachers and focus broader concepts into interpersonal lived experiences for CRT practitioners. Utilizing this lens has the potential to broaden one's perspective on the nuances and complexities of attachment with Black children. Being open to engaging in ongoing active self-reflection as a part of the attachment-racial awareness process has implications for deeper culturally respectful bonding where race, culture, and warm relationships are sources of empowerment. This approach may also improve the quality of teacher-child relationships, especially in cross-racial interactions, potentially impacting child outcomes such as social-emotional development, reduction in behavioral problems, and alternatives to suspension and expulsion.

There is a real need in American school systems to deeply grapple with potentially harmful anti-Black educational practices, particularly with our very young children. This requires seeing and experiencing interactions with Black children through a new lens. Whether implicit or explicit biases, pre-K children can benefit from experiencing a bias-aware teacher who actively engages in counteractions and presents counternarratives for the children. These counteractions and counternarratives may come in the form of positive affirmations in terminology like “Black joy” or “Black excellence” that may have a favorable impact on the child’s internal working

model (Hughes et al., 2006; Rogers et al., 2021). Moreover, if applied in ways that reinforce counternarratives about Black children and their families, decentralize White middle-class secure base caregiving norms as supreme, intersectionality of systemic racism and child development, then critical race attachment theory has the potential of being utilized to deconstruct anti-Black secure attachment practices.

Another implication of critical race attachment theory is the potential to have meaningful decolonizing impact on pre-service teacher training, early childhood education research, and policy. Children may have multiple secure attachments outside the home. Also, children who are securely attached to their teachers may expand this confident internal working model to society at large (Stern et al., 2022). Further, a focus on Black-norming in research samples can potentially deconstruct the White-norm/Black-deviant dichotomy in research that contributes to skewed findings (Ehrlich et al., 2019). CRAT has the potential to produce decolonized public policy that could affect the way local, state, or federal educational decisions are made regarding equity.

### **Critical Race Theory's Implications for Early Childhood Education**

Critical Race Theory addresses the interrelatedness of owning property, right to disposition, enjoyment, and education; storytelling as social confirmation; society rewards students/children for White norms and punishes them for Black norms (Ladson-Billings & Tate, 1995/2021). These basic concepts of CRT related to the educational system naturally emerged as structural remedies to racial disparities in systems that intentionally oppress children of color. Furthermore, Tate (1997) highlights the potential implications of this body of literature for the scholarly articulation of race and equity in educational policy and research. "The CRT movement in legal studies is rooted in the social missions and struggles of the 1960s that sought justice,

liberation, and economic empowerment; thus, from its inception, it has had both academic and social activism" (Tate, 1997, p. 4).

### **Attachment Theory's Implications for Early Childhood Education**

In early childhood education, secure bonds between teachers and children help children regulate their emotions and behaviors, develop interpersonal skills, and develop a sense of self and others under the safety of a trusted adult. In early childhood, all children must know they have a stable adult who will provide predictable nurturance and protection in a safe environment in times of need (Harman-Smith, 2011). Children's developmental outcomes depend on how relatable adults are to them and how well adults provide a secure base for self-exploration. Attachment theory implies that the early childhood educator, a trusted adult in the classroom, is responsible for ensuring a secure and responsive relationship with each child conducive to growth.

AT encourages teachers to be a secure base for every child. However, ensuring that attachment security is offered to each child is challenging, particularly when applied cross-culturally (Graham, 2022; Iruka et al., 2020). Stern et al. (2022) critique AT for falling short of addressing the effects of systemic racism and cultural strengths on Black youth development, which Causadias et al. (2022) argue is mainly due to the under-representation of Black and Brown attachment theory scholars and a lack of centering Black lives and experiences. CRAT is a comprehensive way of viewing how the social-emotional needs of racially marginalized children and their teacher's management of implicit racial biases are intrinsically connected to the child's outcome.

## Conclusion

With the growing diversity of children in American classrooms, teachers are challenged to meet the varied needs of children without bias. Unfortunately, teachers can be unaware of their implicit racial bias that they may bring into the classroom and project onto Black children, impacting these children's socioemotional development, particularly young pre-K children. These microaggressions, influenced by larger societal beliefs and practices manifested in the pre-K classroom, can be detrimental to a young child's internal working model. One way to view the problem is through a macro-level critical race framework, which examines the interrelated systems that impact schooling and educational policies. Another way to view the problem is by examining the teacher-child relationship through a micro-level framework such as attachment theory. Whereas both established theories have pros and cons regarding how to address the understanding of the problem, a new multifaceted theory could best help analyze the problem's complexity.

To move understanding forward, there needs to be reimagined safe spaces for Black children to experience secure bonds in the classroom. CRT and AT are theoretical frameworks that use siloed and presumably incompatible understandings to analyze the teacher-child relationship. This paper proposes a comprehensive synthesized theory called critical race attachment theory (CRAT). The concept of critical race attachment theory was introduced in "Hip Hop in the Time of Trauma" (Benabdallah, 2020), which discussed and lived experiences of a Black child in the school system. Further testing and refinement may be needed on CRAT to impact teacher practices, school training, and educational policies.

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## MANUSCRIPT II

### **Associations Among Pre-K Teacher Race, Child Race and Gender, and Behavioral Reports**

This manuscript is prepared for submission to the peer-reviewed journal *Early Childhood Research Quarterly* and is the second of three manuscripts prepared for a journal-ready doctoral dissertation.

## Abstract

Black boys are disproportionately represented in statistics on disciplinary actions (Civil Rights Data Collection, 2021). Although evidence is abundant (Escayg, 2018; Legette et al., 2021; Okonofua et al., 2016; Staats, 2016) that supports this claim, there is a scant body of empirical research that focuses on proactive factors in the classroom to deter suspension and expulsion. The primary objectives of the current study were to examine the relationships among pre-K teachers' race and behavioral ratings based on the child's characteristics, including race and gender, and whether teacher-child racial match and teacher-child relationship would moderate that association. Data were previously collected by the National Center for Early Development and Learning (NCEDL) Multi-State Study of pre-Kindergarten and the State-Wide Early Education Programs (SWEEP) study (Early et al., 2013). The current study uses these data to examine 470 Black and White teacher-child pairs from an existing dataset. The study uses standardized scales such as the Teacher-Child Rating Scale, which measures children's behavior problems and competencies at school; the Student-Teacher Relationship Scale (STRS), which measures child-teacher relationships; and the teacher-child racial match was dummy coded to include match and mismatch pairs of Black and White teachers and children. *Critical race attachment theory* (CRAT) was used as a theoretical framework to contextualize and justify the importance of the selected variables. Findings from running a multiple regression indicated no significant differences in ratings racially but boys received higher behavioral ratings than girls. *Keywords: pre-K behavior problem ratings, teaching-child racial match, teacher-child relationship, child outcomes, critical race attachment theory (CRAT)*

## **Associations Among Pre-K Teacher Race, Child Race and Gender, and Behavioral Reports**

### **Introduction**

The teacher-child relationship is vital because it builds a foundation for trust, developmental milestones, social-emotional growth and regulation, and creating secure relationships throughout the lifecycle (citation needed here to document teacher-child attachment). Children thrive in nurturing, predictable, responsive, and secure relationships (Pianta & Stuhlman, 2019; Verschueren & Koomen, 2012). There are factors such as race, gender, teacher-child racial match/mismatch, teacher-child closeness, and conflict that influence teacher-child interactions (Escayg, 2018; Graham, 2022). A teacher's internalized racial perceptions (Legette et al., 2021) profoundly affect how they interact with children and how children and their peers relate to one another within the classroom (Brophy & Good, 1986).

Although most teachers have good intentions to treat children fairly, research suggests that Black children and boys are treated differently than their White peers based on the teacher's perception of the child's behavior and the teacher's race (Gilliam et al., 2016). Teachers' biased perceptions may lead to racialized disciplinary actions toward Black children, justified by high behavior problem ratings (Harry & Anderson, 1994; Skiba et al., 2002). The child's gender may also play a significant role in the teacher's perceptions of the child's behavior problem. Boys represented more suspensions and expulsions than girls, and the disproportionality increased for Black children. For example, in 2017 – 2018, Black pre-K children received one or more suspensions 2.5 times greater than other racial groups of pre-K children. Although only being 18.2% of total pre-K enrollment (Civil Rights Data Collection, 2021), 35.8% of pre-K children expelled were Black boys. Black preschool girls accounted for 8.6% of total preschool enrollment but received 9.1% of one or more out-of-school suspensions (CRDC, 2021). Not all

teachers' behavior problem ratings of Black boys (and girls) are racially biased or inaccurate. However, Black boys and other children of color are rated more severely and frequently than their White peers (Zimmerman & Kao, 2020).

### **Purpose, Guiding Questions, and Hypotheses**

Despite the importance of this topic, the examination of conjoint protective factors, such as teacher-child racial match and teacher-child relationship, are scantily addressed in the literature. Many empirical studies (Downer et al., 2016; Iruka et al., 2023; Pianta et al., 2021) have focused primarily on the child's low socioeconomic status, race, and classroom behavioral problems. While a few studies (Blazar, 2021; Redding, 2019) have centered the influences of the child's characteristics on teachers' differential report of behavioral problems, they are not empirical. Several empirical studies are deficit-based focusing solely on the problem offering no tangible solutions (Downer et al., 2016; Gilliam et al., 2016; McGrady & Reynolds, 2013; Milfort & Greenfield, 2002). Some studies had similar research topics but had small local dataset (Milfort & Greenfield, 2002; Yates & Marcelo, 2014). To address these limitations, the current study used an available dataset and quantitative, non-experimental approach to examine the association between pre-K teachers' problem behavior ratings of children based on the teacher's race, the child's race, and the child's gender. Additionally, moderators, namely teacher-child racial match and teacher-child relationship, are explored to understand the potential buffering of high teacher-rated behavior problems for Black children. The purpose of this study is to examine protective factors drawing on *critical race attachment theory* (CRAT). This study explores protective factors in the classroom that moderate the association between a child's characteristics and child outcomes. Given the intersectional predicting variables (child's race and gender), hierarchical variables (teacher's race), and mitigating variables (teacher-child racial match and

teacher-child relationship) with projected child outcome variable (child's behavioral problem rating by teacher), CRAT is suited to contribute foundational understandings to a multilevel problem.

The current study utilized some of the benefits of an existing dataset from a large combined longitudinal study, the National Center for Early Development and Learning (NCEDL) Multi-State Study of pre-Kindergarten and the State-Wide Early Education Programs (SWEEP) study (Early et al., 2013) included a cross-section of teachers and children from different races, socioeconomic statuses, states, and genders. Three guiding questions and eight hypotheses directed the current study:

**Research Question 1.** Are there any differences in teacher-reported child behavioral ratings based on child characteristics such as race and gender?

Hypothesis 1-1. Black children are more likely to have higher behavioral problem report ratings than White children.

Hypothesis 1-2. Boys are more likely to have higher behavioral problem report ratings than girls.

**Research Question 2.** Does teacher-child racial match moderate the association between child characteristics (race and gender) and teacher-rated behavioral problems?

Hypothesis 2-1. Black children are more likely to have higher teacher-rated behavioral problems from White teachers than from Black teachers.

Hypothesis 2-2. Boys are more likely to have higher teacher-rated behavioral problems from White teachers than Black teachers.

**Research Question 3.** Does the teacher-child relationship moderate the association between child characteristics and teacher-rated behavioral problems?

Hypothesis 3-1. Black children are expected to receive lower teacher-rated behavioral problems from teachers with whom they have a close relationship than from teachers with a conflicted relationship.

Hypothesis 3-2. Boys who have a close relationship with their teachers are more likely to have lower behavioral problem ratings than boys who have a conflictual relationship with their teachers.

Hypothesis 3-3. Black children are expected to receive higher teacher-rated behavioral problems than White children from teachers with whom they have a conflictual relationship.

Hypothesis 3-4. Boys with conflictual relationships with their teachers are more likely to have higher behavioral problem ratings.

## **Literature Review**

### **Social Skills and Behavioral Problems Among pre-Kindergarteners**

Young children acquire prosocial behaviors, such as sharing, negotiating differences, problem-solving, helping, comforting, and regulating aggressive behaviors through experiences that receive favorable responses from parents, other adults, and peers (Davies, 2011). Prosocial skills that are age- and developmentally appropriate for three- and four-year-old children are necessary for socioemotional mastery and healthy relationships (Davies, 2011). However, young children who have limited prosocial skills can experience acting out, shyness or anxiety, and learning problems, which can be conceptualized as behavior problems (Miller et al., 2007),

There are two forms of behavioral problems: internalizing behaviors (such as sadness and social withdrawal) and externalizing behaviors (such as fighting and verbal outbursts) (Gresham & Elliott, 1990). Because internalized behaviors can manifest as acting out behaviors and can be misconstrued as such, this study focuses on easily identifiable externalized behaviors.

Externalizing behaviors associated with disruptive expressions receive more attention from teachers than internalizing behaviors (Gregory et al., 2010). Aggressive behaviors include instrumental, hostile, overt, and relational, with instrumental aggression being the most common form of externalizing behaviors (Woolfolk, 2004). Specifically, instrumental aggression typically occurs among young children and is intended to gain an object or privilege, as in snatching a ball or toy from another child. They develop a desire to get what they want without intentionally harming another person, which often results from their cognitive immaturity, limited ability to use other forms of communicative tools such as language, and lack of self-regulation, which are considered typical behaviors in this developmental period (Willis, 2016; Woolfolk, 2004).

### **Teacher Perception of Behavioral Problems Varied by Child Race and Gender**

Research has found significant associations between child race and teacher perception of behavioral problems often related to teachers' expectations of particular racial groups (de Boer et al., 2018; Tenenbaum & Ruck, 2007). For example, multiple studies (Girvan et al., 2017; Noguera, 2017; Okonofua et al., 2016) have found that White pre-K teachers often view young Black children as displaying more aggressive behaviors than White children (such as hitting, biting, and territorial in play) and have lower expectations (for example scaffolding to do just enough to get to the next task) and tolerance of them. These Black children receive high ratings on behavioral problem reports and are often suspended.

In pre-K settings, children experiencing emotional difficulties may be treated differently based on the enforcement of school behavioral codes, which can be subjective depending on the situation, teacher, teacher's attitude, and the race and socioeconomic status of the child (Gilliam, 2005). In Barbarin and Crawford's (2006) study on pre-K program quality and program outcomes, observers noted that in many pre-K and kindergarten classrooms, they visited, a single



child was separated from the group and placed at a desk next to the teacher's desk. These children were considered "difficult" and "disruptive" and were usually Black boys. Barbarin and Crawford (2006) wrote that, "The singling out of children this way effectively assigned them to the stigmatized roles of a troublemaker or bad child" (p. 80). Good and Brophy (1994) added to the preponderance of literature that negatively biased expectations and assessments of children's behaviors would likely be based on or influenced by social class, race, and other child characteristics.

Extending the context of invisibility, one can argue that young Black children in early childhood settings are invisible when in need of protection from exclusionary practices but quite visible when problematic behaviors surface. Thus, these young Black children are more at risk for harsher disciplinary actions, partly due to perceived behaviors (Goff et al., 2014). Over the past thirty years, research has shown that Black children are disciplined at rates that far exceed their statistical representation, particularly on measures of suspension and expulsion, in almost all primary school systems (Children's Defense Fund, 2020; Drakeford, 2004).

Child gender is also a factor in predicting teacher ratings of behavior problems (Patterson et al., 1990). It has been identified as an essential element in teachers' judgments about children (Saft & Pianta, 2001). Specifically, boys are more likely than girls to receive higher ratings on the externalizing behavioral problem scales. Ewing and Taylor (2009) argue that girls tend to have a higher teacher rating on teacher-child relationship closeness, and closeness is a stronger predictor of social competence for girls than boys. Contrastingly, boys tend to receive higher ratings of teacher-child relationship conflict, and conflict is a stronger predictor of problem behaviors for boys than girls (Ewing & Taylor, 2009). Other possibilities include differences in socialization and behavioral expectations of boys instead of girls.

Several sound reasons justify examining whether teachers' perceptions of children's behaviors vary by children's characteristics, such as their race and gender. An example of these racialized and gendered differences is present in a small yet compelling body of literature, which further reveals that teachers are most likely to discipline Black boys even when boys and girls of other races participate in identical behaviors (McCadden, 1998). This evidence furthers the need for an examination of the overrepresentation of Black boys in harsher classroom treatment and calls for studies that reduce this trend of overrepresentation of Black boys that results from teachers' potential stereotyping and bias toward these children.

### **Protective Factors for Overrepresentation of Teacher-Rated Behavioral Problems Among Black Children**

Studying the potential protective factors to divert the spiraling advancement of Black children, particularly Black boys, in the school-to-prison pipeline is necessary to redirect them to more positive trajectories. The negative trend can take root as early as in the pre-K classroom, where behavioral problems and suspension tendencies can manifest. The teacher's behavioral problem reports are crucial to exploring diversionary strategies in the pipeline. With potential problems noted in the classroom, so should potential solutions. There is a plethora of potentially protective factors that may mitigate biased teacher ratings related to behavior problems of Black children and boys, such as teacher-parent relationships, but classroom interactions are essential to examine teacher-rated problem behaviors as past research has indicated (Brock & Cumby, 2014; Pianta et al., 2012). Therefore, this study focuses on the teacher-child dyad, including teacher-child racial match and teacher-child relationships within the classroom.

### ***Teacher-Child Racial Match***

The effects of the teacher-child racial match on the perception of a child's behavioral problems are essential in understanding Black children's social and cognitive development. Teachers' perceptions of children's behaviors differ by the teacher's race. For example, as suggested in a previous study (Gilliam et al., 2016), Black and White teachers both focused on potentially disruptive classroom behaviors of preschool Black boys, but for different reasons, such as improved academic and behavioral outcomes (Dee, 2004; Egalite & Kishida, 2015; Gershenson et al., 2017; Villegas & Irvine, 2010). Black teachers tended to have a "parental protective" interest in Black boys, while White teachers tended to be more suspicious of the Black boys' physical movements and behaviors. McKinney de Royston and colleagues (2020) explain this parental-protective role of Black teachers as disrupting the "racialized harm produced within schools to instead (re)position Black students as children worthy of protection via caring relationships, alternative discipline policies, and other interpersonal and institutional mechanisms (p. 1)." Furthermore, Black teachers were more sympathetic and relational, given contextual information about the child's behavior, as opposed to White teachers who remained suspicious (Foster, 1990; Gilliam et al., 2016; Irvine & Fraser, 1998; Ladson-Billings, 1997; Ware, 2006). Additionally, Murray and Murray's (2004) study showed that Black teachers preferred the more independent style of Black children, in which many Black boys engage.

Beyond teacher race, the teacher-child racial match can be a factor regarding teachers' perception and potential bias toward children, which may be associated with their interactions and assessments of children's development (Ramirez et al., 2019; Zumwalt & Craig, 2008). The racial differences between teachers and children have been a source of misunderstandings, stress, and tension, leading to misconceptions about children's needs and abilities (Cholewa & West-

Olatunji, 2008; Downer et al., 2016) while teachers tend to assess same-race children's performance skills more favorably (Ouazad, 2014). For example, Downer and colleagues (2016) conducted a secondary analysis on a large multi-state quantitative study of 721 state-funded pre-K classrooms in over 11 states that tested two hypotheses in the early 2000s. First, children would be perceived to be better adjusted at the beginning of pre-K when rated by a same-race teacher than by a different-race teacher. Second, children would demonstrate greater social and academic gains during the pre-K year in the classroom of a same-race teacher. They examined the associations between teacher-child racial/ethnic match and teacher assessments of children's behavioral skills. Findings indicated no differences between Black and White teacher ratings at the beginning of the year. However, as the year progressed, White teachers were more likely to rate Black pre-K children, particularly Black boys, more harshly than Black teachers.

The discrepancy in ratings was due to the perception that Black children had fewer gains and more behavior problems than White children, who were perceived to be poorly adjusted. The current study analyzed different variables (i.e., teacher-child relationship as moderator), and additional teacher demographics (e.g., degrees, years in the field) in the longitudinal study rendered contrasting results. Moreover, Hughes et al. (2005) and Peterson et al. (2016) carried out their studies on an older behaviorally challenging child population, with findings revealing racial biases and lowered expectations. White teachers rated their relationships with White and Hispanic children and parents more positively than with Black children and their parents and displayed racially based prejudiced attitudes.

These studies suggest a potential benefit for Black children of having a teacher from the same racial group for children to receive more favorable ratings on their behaviors, which had been identified in research nearly 90 years ago (Prosser, 1933). For Black children, this benefit

of having a teacher from the same racial group may be in part because teacher-child racial match tends to contribute to role model effects and a better understanding of children's background and behaviors and may reduce stereotype threat and teacher biases (Dee, 2004; 2005; Dee & Gershenson, 2017). In education and race, the role model effect acknowledges that exposure to one Black teacher in grades 3-5 increases the likelihood that Black children will attend college (Gershenson et al., 2018).

Research shows that non-Black teachers (including White, Asian, Native American, Pacific Islander, and Latino) not only have significantly lower expectations but also are more likely to give lower evaluations of Black children's future accomplishments and behaviors than Black teachers (Dee, 2005; Gershenson et al., 2016). Based on these findings, analyzing same-race and different-race teacher-child interactions gives context to developing equitable policies and practices. Given that approximately 80% of teachers are White females, there is a high probability that Black children will have White teachers for most of their educational course. These teachers may not be familiar with strategies to teach a diverse body of children (U.S. Department of Education, 2016).

Wishard et al. (2003) indicated that more significant patterns and cultural implementations in early childhood classrooms surfaced when analyzing teacher-child racial matches together, as opposed to teacher race and child race separately. Predictions of children's early childhood classroom experiences could be determined by three modestly significant contributions - teacher and child ethnicity, teacher and program practices, and classroom quality (Wishard et al., 2003). Based on the literature, this study will examine the teacher-child racial match as a protective factor and hypothesize that there would be higher ratings of the Black child's behavior problems when rated by a different-race teacher more than by a same-race teacher.

### ***Teacher-Child Relationship***

Previous research has recognized that the teacher-child relationship significantly impacts social-emotional child outcomes (Buyse et al., 2009; Hamre & Pianta, 2001; Roorda et al., 2011). Split and Hughes (2015) noted that based on Attachment Theory and socio-motivational pedagogies on learning, positive and effective relationships with teachers are believed to promote emotional security and engagement in learning activities, which are mandatory for adaptive school functioning (Pianta, 1992; Verschueren & Koomen, 2012). Further, having a positive close relationship can offer a deeper understanding, responsibility, and accountability for the teacher towards the child. Children who experienced close relationships with their teachers in the early school years displayed more social competence and fewer problem behaviors concurrently (Birch & Ladd, 1997; Ladd et al., 1999; Murray, 2009).

Research with older children found that teacher-child conflict was strongly linked to externalizing behaviors such as aggression, defiance, and antisocial peer interactions (e.g., Doumen et al., 2008). On the other hand, close relationships with their teachers were linked to better behavioral outcomes (Iruka et al., 2019; O'Connor et al., 2012). Teachers who are exposed to diverse cultures and who have positive experiences and cultural beliefs can mold classroom practices consistent with those beliefs, thus creating a safe space in which children learn and develop their abilities in the classroom (Jao, 2012; Legette et al., 2021; Miron, & Kelaher-Young, 2012; Waddell, 2013). Furthermore, evidence reveals child and teacher attributes account for between 4.5% and 27% of the explained variance in teachers' perceptions of relationship quality, most notably with higher predictions for relationship aspects that teachers experience as unfavorable or of concern (Saft & Pianta, 2001).

Further, researchers found variations in the quality of teacher-child relationships by child characteristics. The current study asks whether teacher-child relationships moderate the association between a child's gender, race, and social outcomes (teacher-rated behavioral problems). Previous research suggests that teacher-child relationships strengthen or weaken the association based on the relationship's quality (close or conflictual) of the relationship and the characteristics of the child. For example, boys tend to have higher conflictual relationships with their teachers than girls (Downer et al., 2016; Hamre & Pianta, 2001; Okonofua et al., 2016), and high-conflict relationships tended to strengthen the association between gender (boys) and poorer academic outcomes (Hamre & Pianta, 2001). Girls may seek more nurturing relationships with teachers, whereas boys are more inclined to present themselves as independent, resulting in less close teacher-child relationships for boys than girls (Ewing, 2009; Ewing & Taylor, 2009). Thus, girls' low-conflict and high-closeness relationship with teachers tended to positively affect girls' social and academic outcomes (Coley, 2001; Hamre & Pianta, 2001; Matthews et al., 2009; Pomerantz et al., 2002). This variation in the quality of teacher-child relationships by gender may moderate teacher behavior problem ratings.

Acknowledging that the child's race plays a role in teacher-rated behavioral problems (Okonofua & Eberhardt, 2015), the other component of the present study asks whether teacher-child relationships mediate this association. Relationships with teachers have a sustaining effect on children. In a longitudinal study by Hamre and Pianta (2001), 179 kindergartners were followed through to the eighth grade. Results indicated that teachers' perceptions of their relationships with their kindergartners predicted children's school outcomes up to middle school, including behavioral problems. Furthermore, Skiba et al. (2011) found that teachers' racialized interpretations of children's behaviors are likely to lead to racial disparities in

discipline across all education levels (Skiba et al., 2011). Similar results were revealed with specified negative teacher perceptions of Black boys in Legette et al.'s (2021) study involving 228 teachers. Legette et al. (2021) examine teachers' ability to attribute institutional racism to racial educational inequities to mitigate negative teacher-child relationships for Black children. Teachers with this nuanced understanding are more likely to provide equitable learning opportunities to children, acknowledge racially marginalized children's experiences with racism (Blaisdell, 2016), and apply more cognitive pliancy in their responses to child students (DeCuir-Gunby, 2020), all of which in turn have a probability of strengthening teacher-child relationships and encouraging children's achievement (Legette et al., 2021).

There are several gaps in the literature on the associations among child race, child gender, teacher race, teacher-child racial match, teacher-child relationship, and teacher-rated behavior problems:

1. There is a lack of research addressing potential protective factors (i.e., moderator) for problematic behavioral reports biased toward Black children and boys. Previous research focuses overwhelmingly on the deficit model, highlighting the negative consequence of biased behavioral problem ratings for Black children and boys without examining buffering or protective factors that could help mitigate the likelihood of the biased ratings.
2. The current literature does not address protective factors, including the racially and socially economically diverse population of pre-Kindergarten children using a longitudinal and large data set. This is important to detect widespread trends and the generalizability of potential solutions.
3. Past research was conducted on samples drawn from low-income contexts (Downer et al., 2016; Partee et al. 2022). Focusing on samples with a low-income context is problematic because the non-generalizability to other samples (e.g. mid- and upper- income contexts) with other similar characteristics such as race and gender.

The present study attempts to go beyond raising the problem by offering potential mitigation solutions by examining protective factors to overreporting behavioral problems perceived about Black boys. Thus, the current research uses a large data set that includes children from diverse



racial and socioeconomic backgrounds (as opposed to those of lower SES) to explore the potentially widespread practice of overreporting. Furthermore, a key component to centering Black children relies on a synthesized theory combining CRT and Attachment Theory as a comprehensive framework situating racialized and gendered pre-Kindergarten behavioral rating data.

### **Theoretical Framework**

Critical race attachment theory (CRAT, Benabdallah, 2020) informed this study's theoretical underpinnings. This framework aids in contextualizing the variables, selecting the population, and framing the results. The CRAT framework proposes to understand and analyze how systemic racism and biases manifest in early childhood classrooms through teacher perceptions and practices while focusing on attachment. The author developed a theoretical framework that draws from critical race theory (CRT; Crenshaw, 2011; Crenshaw et al., 1995; Delgado & Stefancic, 2001) and attachment theory (AT; Bowlby, 1982) to comprehensively explore the macrosystemic contributions of racism that occur in everyday teacher-child interpersonal relationships (in the form of explicit racism, implicit racial bias, or racialized microaggressions) that potentially affect outcomes (such as poor behavioral ratings) for young marginalized children. CRAT fits in the literature to bridge Critical Race Theory and Attachment Theory as the focus is to examine better child outcomes for all children in fair and equitable teacher-led early childhood classroom settings.

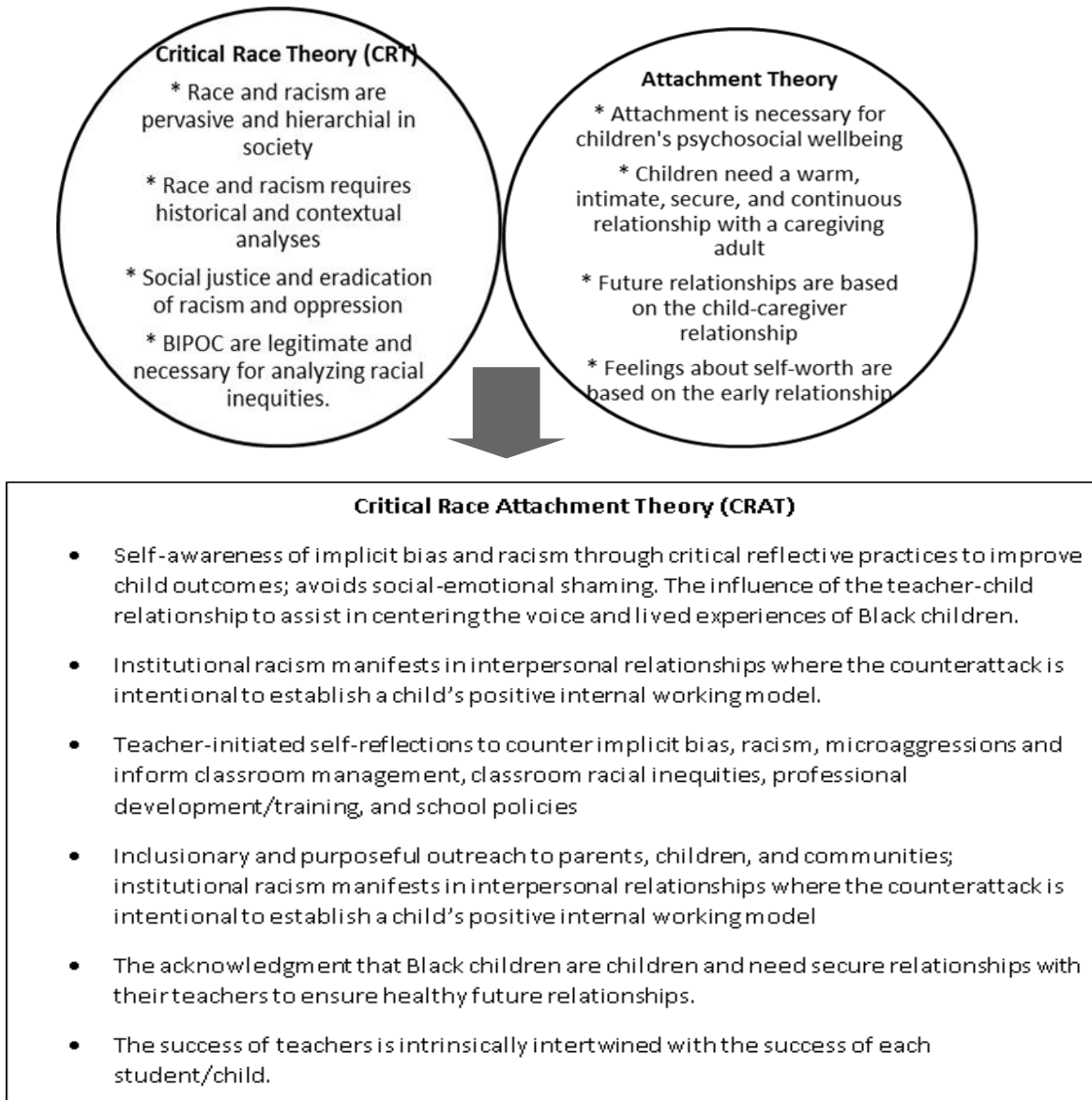
Critical race theory (CRT) highlights systemic racism in educational and legal systems. CRT bioecologically interrogates racist practices at the macrosystemic and exosystemic levels. Attachment theory (AT) points to significant interrelationships between a caregiving adult and a very young child-based on attachment. Critical race attachment theory (CRAT; Benabdallah,

2020) is employed in this study to examine the teacher as an attachment figure and a conduit of the school and educational systems in which they participate. Teachers' bidirectional socialization experiences (meaning society and organizations at a macro level scaffolds according to a set of beliefs and values to the individual who reciprocates by contributing those beliefs and values to society) occur within macrosystems and familial systems (Bronfenbrenner, 1998; Delpit, 2006). These systems influence and lay a foundation for how one feels, thinks, and acts toward oneself and others (Delpit, 2006). Internalized stereotypes of Black children being lazy, aggressive, unmotivated, less intelligent, and older (Rowley, 2014) while still helpless, joined with "colorblindness" and the banking deficit model (Freire, 2020; Ladson-Billings, 2021) are harmful and lead to racialized differences in teacher perceptions, practices, and interpretations of a child's behavior (Okonofua & Eberhardt, 2015).

In comparison with White children, Black children are viewed as more aggressive, overly emotional, and more likely to repeat a problematic behavior (Halberstadt et al., 2018; Rowley et al., 2014; Steele & Aronson, 2004; Weir, 2017). Contrastingly, teachers can scaffold young children by utilizing healthier and more diverse lived experiences to secure a close teacher-child relationship that affects child outcomes. CRAT connects and centers race, racial bias, socioemotional development of a child, and teacher cognitive awareness of equity via reflective practices as a congruent and comprehensive framework to examine developmentally and culturally appropriate practices and assessments of Black children. In so doing, CRAT posits that teachers with positive relationships with all children regardless of race and gender would produce behavior ratings that would not differ by children's characteristics.

**Figure 1**

*Synthesized Model of Critical Race Attachment Theory*



**Research Questions**

The current study utilized existing data from a large combined longitudinal study, the National Center for Early Development and Learning (NCEDL) Multi-State Study of pre-Kindergarten and the State-Wide Early Education Programs (SWEEP) study (Early et al., 2013).

Three guiding questions and eight hypotheses directed the current study:

**Research Question 1.** Are there any differences in teacher-reported child behavioral ratings based on child characteristics such as race and gender?

Hypothesis 1-1. Black children are more likely to have higher ratings on behavioral problem reports than White children.

Hypothesis 1-2. Boys are more likely to have higher ratings on behavioral problem reports than girls.

**Research Question 2.** Does teacher-child racial match moderate the association between child characteristics (race and gender) and teacher-rated behavioral problems?

Hypothesis 2-1. Black children are likely to have higher teacher-rated behavioral problems from White teachers than from Black teachers.

Hypothesis 2-2. Boys are more likely to have higher teacher-rated behavioral problems from White teachers than Black teachers.

**Research Question 3.** Does the teacher-child relationship moderate the association between child characteristics and teacher-rated behavioral problems?

Hypothesis 3-1. Black children are expected to receive lower teacher-rated behavioral problems from teachers with whom they have a close relationship than from teachers with a conflicted relationship.

Hypothesis 3-2. Boys who have a close relationship with their teachers are more likely to have lower behavioral problem ratings than boys who have a conflictual relationship with their teachers.

Hypothesis 3-3. Black children are expected to receive higher teacher-rated behavioral problems than White children from teachers with whom they have a conflictual relationship.

Hypothesis 3-4. Boys with conflictual relationships with their teachers are more likely to have higher behavioral problem ratings.

## **Method**

### **Inclusion and Exclusion Criteria**

This study excluded the cases if the child's race, teacher's race, or behavioral were missing. Over 35% of the data were missing and had to be excluded from the study. Regarding teacher and child race, cases were excluded if either were not clearly indicated as Black or White and English-speaking. For teachers and children's families, all income and educational levels were included. For teachers, all degree levels and professional experience were included.

### **Participant Characteristics**

The primary data were collected on a stratified random sample of 721 state-funded pre-K classrooms (generated from each state's department of education list), selecting a teacher from each site. Given the focus of this study the first examination step involved extracting data only on participants who indicated that they were either Black or White for analysis and children who, in addition to race, were identified by gender (boy or girl, as defined by the longitudinal study). Secondly, of these participants, only those children who received teacher-child relationship and teacher-rated behavioral problem scores were included in the final sample.

After the sample size, key variables were determined, and data were analyzed for salient variables, concluding with a sample size of ( $N = 355$ ) for teachers and ( $N = 470$ ) for children for the current study. Black teachers represented a significantly smaller proportion of the sample (19%;  $n = 67$ ) than White teachers (81%;  $n = 288$ ). However, these percentages are reflective of the larger population. Black children's sample size was 20% ( $n = 96$ ). Black boys were 50% ( $n = 48$ ), and Black girls were 50% ( $n = 48$ ) of the sample of Black children. In comparison, White

children represented 80% ( $n = 374$ ) of the sample, with White boys at 48.7% ( $n = 182$ ) and White girls at 51.3% ( $n = 192$ ). Regarding gender, the sample was nearly equal between boys (49%  $n = 230$ ) and girls (51%;  $n = 240$ ). The children were 3 – 4 years old and from various socioeconomic statuses.

## **Measures**

### ***Teacher Ratings of Child Behavior Problems***

Hightower's Teacher-Child Rating Scale (TCRS) is a 38-item teacher-report measure of children's behavior problems and competencies at school (Hightower et al., 1986). Hightower et al. (1986) developed this scale so that eighteen items measure behavior problems (acting-out behavior, shyness/anxiety, learning problems) on a 5-point scale ranging from 1 = not a problem to 5 = very serious problem. Twenty items measure child competencies (assertive social skills, task orientation, frustration tolerance, peer social skills). Hightower's TCRS is a 5-point Likert scale with each item rated for how well it describes the child, ranging from 1 = not at all to 5 = very well. On a scale ranging from 1 to 5, teachers rated each statement based on the teachers' understanding of the child's behavior. The response scale for the Behavior Problems items was 1 = Not a problem, 2 = Mild, 3 = Moderate, 4=Serious, and 5 = Very serious problem. The Total Behavior Problems score was analyzed and has demonstrated internal consistency ranging from 0.85 to 0.95 in previous research (Hightower et al., 1986). Additionally, Hightower et al.'s (1986) research produced a median score of .91 for Cronbach's alpha and test-retest coefficients' median score of .83, ranging from 0.61 to 0.91 with administering intervals of 10- and 20-weeks.

The Total Behavior Problems measure consists of 18 items (Acting Out, Shyness/Anxiety, and Learning Problems subscales). A higher score reflects more behavior

problems in the classroom. Acting Out consists of six items ("Disturbs others while they are working"). A higher score reflects more acting-out behavior in the classroom. Shyness/Anxiety means six items ("Nervous, frightened, tense"). A higher score reflects more shyness and social anxiety in the classroom. Learning Problems consists of six items ("Underachieving (not working to ability)"). A higher score reflects more difficulties with behaviors related to learning in the classroom. The author used a mean score for Total Behavior Problems.

### ***Teacher-Child Racial Match***

Racial data for teachers were collected from existing scales and measures completed by teachers indicating their demographic information, educational background, and ratings of children in the Fall and Spring of the educational year. Racial data for children were collected from existing scales and measures completed by the children's families. Most children who participated in the study had consistency with the same teachers in the Fall and Spring. The children's parents provided demographic information about the children and their families, also collected from existing measures.

Dummy variables were created to indicate teacher-child racial match or mismatch. The child's race was dummy-coded Black = 0 and White = 1 (not Black). Teacher race was coded Black = 0 and White = 1 (not Black). Thus, Black Teacher-Black Child match (Black\_Match) = 0, 0; White Teacher-White Child match (White\_Match) = 1, 1; Black Teacher-White Child mismatch (BTWC) = 0, 1; and White Teacher-Black Child mismatch (WTBC) = 1, 0. Other races indicated in the original study included coding for Latino, Native American, and Asian. All other races except for Black and White were excluded from the analysis.

### ***Child-Teacher Relationship Scale***

The 15-item 5-point Likert scale short version (STRS-SF) was implemented in the current study (Pianta, 2001). The STRS is a self-report measure that assesses teachers' perception of their relationship with a particular child in a classroom setting. The theoretical foundation for STRS is based on attachment theory and research on parent-child and teacher-child relationships (Pianta & Nimetz, 1991). The teacher self-report scale indicates Closeness and Conflict relationship quality subscale scores. The subscale scores of Closeness and Conflict were used for analysis in the current study. Conflict measures the degree to which a teacher perceives the relationship with a child as negative and conflicting. Closeness measures the degree to which a teacher experiences affection, warmth, and open communication with a child. Conflict inversely moderates the association between child characteristics and behavioral problem rating. The lower the teacher-child conflictual relationship rating, the more likely it will function as a buffer to higher behavioral problem scores.

On the other hand, closeness directly moderates the association between child characteristics and behavioral problem rating. The higher the teacher-child close relationship rating, the more likely it will function as a buffer to higher behavioral problem scores. In the original study, the Cronbach's alpha for the Total scale was 0.89. Cronbach's alpha for conflict was 0.92, and for closeness, it was 0.86 (Early et al., 2013; Pianta, 2001). Early et al. (2013) used a normative sample in their primary study. A normative sample is a subgroup within a population that assesses what is normal for that population (Edupedia, 2022). Reliability for the Dependency subscale was 0.64, which is not as high, was indicated in the primary study (Early et al., 2013). Researchers from the primary study (Early et al., 2013) noted that reliability estimates for each STRS scale and subscale for boys were 0.74, and for girls was 0.74. The total normative sample



was slightly higher for reliability estimates than for each race/ethnic group reported. Estimates of test-retest reliability and stability of the STRS were obtained from a subsample of the normative sample indicated in the primary research (Early et al., 2013). In the primary research, these statistics (Early et al., 2013) were indicated - for the subsample of 24 kindergarten teachers, each reporting on three students (N=72), the STRS was completed twice during a 4-week interval. Test-retest correlations were closeness at 0.88, Conflict at .92, and Total at .89, with a  $p < .05$  significance for all subscales.

Studies (Mason et al., 2017; Pianta & Stuhlman, 2004; Hamre & Pianta, 2001) indicate that the STRS correlates in predictable ways with concurrent and future measures of academic skills. The STRS scale and subscales show strong evidence for concurrent and predictive validity. In expected directions, a moderate degree of association was found with the Teacher-Child Rating Scale (Hightower et al., 1986).

## **Data Collection**

### ***Primary Study Data Collection***

Eleven states were selected based on their significant contribution to resources supporting pre-K initiatives. States were selected to maximize diversity, including geography, program settings (public school or community setting), program intensity (full-day vs. part-day), and teachers' educational credentials. In each state, a stratified random sample of 40 centers/schools was selected from the list of all the schools/centers or programs provided by each state's education department. The original data were collected on a stratified random sample of state-funded pre-K classrooms (generated from each state's department of education list), selecting a teacher from each site using a combination of standardized instruments and observations. Data were collected once at the beginning of school in the Fall and once towards

the end of the school year in the Spring. Data about the child's race were collected from the child's family on the questionnaire from the original data. Teachers completed a survey regarding the child's behavior problems each time (Fall and Spring of pre-K).

### ***Secondary Data Analysis (SDA) Data Collection***

The author used the previously collected data on demographic information, child behavioral problems, and teacher-child relationships and created a teacher-child racial match variable using child and teacher race data. For this study's SDA data collection, the author identified and obtained appropriate SDA data, repeatedly analyzed the overall quality of the data, determined any limitations inherent in the original study, and assessed for appropriate fit between the purpose and variables in the of the original study and the purpose of the current SDA study (Wickham, 2019).

### **Research Design**

The study's design focused solely on the potential predictive effects of race and gender and mitigating effects of racial match and relationships on child outcomes. Additionally, given the nature of the research, the design is observational and retrospective (Wickham, 2019). CRAT informed the design of the study as it provided an understanding of the potential discriminatory microaggressions that may occur in the classroom based on the child's race and gender and the teacher's race. The study explores that regardless of socioeconomic status, job training, experience, age, and college degrees, would female teachers rate Black children higher on behavior problem ratings (regardless of their parents' income, career, college degrees, and the number of children). If so, the study examines whether teacher-child racial match or teacher-child relationship moderates that association.

## **Data Analysis**

The data set has two time points for all key variables. Time 1 data (fall score) were used for protective factor variables (i.e., teacher-child racial match, teacher-child relationship), and Time 2 data (spring score) were used for the outcome variables (teacher report of behavior problems). Data analyses were conducted using SPSS. Descriptive analyses were conducted to obtain information on the critical variables' frequencies, percentages, mean scores, and standard deviation, including child race, child gender, teacher race, and teacher-rated behavioral problems. Preliminary analyses included the Levene F test, which assesses the assumption of homogeneity of variance. Levene's test was conducted to test the assumption that variances of two different sample populations are equal (Levene, 1960).

To address the research questions, an independent t-test was conducted to test potential statistical differences between the means of two groups including teacher ratings on child behavioral problems between Black and White children and teacher ratings on child behavioral problems between boys and girls. Multiple regression was conducted to examine the teacher-child racial match's main effects and moderation effects on the associations between the key independent variables (race, gender, teacher-racial match) and the dependent variable (teacher-rated behavior problems). Furthermore, multiple regression was conducted to examine the teacher-child relationship's main effects and moderation effects on the associations between the key independent variables and the dependent variable.

## **Results**

Table 2 presents descriptive statistics of critical variables conducted in SPSS (version 28), including data within normal ranges, means, and standard deviations to justify using inferential statistics applied to the population.

**Table 2***Descriptive Statistics of Key Variables (N = 470)*

<b>Variable</b>	<b>Sample Size (%)</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Range</b>
Black Teachers	67 (19%)			
White Teachers	288 (81%)			
Black Children	96 (20%)			
Boys	48 (50%)			
Girls	48 (50%)			
White Children	374 (80%)			
Boys	182 (48.7%)			
Girls	192 (51.3%)			
Teacher-Child Close Relationship		4.38	.59	1 - 5
Teacher-Child Conflict Relationship		1.59	.67	1 - 5
Behavior Problem		1.49	.53	1 - 5

Three guiding research questions were examined for this study, and the results are presented below, involving child race, child gender, teacher race, teacher-child racial match, teacher-child relationship, and teacher-rated behavioral problems.

### **Teacher-Reported Behavioral Problems Based on Race**

The analyses for research question #1 are discussed here for race and in the following section for gender. *Research Question 1. Are there any differences in teacher-reported child behavioral ratings based on child characteristics such as race and gender?*

Prior to conducting the main analysis for research question #1, the Levene's F-test was conducted to assess the assumption of homogeneity of variance of sample populations of pre-K Black ( $M = 1.47, S.D. = .54$ ) and White children ( $M = 1.50, S.D. = .53$ ). The result of Levene's F-test is  $F = .035, p > .05$  indicating similar variance estimates in the two group means and meeting this assumption underlying the planned t-tests. Therefore, we accept the null

hypothesis, assuming no relationship exists between the variables of a sample population (Ford, 2018).

The first independent t-test compared the mean teacher-rated problem behavioral scores of pre-K Black children and pre-K White children. The child sample is ( $N = 470$ ). Of this sample pre-K White children were ( $N = 374$ ) associated with a teacher-rated problem behavior score of  $M = 1.50$  ( $S.D. = 0.53$ ). By comparison, pre-K Black children ( $N = 96$ ) were associated with a numerically smaller teacher-rated problem behavior score  $M = 1.47$  ( $S.D. = .54$ ). In the main analysis, the t-value = 0.4928,  $df = 468$ , two-tailed p-value = 0.6224 (one-tailed p-value = 0.3112) indicate that the difference in the sample means is not significant.

The alpha level used in the analyses to determine significance is p-value is 0.05. Therefore, we can conclude that there is no statistically significant difference between the teachers' ratings of behavioral problems for the Black and White pre-K children in the study. This finding has important implications for our understanding of the relationship between race and teacher-reported behavioral problems. It challenges the hypothesis that Black children are more likely to have higher ratings on behavioral problems than White children, based on the data in this study.

### **Gender and Teacher Rating of Child Behavioral Problems**

Like in the previous section, this section also addresses research question #1 but focuses on gender. In the preliminary analysis, Levene's F test was conducted to assess the assumption that variances of two different sample populations are equal (assumption of homogeneity of variance). The result of Levene's F test is  $F = 9.999$ . The p-value of Levene's test is  $p < .05$ . Therefore, we reject the null hypothesis and accept the alternative hypothesis. As with child race, in the main analysis, an independent t-test was conducted to compare the means of pre-K boys

and girls. Pre-K boys ( $n = 230$ ; 49%) were associated with a teacher-rated behavioral problem score  $M = 1.6121$  ( $S.D. = .56113$ ). Contrastingly, pre-K girls ( $n = 240$ ; 51%) were associated with a teacher-rated behavioral problem score  $M = 1.3790$  ( $S.D. = .47889$ ). The  $t$ -value = 4.835,  $df = 450.127$ . The two-tailed  $p$ -value is less than 0.0001. It is a widely accepted criteria that this difference is considered statistically significant.

From this result, it is inferred that there is a highly significant association between gender and problem behavior rating. Specifically, boys (both Black and White) generally receive higher ratings than girls, consistent with the literature. Hypothesis 1-2. Boys are more likely to have higher ratings on behavioral problems than girls. This prediction is confirmed. Child gender and teacher race crosstabulations revealed that of the 230 boys, 207 (90%) had White teachers and 23 (10%) had Black teachers. Of the 240 girls, 210 (88%) had White teachers, and 30 (12%) had Black teachers.

### **Teacher-Child Racial Match as Moderator to Behavioral Problem Ratings**

*Research Question 2. Does teacher-child racial match moderate the association between pre-K child characteristics (race and gender) and teacher behavior problem ratings?*

In Table 3, a basic multiple regression was conducted on teacher-rated behavior problems given by Black and White teachers to Black and White children with gender, race, and teacher-child racial match interaction terms and teacher-child closeness and conflict. This model explained 46.2% of the variance in the Problem Behavior rating. In this model, child gender was significant,  $t = -2.47$ ,  $p < .05$ . The assumption of child race as a predictor of teacher-rated behavior problems was not confirmed at Level 1,  $t = 0.92$ ,  $p > .05$ . The results of research question one confirms there are nonsignificant racial variations. Thus, no further analysis at Level 2 is needed. Hypothesis 2-1 states that Black children are more likely to receive higher

behavioral problem ratings from White teachers than Black teachers. The hypothesis was not confirmed.

**Table 3**

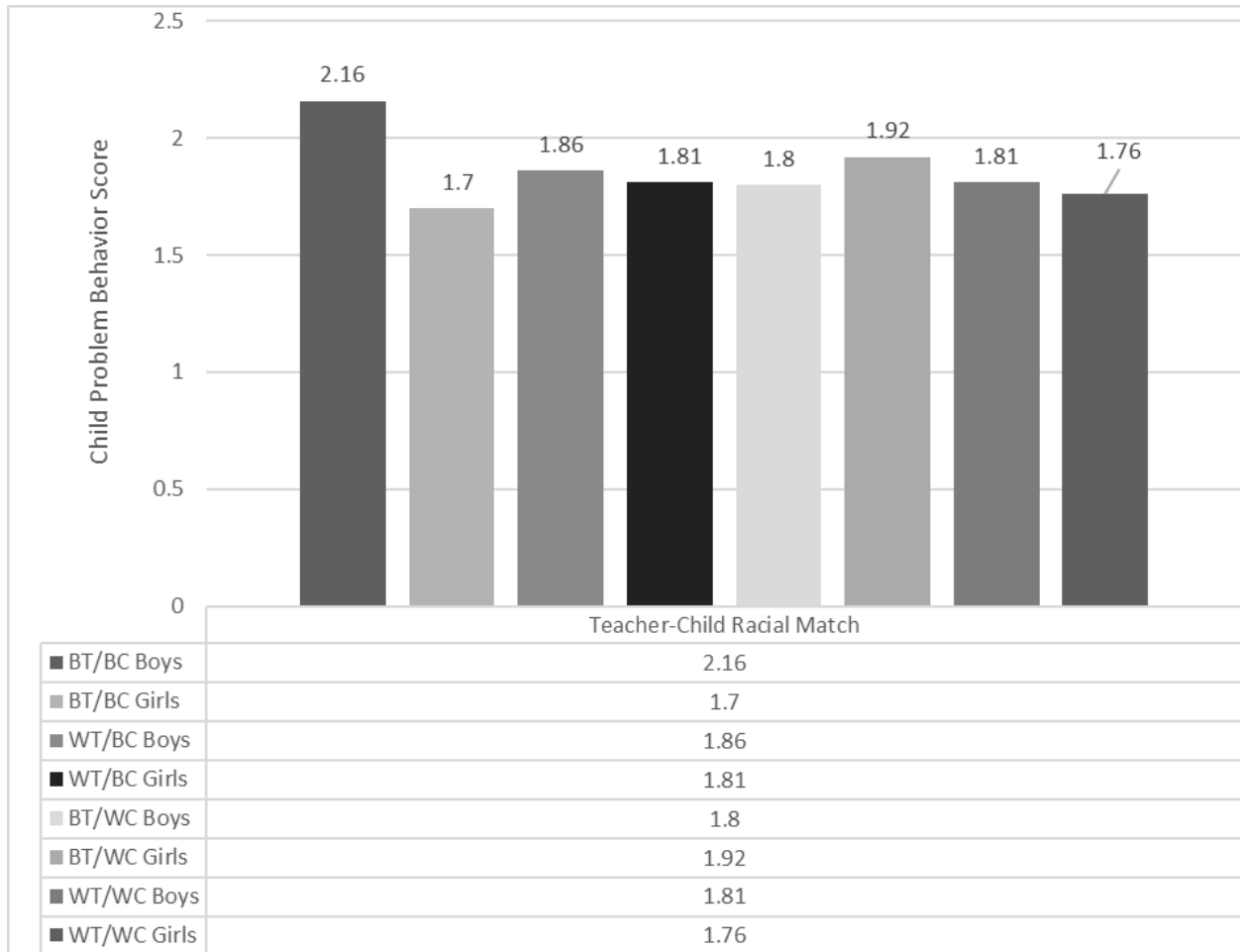
*Model Summary of the Basic Regression*

<b>Problem Behavior Score</b>	<b>Coefficient</b>	<b>S.E.</b>	<b>t</b>	<b>P&gt; t </b>	<b>95% conf. interval</b>	
Constant: WTBC Boy Mismatch	1.85	.23	8.20	0.00	1.41	2.30
Girl Student/Child Gender	-.09	.04	-2.47	0.02	-.16	-.02
Black Student/Child Race	.02	.09	0.26	0.80	-.15	.19
Teacher-Child Close Relationship	-.23	.04	-5.49	0.00	-.31	-.14
Teacher-Child Conflict Relationship	.43	.05	9.05	0.00	.34	.53
Black Match	.08	.09	0.92	0.36	-.10	.27
White Match	-.07	.09	-0.86	0.39	-.24	.10
BTWC Mismatch	.01	.11	0.10	0.92	-.21	.23

**Note:** WTBC Boy Mismatch is White Teacher/ Black Boy; Mismatch. Black Match is Black Teacher/-Black Child; White Match is White Teacher/White Child; BTWC Mismatch is Black Teacher/White Child Mismatch

**Figure 2**

*Means of Interaction Effects of Gender and Teacher-Child Racial Match*



**Note:** BT/BC Boys is Black Teacher/-Black Child Boys; BT/BC Girls is Black Teacher/Black Child Girls; WTBC. WT/BC Boys is White Teacher/Black Child Boys; WT/BC Girls is White Teacher/Black Child Girls; BT/WC Boys is Black Teacher/White Child Boys. BT/WC Girls is Black Teacher/White Child Girls. WT/WC Boys is White Teacher/White Child Boys. WT/WC Girls is White Teacher/White Child Girls. Black teachers rated Black boys higher than White teachers but both groups of teachers rated Black boys higher than White boys. Black teachers rated Black girls significantly lower than Black boys. Black teachers rated Black girls lower than White teachers. But rated White girls significantly higher than White and Black boys.

Besides race, the other moderation that research question two highlights is gender and teacher-child racial match interaction's effect on teacher-rated behavioral problems. Because gender was



a significant predictor of teacher-rated problem behavior, a deeper analysis was required to answer what made it significant when the teacher-child racial match was introduced as a moderator (as shown in Table 4). Additionally, Hypothesis 2-2. states that boys are more likely to have higher teacher-rated behavioral problems from White teachers than Black teachers. It was found that Black boys matched with Black teachers significantly predicted teacher-rated behavioral problems ( $\beta = 0.31$ ,  $S.E. = 0.14$ ,  $p < .05$ ) in the opposite direction of the prediction. In other words, rates for Black boys increased with same-race teachers. Contrastingly, results for Black girls matched with Black teachers significantly predicted teacher-rated behavioral problems ( $\beta = -0.47$ ,  $S.E. = 0.20$ ,  $p < .05$ ) inversely. Another way to analyze the means differences is shown in Figure 2. It shows that, on average, Black teachers rated boys higher (1.98) than White teachers (1.84). Black teachers tended to rate girls' behavioral problems (1.81) approximately the same as White teachers (1.79). However, Black teachers rated Black girls (1.7) the lowest of all gender-racial match combinations on behavioral problems.

**Table 4***Child Gender and Teacher-Child Racial Match Interaction Regression Model*

<b>Problem Behavior Score</b>	<b>Coefficient</b>	<b>S.E.</b>	<b>t</b>	<b>P&gt; t </b>	<b>95% conf. interval</b>	
Constant: WTBC Boy Mismatch	1.86	.22	8.41	0.00	1.43	2.30
Black Student Child Race	.03	.09	0.31	0.76	-0.14	.20
Teacher-Child Close Relationship	-.23	.04	-5.76	0.00	-.31	-.15
Teacher-Child Conflict Relationship	.43	.05	9.11	0.00	.34	.53
Girl Student Child Gender	-.06	.04	-1.41	0.16	-.14	.02
Black Match	.31	.14	2.23	0.03	0.03	.58
Girl Student Child Gender * Black Match	-.47	.20	-2.40	0.02	-.85	-.08

**Note:** WTBC Boy Mismatch is White Teacher/Black Boy Mismatch. Black Match is Black Teacher/Black Child Match. White Match is White Teacher/White Child. BTWC Mismatch is Black Teacher/White Child Mismatch.

## **Teacher-Child Relationship as Moderator to Behavioral Problem Ratings**

*Research Question 3. Does teacher-child relationship moderate the association between child characteristics and teacher-rated behavior problems?* Hypothesis 3-1 states that Black children are expected to receive lower teacher-rated behavioral problems from teachers with whom they have a close relationship than from teachers with whom they have a conflictual relationship. Hypothesis 3-2 states Boys who have a close relationship with their teachers are more likely to have lower behavioral problem ratings than boys who have a conflictual relationship with their teachers. Hypothesis 3-3 Black children are expected to receive higher teacher-rated behavioral problems than White children from teachers with whom they have a conflictual relationship. Hypothesis 3-4 Boys who have a conflictual relationship with their teachers are more likely to have higher behavioral problem ratings. Multiple linear regression was used to test if child gender, racial match, racial mismatch, teacher-child close relationship, significantly predicted teacher-rated behavioral problems. None of the interactions were significant,  $p > .05$ . The final set of regressions was designed to test the moderation effects of gender and race separately for teacher-child closeness and conflict, and these are provided in Tables 5 through 8.

**Table 5***Child Race and Teacher-Child Relationship: Closeness Interaction Regression Model*

<b>Problem Behavior Score</b>	<b>Coefficient</b>	<b>S.E.</b>	<b>t</b>	<b>P&gt; t </b>	<b>95% conf. interval</b>	
Constant: WTBC Boy Mismatch	1.85	.30	6.25	0.00	1.27	2.44
Girl Student/Child Gender	-.09	.04	-2.46	0.02	-.16	-.02
Teacher-Child Conflict Relationship	.43	.05	9.02	0.00	.34	.53
Black Student/Child Race	.02	.35	0.07	0.95	-.66	.71
Teacher-Child Close Relationship	-.23	.06	-4.01	0.00	-.11	-.34
Black Student/Child Race*Teacher-Child Close Relationship	-.00	.07	-0.00	1.00	-.15	.15
Black Match	.08	.09	0.92	0.36	-.10	.27
White Match	-.07	.09	-0.86	0.39	-.24	.10
BTWC Mismatch	.01	.11	0.10	0.92	-.21	.23

**Note:** WTBC Boy Mismatch is White Teacher/Black Boy Mismatch. Black Match is Black Teacher/Black Child Match. White Match is White Teacher/White Child. BTWC Mismatch is Black Teacher/White Child Mismatch.

**Table 6***Child Race and Teacher-Child Relationship Interaction: Conflict Regression Model*

<b>Problem Behavior Score</b>	<b>Coefficient</b>	<b>S.E.</b>	<b>t</b>	<b>P&gt; t </b>	<b>95% conf. interval</b>	
Constant: WTBC Boy Mismatch	1.80	.23	7.72	0.00	1.34	2.26
Girl Student/Child Gender	-.09	.04	-2.39	0.02	-.16	-.02
Teacher-Child Close Relationship	-.23	.04	-5.53	0.00	-.31	-.15
Black Student/Child Race	.17	.13	1.26	0.21	-.09	.43
Teacher-Child Conflict Relationship	.47	.06	8.40	0.00	.36	.58
Black Student Child Race*Teacher-Child Conflict	-.09	.07	-1.15	0.25	-.23	.06
Black Match	.09	.09	0.96	0.34	-.09	.27
White Match	-.08	.09	-0.97	0.34	-.26	.09
BTWC Mismatch	-.01	.11	-0.12	0.91	-.24	.21

**Note:** WTBC Boy Mismatch is White Teacher/Black Boy Mismatch. Black Match is Black Teacher/Black Child Match. White Match is White Teacher/White Child. BTWC Mismatch is Black Teacher/White Child Mismatch.

**Table 7***Child Gender and Teacher-Child Relationship Interaction: Closeness Regression Model*

<b>Problem Behavior Score</b>	<b>Coefficient</b>	<b>S.E.</b>	<b>t</b>	<b>P&gt; t </b>	<b>95% conf. interval</b>	
Constant: WTBC Boy Mismatch	1.82	.31	5.93	0.00	1.21	2.43
Black Student/Child Race	.02	.09	0.26	0.80	-.15	.19
Teacher-Child Conflict Relationship	.43	.05	8.94	0.00	.34	.53
Girl Student/Child Gender	-.03	.33	-0.08	0.94	-.68	.63
Teacher-Child Close Relationship	-.22	.06	-3.63	0.00	-.34	-.10
Girl Student Child Gender*Teacher-Child Close Relationship	-.01	.07	-0.20	0.85	.16	.13
Black Match	.08	.09	0.89	0.38	-.10	.27
White_Match	-.07	.09	-0.86	0.39	-.24	.10
BTWC Mismatch	.01	.11	0.10	0.92	-.21	.23

**Note:** WTBC Boy Mismatch is White Teacher/Black Boy Mismatch. Black Match is Black Teacher/Black Child Match. White Match is White Teacher/White Child. BTWC Mismatch is Black Teacher/White Child Mismatch

**Table 8***Child Gender and Teacher-Child Relationship Interaction: Conflict Regression Model*

<b>Problem Behavior Score</b>	<b>Coefficient</b>	<b>S.E.</b>	<b>t</b>	<b>P&gt; t </b>	<b>95% conf. interval</b>	
Constant: WTBC Boy Mismatch	1.84	.22	8.26	0.00	1.40	2.28
Black Student/Child Race	.02	.09	0.27	0.79	-.15	.19
Teacher-Child Close Relationship	-.23	.04	-5.54	0.00	-.31	-.15
Girl Student/Child Gender	-.07	.11	-0.68	0.50	-.28	.14
Teacher-Child Conflict Relationship	.44	.06	7.93	0.00	.33	.55
Girl Student/Child Gender*Teacher-Child Conflict Relationship	-.01	.08	-0.15	0.88	-.16	.14
Black Match	.09	.09	0.94	0.35	-.10	.27
White_Match	-.07	.09	-0.86	0.39	-.24	.10
BTWC Mismatch	.01	.11	0.09	0.93	-.21	.23

**Note:** WTBC Boy Mismatch is White Teacher/Black Boy Mismatch. Black Match is Black Teacher/Black Child Match. White Match is White Teacher/White Child. BTWC Mismatch is Black Teacher/White Child Mismatch.

### **Discussion**

The purpose of this study is to examine protective factors drawing on *critical race attachment theory* (CRAT). Based on the results, there is no statistically significant difference between the teachers' ratings of behavioral problems for the Black and White pre-K children in the study. Critical race attachment theory (CRAT; Benabdallah, 2020), a synthesized culturally responsive and developmentally appropriate framework, informed the current study by

examining the association between Black and White teacher-rated behavior problems of pre-K Black and White children. The theoretical framework used in this study is uniquely suited to help advance and justify the importance of focusing on the particular variables used. Central to the discussion are findings that are directly connected to the research aim and questions considering CRAT.

Regarding the main effects examined, the first research question asks, *are there any differences in teacher-reported child behavioral ratings based on child characteristics such as race and gender?* The first component of the question explores the mean difference in teacher ratings of behavioral problems between Black and White children. The results did not support this prediction. This could be explained by both Black and White teachers rating children based strictly on the child's behavior and not on the child's race. Contrastingly, in terms of CRAT's cognitive shifting, teachers may have consciously overcorrected their ratings of Black boys, instead of deeply reflecting, leading to an indistinguishable racial difference in the child outcomes. Overcorrection can show up as social desirability responding (SDR). SDR is the inaccurate answering of a participant's survey, questionnaire, or interview questions to portray oneself positively to others (Bergen & Labonté, 2020; McKibben & Silvia, 2016). To appear fair and socially desirable, teachers in the study may have intentionally rated Black boys higher or lower in behavioral ratings to mirror their peers. On the other hand, teachers may have engaged in components of CRAT to produce favorable outcomes although the research suggests the opposite (Gilliam et al., 2016). Neither over correction nor cognitive shifting can be fully explained due to the nature of the study as a secondary data analysis. Following up with the same teachers is impossible.



The nonsignificant behavioral problem ratings of Black boys are not supported by the literature (Downer et al., 2016; Gershenson et al., 2018; Iruka et al., 2010) but may be explained by a majority of White and Black teachers who rate pre-K children differently or more positively regarding the child's behavior. Downer et al. (2016) used the same dataset (Early et al., 2013) as the current study. However, they had findings that were more congruent with the literature stating higher behavioral problem ratings for Black and Latino children. One possible discrepancy between Downer et al.'s (2016) and the current study is that race/ethnicity was included in the Downer study, broadening the category of Latino or Black. For example, there are White-identified and Black-identified Latinos. How the child's family and the teacher identify can skew numbers, perceptions, and outcomes. The current study narrows race to Black-identified and White-identified participants for clarity. Another difference between the studies is that the current study does not examine school readiness or adjustment as outcomes but rather social-emotional outcomes. Given the probability that most Black children will have White teachers throughout their educational journey, it is important to further examine various angles of the potential challenges. CRAT supports the equitable treatment of all children but hypothesizes that this would not happen possibly due to biases, microaggressions, and racism. CRAT's hypothesis is not supported by this outlying finding but it is supported by literature (Escayg, 2018; Legette et al., 2021; Okonofua et al., 2016; Staats, 2016).

There were significant differences in teacher ratings of behavioral problems between girls and boys, which confirmed the prediction that boys are more likely to have a higher rating than girls in behavioral problems. Egalite and Kishida (2018) found that same gender matches positively influenced children's behaviors and closeness reports by both teachers and families' reporting about teachers. It is widely observed in the field that the majority of early childhood

educators are females and considering the same-gender closeness (Egalite & Kishida, 2018), the need for more male pre-K teachers may have an impact on these numbers. Also, these findings met expectations based on the current literature. One possible explanation is that when race is controlled for, Black teachers, like White teachers, rate boys higher with behavior problems (Gilliam et al., 2016). The literature also suggests that teachers underestimate the behavioral problems of girls along with gender bias in favor of girls that may be reflected in the underrating of girls' behavioral problem ratings, possibly influenced by a closer teacher-child relationship with girls (Ewing & Taylor, 2009; Saft & Pianta, 2001; Zee & Koomen, 2017). Although CRAT emphasizes fair treatment of all children, it hypothesizes that boys, particularly Black boys will be rated higher in behavioral problems. Findings supported the higher rating of all boys.

Regarding gender, Downer et al. (2016) produced different results. These discrepancies could be partly due to Downer et al. (2016) examining the moderation effects of gender and poverty status on teacher perceptions and academic and social adjustment. In the current study, gender is examined as an independent child characteristic moderated by teacher-child racial match and teacher-child relationship. The differences in the studies' moderators and key variables elicit contrasting outcomes. The current study was interested in determining if teachers' rating patterns differed based on teacher race and child race regardless of poverty status. In taking this approach, CRAT aimed to examine the universality of anti-Black racial discriminatory practices in the early childhood classroom instead of a combined socioeconomic and racial status that would make it difficult to make a definitive statement about either variable. Moreover, two moderators, teacher-child racial match and relationship, were examined to analyze the strength or weakness they placed on the association. This area requires greater

exploration, mainly because the findings contrast with a robust body of literature (Escayg, 2020; Gilliam, 2016; Graham, 2021).

Whereas the main effects test direct associations between an independent variable and a dependent outcome variable, the moderation effects examine the interactions between the independent variables. Interestingly, on the first level, between-group analysis of Black and White children's behavioral problem reports, White teachers did not rate Black children higher than Black teachers on behavioral problems. Although significant to the model, the teacher-child racial match was not a significant moderator for all Black children but rather for White children. An explanation for this result could be that more White children are racially matched with their teachers than Black children. Due to the more significant number of White teachers in the field, most Black children will have their behaviors rated by White teachers (Legette et al., 2021). In the current study, one explanation to explore is whether the teacher population was better trained or had more experience with diverse child populations. The longitudinal data included teachers' certifications and degrees; however, the current study examined if most teachers, regardless of certifications, degrees, and training, would rate Black children higher for problem behaviors.

Furthermore, Hypothesis 2-2 states that boys are more likely to have more serious teacher-rated behavioral problems from White teachers than Black teachers. Both Black and White teachers rated boys higher than girls. The lower problem behavior score for girls is consistent with the literature (Noguera, 2017). Moreover, Black teachers rated Black boys higher than Black girls on behavioral problems. This gendered pattern of protection by Black female teachers can offer insight into how these teachers navigate the complexities of race, gender, classroom management, racialized harm, caring, and hope. McKinney de Royston et al. (2021) illuminate in their research the intentional position of Black educators to disrupt the racialized

harm produced within schools by (re)positioning Black students as children worthy of protection via caring relationships, alternative discipline policies, and other interpersonal and institutional mechanisms. With Black girls, Black female teachers who were once young girls being taught by mostly White teachers can find themselves relating to Black girls, triggering a response of caring and protection that may be reflected in the low behavioral problem ratings. On the other hand, Black boys may be overprotected and held to higher behavioral expectations to counter what Rowley et al. (2014) call *Black boy narratives* (derogatory, adultified, criminalized, and racialized low expectations of Black boys). Another explanation is that some Black educators may engage in respectability politics by maintaining the status quo and internalized racism over the dignity of a child (McKinney de Royston et al., 2021). These findings did not confirm typical cross racial biases hypothesized by CRAT and contradicts an abundance of robust literature (Escayg, 2018; Legette et al., 2021; Okonofua et al., 2016; Staats, 2016) but boys of both races were rated higher than girls.

Finally, the moderation effect of the teacher-child relationship was tested on the association between child characteristics and teacher-rated behavioral problems. In this model, the main effect of teacher-child closeness and teacher-child conflict were found to be significant, but the moderation effect was not found to be significant. Teacher-child relationships did not mitigate the association between child race and teacher behavioral problem ratings. Nor did it influence the association between child gender and teacher behavioral problem ratings. These findings could be related to the less-than-strong association between child characteristics and teacher-rated behavior problems that made these moderators appear weak or less effective. More explorations are needed to understand whether specific effects are masked. CRAT highlights that secure teacher-child relationships would mitigate a child's social-emotional outcome. Given the

findings, this hypothesis is not confirmed. However, the literature confirms that a secure teacher-child relationship has a positive influence on a child's social-emotional outcome (Buyse et al., 2009; Hamre & Pianta, 2001; Roorda et al., 2011; Split & Hughes, 2015).

This study was guided by an anti-bias/anti-racist culturally based attachment theory, Critical Race Attachment Theory (Benabdallah, 2020). CRAT advocates for intentional protection, secure relationships, and nuanced teacher-child intrinsic success for each child, but especially for Black children, particularly Black boys who are often adultified and criminalized as early as pre-K. CRAT offered a way of examining the data with illuminated attention given to Black boys. Evidence is abundant in the literature that firmly states Black young children's deficits in America's pre-K classrooms due to a perception of poor behavior (Legette et al., 2021; Wood, 2020). As in Iruka et al.'s (2023) study examining classroom quality with race/ethnicity, and social-emotional development, the results were only partially supported. In regard to gender, indeed, the current study confirms that among Black children, Black boys were rated the highest among Black children and boys. The purpose was to explore proactive measures that could influence better child outcomes. This study attempted to address the gap in the literature by offering proactive factors that could make a difference in the outcomes of Black children who are potentially pushed out of the school system and into the prison system influenced by teacher-rated behavioral problems. This study confirmed that teacher-child racial match and teacher-child relationship are essential for gender. By exposing gendered success for pre-K Black children, subsequent research can examine further the moderators needed to reduce the association between pre-K Black boys and adverse social-emotional outcomes. It is imperative that all teachers, regardless of background or race, make efforts to practice equitable treatment in the classroom for better social-emotional outcomes (Barbarin & Crawford, 2006; Gilliam et al.,

2016; Girvan et al., 2016; Iruka et al., 2010; Noguera, 2017; Okonofua et al., 2016). This study aims to provide a meaningful and insightful lens to view and put into action fair and equitable practices for all children, especially Black children who have been traditionally targeted.

### **Limitations and Future Directions**

There were several limitations to this study. First, a significant portion, over 35%, of the data was missing from the original dataset and could not be recovered. This could skew the findings. To curtail this problem, an exclusionary filter for missing data was employed. This restricted the data to only allowing those with actual values. Also, a nonvalue identifying code was entered for missing data. The way that the data was handled in the current study could have influenced the results.

Second, although two were examined in this study, other protective factors may affect outcomes, such as teacher-community outreach or teacher support (i.e., co-teacher, aide, social worker, psychotherapist). Gilliam et al.'s (2016) findings suggest that racially matched teachers tended to rate children lower particularly when family stressors and additional contexts were given. However, the data set used for this study does not include these variables (such as family stressors and additional contexts), a limitation inherent in secondary data analysis. Studying other potentially protective factors is necessary to gain better insight into the disproportionate representation of the child population for early suspension and expulsion.

Third, whereas the original data were rich and robust, the data were collected on a given population 20 years ago, making a case for updated nuanced data. Further, racial categories over the last two decades may have expanded (e.g., Black Latinos, pan-African) or divided (e.g., mixed race), highlighting features (i.e., skin tone, hair texture, eye color) that may be indicators of implicit bias that affect teachers' perceptions of behavior problems. Also, the historical context

of the data may have shifted over the last 20 years, allowing for a shift in meaning and understanding.

The current study highlights a much-needed intersectional specialty in the field that examines early childhood classroom experiences involving race, teacher perceptions, anti-bias/anti-racist practices, and relationships. The unexpected findings regarding insignificant teachers' ratings of Black boys raise questions and space for further research examining if pre-K teachers overcorrect for biases, partake in diversity training (amount and at what time in their career), and routinely engage in reflective practices. Follow-up research may also examine teacher support, parent-teacher relationship, and teacher-community engagement as factors. For a more critical analysis of the teacher-child racial match, a guiding research question might be, "Do Black teachers' behavior problem ratings represent a cultural overprotection of Black boys?" These future studies could build the knowledge base and influence teacher training, classroom practices, and education policies uniquely relevant to better child outcomes associated with teacher behavioral ratings.

### **Implications**

The findings of the present study suggest some implications for professional development. First, the findings highlight the importance of a standardized way of understanding behavior problems and how they might manifest differently in girls and boys. Training highlighting how externalized and internalized behaviors are expressed in manifested behaviors in the classroom for both boys and girls may lead to differentiated decision-making based on the child's social-emotional needs, level of understanding, and developmental stage. Also associated with the child's outcome is the teacher's perception of the child's behavior, which can be accessed through intentional post-incident reflection. Training may be used to assist teachers in the critical

self-reflection process that has the potential to reveal racial or gender biases, potentially skewing perceptions of a child's behavior. Training, strategies, and resources can serve as culturally competent tools for all teachers, including Black and White teachers.

Second, the findings revealed that neither teacher-child racial match nor teacher-child relationship moderated behavior ratings for Black boys. As with most teachers in this sample, Black teachers were female, although teacher gender was not considered for analysis. Black teachers, who were primarily female, rated Black boys higher than White teachers. This finding could mean that Black female teachers were trained similarly to many White teachers (deficit model) or that they were overprotective with higher expectations of Black boys, as the literature suggests (Gilliam et al., 2016). With evidence showing that both Black and White female teachers rate Black boys higher than girls, it is reasonable to look towards including more male pre-K teachers and perhaps more Black male pre-K teachers. As for Black girls, the racial-gender match may have similar results of lower behavioral problem ratings.

Black teachers rated pre-K Black girls' significantly lower on behavioral problem reports than any other category of pre-K children. These findings imply that Black girls, unlike Black boys, may receive the type of support from their teachers necessary to reduce the perception of behavioral problems. This understanding, however, implies that Black boys are not being offered the same support from teachers, which might affect high teacher-rated behavior problems.

Third, findings illustrate that at least one child characteristic (gender) was associated with higher ratings of behavior problems. With the increase of diversity in classrooms, more teachers who have not benefited from preservice educational programs focusing on diversity (including gender) may find themselves unprepared to emotionally connect with and effectively assess Black children's behavioral problems, if any.



Implicit bias can render overrating and underrating (due to invisibility/not acknowledging a child of color) if not acknowledged and addressed. Educational policies can mandate the exposure, intern placement, critical reflective practices, and professional training of teachers graduating from education programs, ultimately affecting child outcomes.

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## MANUSCRIPT III

Critical Reflective Practices: A Therapist's Insights into the Early Childhood Classroom with  
Black Children

This manuscript is prepared for submission to the peer-reviewed journal *Urban Education* and is the third of three manuscripts prepared for a journal-ready doctoral dissertation.

## Abstract

In this article, a psychotherapist shares insights into her interventions with young Black child clients, their families, and early childhood educators (Benabdallah, 2022). The article highlights the usage of practical strategies guided by critical race attachment theory (CRAT) to implement in early childhood classroom settings to assist teachers with professional reflections on teacher-child interactions that will improve children's social-emotional outcomes. These strategies demonstrate how teachers can provide developmentally and culturally appropriate practices for all children, specifically for Black children. Moreover, the literature shows that Black boys are often marginalized through microaggressive and discriminatory practices at school (Hodge et al., 2020; Okonofua et al., 2016). The proposed strategies promote the integration of teacher-critical self-reflection and cognitive restructuring, which are conducive to preventing school suspension and expulsion. Self-reflection and cognitive restructuring highlight the importance of analyzing and evaluating one's practices, active bias reduction in teacher-child interactions, and authentic engagement. Self-reflection is how teachers think about what they did with their students and assess whether their actions were helpful (Hamel & Viau-Guay, 2019; Tripp & Rich, 2012). *Cognitive restructuring* is a structured, collaborative therapeutic approach in which distressed individuals are taught how to identify, assess, and alter their defective thoughts. (Clark, 2013; Hamel & Viau-Guay, 201). Teachers who reflect on their teaching practices, which leads to cognitive restructuring, are more willing to attempt new approaches (Nagro et al., 2017). The identified strategies can inspire the practice of teacher self-reflection and cognitive restructuring to support teacher professional development and improved child outcomes.

*Keywords: Critical race attachment theory, critical teacher self-reflection, cognitive restructuring, Black early childhood, implicit biases, racial microaggressions, cultural misunderstandings*

## **Critical Reflective Practices: A Therapist's Insights into the Early Childhood Classroom with Black Children**

Early childhood education (ECE) teachers significantly scaffold young children's social-emotional and behavioral development in the classroom (Brophy-Herb et al., 2007; Khalfaoui et al., 2021). They support children's growth and development by creating a learning environment conducive to academic and social-emotional growth and building a relationship with children and families (Falsario et al., 2014; Randelović & Dimić, 2020). Despite their significant role, some factors can disrupt a teacher-child relationship and impair children's emotional regulation and positive behaviors (Blewitt et al., 2020; Brock & Curby, 2014). With the increasingly diverse student population and the predominantly White teacher population, challenges and barriers related to cultural differences may arise in the educational field and classroom. These barriers, including teachers' cultural misunderstandings, implicit racial bias, and microaggressions, may lead to suspension and expulsion in early childhood settings and negatively impact children's sense of self, agency, and belonging (Baker, 2019; Bouley & Reinking, 2021; Davis et al., 2020).

Generally, preschool children are suspended approximately three times more than kindergarten through 12th-grade students in the United States (Giordano et al., 2021; Stegelin, 2018; Zeng et al., 2019). Recent data show that nearly 5,000 preschoolers were suspended at least once, and half were suspended twice within the same year (U.S. Department of Education Office of Civil Rights, 2021). In particular, racially marginalized children and boys tended to be overrepresented in the high expulsion and suspension rates in early childhood compared with their other racial counterparts (Gilliam & Reyes, 2018; Hugueley et al., 2022; Jacobsen et al., 2019; Owens, 2022). For instance, Black children represent 18% of preschool enrollment.



However, Black children are 48% of preschool children receiving multiple school suspensions in a year (Gilliam & Reyes, 2018).

Further, this pattern of differential treatment and overrepresentation of Black children and boys in suspension and expulsion is more pronounced when there is a racial difference between teachers and children (Sabol, 2021). When children act out, there are reasons, such as fear, anxiety, unmet needs, attention seeking, and lack of self-regulation (Logsdon, 2021; Ura & d'Abreu, 2022). For young children developing skills to regulate and express negative emotions in a socially acceptable way, this is an age-appropriate form of communicating one's frustration within a normal range. However, Black children are typically rated more severely and frequently than their White peers for the same challenging behaviors, especially when rated by White teachers (Zimmerman & Kao, 2020). It is possible that when teachers lack understanding of children's behaviors and unmet needs or project racialized attributes such as adult-like aggression onto children's normal acting out behaviors, they tend to partake in microaggression and misjudgment, which would harm Black children's healthy social-emotional development in early years (Sue & Spanierman, 2020).

To address misunderstanding, implicit bias, and microaggression, the author offers utilizing the proactive lens of critical race attachment theory (CRAT) to produce cognitive shifting, reflective practices, and culturally appropriate engagement as a therapist. This paper draws on the author's experiences to share valuable strategies that a school-partnered child and family psychotherapist could implement to improve teachers' understanding of children's behaviors and backgrounds and help mitigate teachers' implicit bias and microaggressive racial disparities. These CRAT strategies would contribute to reducing the rate of suspensions and

expulsions for Black children and eventually improving child social-emotional outcomes in ECE settings.

### **A Therapist Enters the EC Classroom to Facilitate Teacher Openness and Shift**

In 2014, the mother of a former 19-year-old client called me to enroll her 5-year-old son in treatment for depression with underlying anxiety manifested as aggressive behaviors at his school. The mother had concerns that the school had a traditional "school knows better than the family" rigid approach to child discipline. They forced him to sit in the principal's office for long hours, separated from his peers. A tenet of CRAT, as mentioned in the previous two manuscripts, is *teacher self-awareness of implicit bias*. In this case, the child and his family were Black, and the teacher and principal were White, which would add to possible cultural misunderstanding and differential treatment of this child. For example, during one of these "principal interventions," the child became highly agitated, fearful, and dysregulated and began running down the school halls in a panic, eventually ending up underneath the principal's desk. The principal threatened to call the police to manage this child's behavior. When his mother arrived at the school, she was horrified to see her frightened child under the desk. He looked traumatized.

After this incident, the mother, teacher, and principal agreed the child could benefit from psychotherapy to help him manage problem behaviors and feeling overwhelmed at school. The mother hired me as the child's therapist. Consequently, the child received therapy sessions, and the school received consultation to reduce misunderstandings and increase coping skills. The mother reported being called nearly daily to come to the school and sit with her son to calm him. She felt that she was her son's sole staunch advocate.

Later in 2014, one early morning, I received an emergency call from this same mother frantically stating that the school needed me to fax the child's mental health report because he

was having a rough day at school. Without the report, he could not attend school for the day. With the mother's informed consent, I sent the report. As the therapist, I intervened at the school by sharing my insights and observations developed over time. This initial intervention led to a series of follow-up interventions with the school.

After collecting a comprehensive background history (when the problem began), the child, teacher, and parent's interactions exhibited patterns. There were apparent misinterpretations of the child's behaviors and miscommunication between the school and the child's family. The child was experiencing grief after the death of his older brother that gradually manifested as acting out behaviors such as hitting peers and disrupting the classroom. Unfortunately, and contrary to CRAT, his teacher and school administrators mislabeled his manifested grief as disruptive pre-criminal behavior without asking him and his family about what happened. CRAT advocates for a *safe and culturally appropriate learning environment*.

The child was grief-stricken by the abrupt absence of his brother, whom he looked up to as a role model. The school lacked understanding of manifested grief. They failed to communicate with the family member about the child's behavioral changes and adhered to the strictest form of zero tolerance policies regarding behavior modification (i.e., Black boy stereotypes, Rowley et al., 2014) by harshly punishing this young child. The principal and teacher believed he was a troublemaker partly due to their perception of poverty and impoverished neighborhoods. These were some of the problems that made the situation challenging.

The mother decided to transfer her child to another school after the school's continued microaggressions toward the child. Luckily, the second school took a positive, proactive, and child-centered approach. Although the principal and teacher were White, the school staff and

student body were more diverse. The second school was fully open to consulting with me regarding ways the teacher, school, and family could be more effective in helping the child feel a sense of belonging and accomplishment in his classroom. The willingness to consult with the child's therapist contrasts with the first school's emphasis on punishment, not improvement. For example, at the first school, the principal warned the child that she would call his therapist if he continued to act out. Supportive team meetings, including the child, were rejected and not of interest because punishment and control were their guiding principles. These beliefs and practices differ from psychotherapy's primary purpose, which focuses solely on the child's needs for symptom relief, problem solutions, or lifestyle changes (American Psychological Association, 2021), not punishment. On the contrary, the second school viewed therapy and consultation as empowerment tools for the child, family, and teacher. Because the second school had a willingness to help and collaborate, it was easier for the therapist to facilitate the usage of a CRAT-based strategy, *intentionally equitable treatment and engagement*, with the school and teacher.

Within one week at his new school, the child began to receive positive feedback and stickers for behavioral and academic achievements from the teacher. Improvements reported by the teacher at this school may be due to the engaged collaboration between all parties and a combination of preventive and protective care emphasizing a deeper understanding of the child and his behavior. Some interventions implemented by the second school were fair treatment instead of the discriminatory treatment the first school implemented and a clear action plan to support the child and his family. For example, through a positive, strength-based, collaborative meeting among the therapist, teacher, and mother, essential information about the background and the history of the child as a whole child was shared. This information pertains to the tragic

incident involving the brother and the child's learning and communication style, likes and dislikes, and motivations. It offered a teacher insight into the child and his needs and helped her provide tailored support and equitable treatment.

As a therapist, I provided psychoeducation around the child's feelings of depression, grief, and acting out to the child, family, and teacher. Psychoeducation helped the teacher and school understand and monitor the child's behaviors and restorative responses. As part of the psychoeducation, I offered clear guidance and strategies (e.g., cognitive shifting via critical reflections, antibias/antiracist reflection teams) to all parties during the collaborative meeting. Psychoeducation is evidence-based information provided to clients and their supporters about a condition, motivations, treatment, and prognosis (Marschall, 2023). It is part of therapeutic interventions and collaborations. Also, the open exchange of information regarding the child helped the teacher's and the principal's understanding of the situation and successfully drew full support from them. For this Black family, these "village style" collaborations were culturally appropriate (Atkins et al., 2015) in that they involved a supportive community for the child (in contrast to disconnected individualized interventions). This collective involvement and effort from all parties contributed to the positive outcomes the child produced in the second school.

### **Evidence-Based Effective and Equitable Strategies to Support Children**

Through the experiences described above, I realized that one of the best ways to help improve children's outcomes in the classroom is to support the teacher in fully understanding and relating to the child as a therapist. Thus, in this section, I propose various restorative strategies to help reduce teacher cultural misunderstanding, implicit racial bias, and microaggressive behaviors and prevent differentiated discipline affecting Black boys. After listening to parents, teachers, and children, for years as a consulting psychotherapist, I observed patterns of needs.

What developed from these unmet needs were evidence-based therapeutic strategies teachers can implement in their classrooms, which include.

- cognitive restructuring via critical self-reflection,
- antibias/antiracist reflection teams,
- culturally responsive and respectful child and family engagement,
- multicultural visuals and interventions, and
- interactive small group training with follow-up.

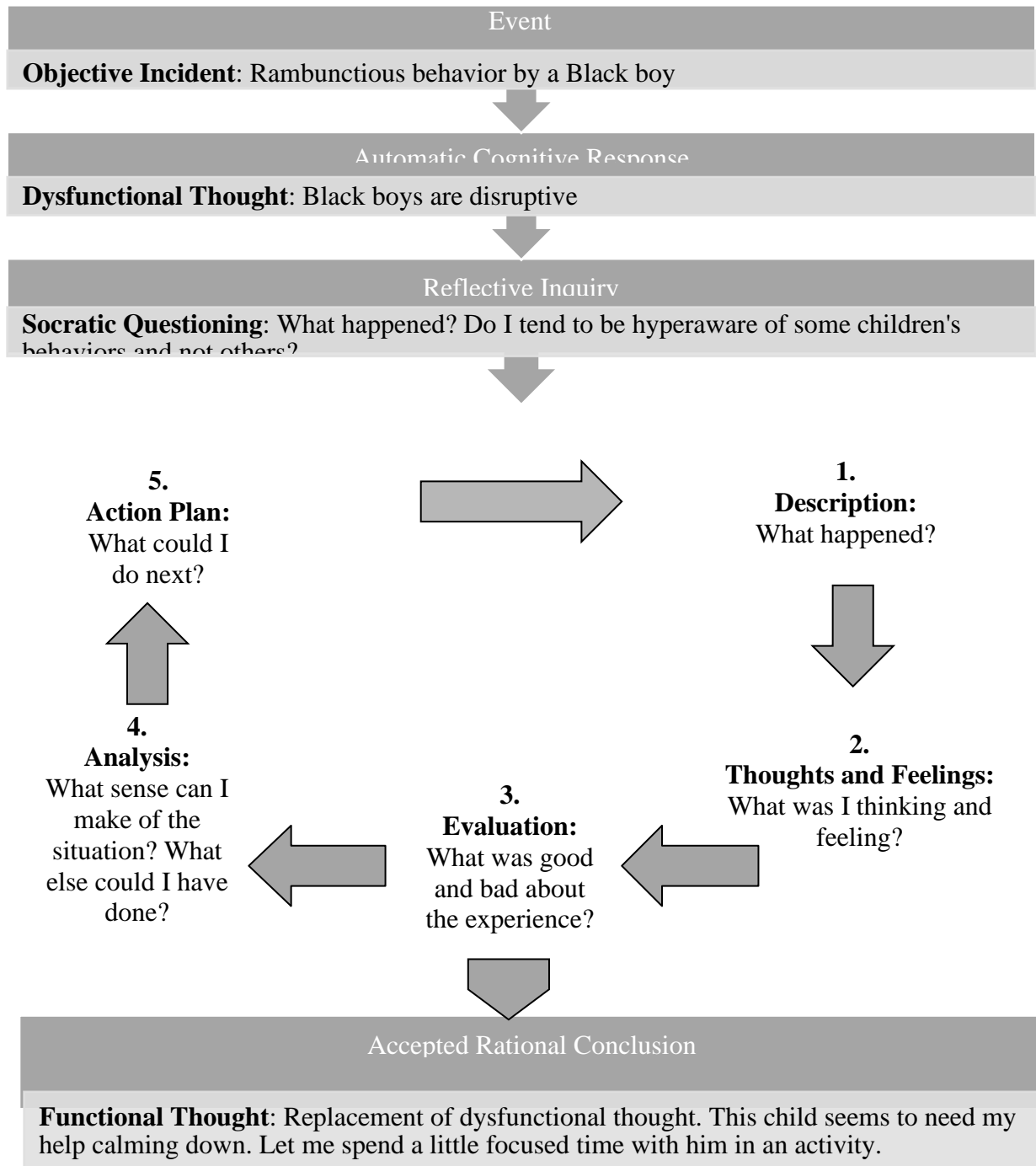
### **Cognitive Restructuring via Critical Self-Reflections for Teachers**

The classroom is a busy and dynamic environment that can be uplifting and motivating on the one hand or overwhelming and oppressive on the other (Freire, 2020). Teachers are prone to racial stereotypes, culturally skewed upbringing, and diversity-deficient work environments that feed biases and leave them racially siloed. Teachers must actively work against the commonplace racialized biases built into the educational system and the mindset of educators produced by that system. Cognitive restructuring (CR; Clark, 2013; Leahy & Rego, 2012) can be employed to prevent or reduce racially biased adult decisions. Cognitive restructuring (Clark, 2013) as Socratic inquiry, as illustrated in Figure 3, is a psychotherapeutic learning and reflective process that can be used by teachers to identify – (a) an event (e.g., rambunctious behavior by a Black boy), (b) the teacher's internal response: an irrational automatic dysfunctional thought such as a racial stereotype (e.g., "Black boys are always the most disruptive people"), (c) address cognitive distortions by engaging in reflection via Socratic questioning (e.g., "Do I tend to be hyper-aware of some children and not others?") and perspective-taking (e.g. "Do children this age normally behave in this manner under certain circumstances?"), and (d) ultimately replace the dysfunctional thought with a functional thought and accept the rational conclusion (e.g., "This child seems like he needs my help calming down. Let me spend a little focused time with him in an activity").

Critical self-reflection can be viewed as an integral part of teaching instead of an appendage or extra task in the classroom. Practicing critical self-reflections before, during, or after the school day allows teachers uncluttered time to check in with their own beliefs and perceptions about children and their behavior that may influence teachers' decisions and assessments, including behavioral problem ratings of children. Reflection, as Schon (1991) posits, can be (a) on the go, where teachers reflect and make decisions as they resolve a problem, or (b) after the incident has occurred. Scheduling time to write notes is another option for critical reflection on how their stereotypes and bias potentially impact their view of and interaction with children, especially Black children. Critical self-reflection can serve as a protective strategy by bringing awareness to potential misunderstandings, biases, and microaggressions affecting not only COC and Black boys but also those affecting children across various demographics.

**Figure 3**

*Example of Cognitive Restructuring*





## **Antibias/Antiracist Interdisciplinary Reflection Team**

Another strategy that works well with individual critical reflections is to form antibias/antiracist reflection teams at the center/school (Derman-Sparks & Edwards, 2019; Derman-Sparks et al., 2020). A multiracial team of teachers can observe each other's practice and give feedback to include diverse perspectives. The same Socratic inquiry I introduced above can be employed in a group setting. Being able to critically reflect on the application of equitable teaching and strength-based scaffolding for all children in the classroom is the foundation of highly effective reflection teams. When these team members from diverse backgrounds reflect together with a clear intention of supporting the child regularly, they gain deeper insights and develop constructive ways to address challenges on a united front and a collective goal alignment.

Reflective teamwork from diverse perspectives and individual reflection allows teachers to view and plan their classroom practices from a balanced lens. This strategy is helpful for teachers to develop mutual accountability for critical reflections focusing on antibias practices. Additionally, reflective teamwork creates a knowledge base for ways to go beyond current understandings, intentional equitable classroom practices, bias awareness, interventions, and support. Teachers can develop and enact a group policy of nonjudgmental discussions and feedback, allowing each teacher to challenge racial biases safely during a professional development day or a teacher planning meeting.

The team can be comprised of various members in school. For example, a school administrator could lead the team in reflections before or after children arrive, emphasizing the importance of being a healthy, secure base for their classroom children via self-awareness and reflective work. CRAT emphasizes *teacher-initiated critical self-reflection for child advocacy*.

Self-reflective work allows teachers the space for autonomy, empowerment, assessment, and creativity (Kuswandono, 2012). It also promotes the examination of the value of their professional practice. Teachers can also partner with a child and family therapist for early childhood mental health consultation to discuss challenges that may surface, such as biases (Davis et al., 2020). Some therapists are contracted with school districts to be embedded in schools to provide these services. Therapists can conduct a biweekly reflective group meeting in the teachers' lounge or secure area that encourages verbalizing tenacious challenges. Teachers who actively and collectively explore biases concerning their work are in a better position to guide Black children, and children in general, through uncomfortable thoughts, feelings, and behaviors (Davis et al., 2020). Utilizing an interdisciplinary antibias/antiracist reflection team such as this can help teachers prepare to move from internal processing to external bridging with the child and family.

### **Child and Family Engagement in a Culturally Responsive and Respectful Way**

Along with the therapeutic strategies mentioned, engaging the child and family may reduce and alleviate a teacher's implicit racial biases, microaggressions, and misunderstandings. A basic understanding of the child's culture makes it easier for teachers to engage the child and their family in child-focused discussions. Teachers can engage children and their families in child-focused discussions using inclusive and affirming language. Inclusive and affirming language acknowledges individual differences, promotes healthy self-esteem, refrains from stereotyping, scaffolds children's learning, and builds trust with families (Ackah-Jnr et al., 2020). For example, teachers may ask children and families to bring and discuss one of their favorite books depicting a family that looks like theirs. They may also ask the child and families how they prefer to describe their skin color, as in *The Colors of Us* (Katz, 1999), *You Be Me, I'll Be*

*You* (Mandelbaum, 1990), and *Our Skin: A First Conversation About Race* (Madison & Ralli, 2021), for example, or ask if there is a unique name for family members (e.g., Bigmama instead of Grandmother). Teachers making cultural connections and outreach may find it easier to establish a secure relationship with the child and families from diverse backgrounds.

Additionally, connections are deepened when teachers engage by asking about and highlighting children's family and social culture, neighborhood, specific, meaningful community sites, or a particular child for the week. Acting on awareness allows for deep reflections, culturally sensitive scaffolding of the whole child, connectedness, and a sense of belonging. "No significant learning occurs without a significant relationship" (Poth, 2018, p. 196). Children involved in healthy, strong, warm, and secure attachments to responsive, non-threatening adult caregivers in early childhood are more likely to display prosocial skills later in life (Maccoby, 1992; Steelman et al., 2002).

Reducing biases and increasing openness may help teachers make fair and equitable decisions toward children from different backgrounds. Being authentically open may lead to a deeper understanding of that child's needs, strengths, and challenges. Therapists can help facilitate these strategies via consultations, collaborations, parent-teacher-student conferences, Individual Education Programs (IEP), and special school meetings.

### **Utilizing Culturally Appropriate Representation in the Classroom**

Teachers may create a classroom representing diversity and explore Diversity, Equity, and Inclusion (DEI). Teachers may assess if their classroom is culturally reflective of the children in the classroom to reduce misunderstandings, implicit racial bias, and microaggressions. Culturally appropriate representation may include non-monolithic diverse

books, curricula, instructions, and play materials conducive to children feeling visible, heard, and appreciated (Wright & Ford, 2019).

The classroom climate, curricula, instructions, setup, images, and books combine to prime children for their cultural identity and expected roles. Classroom climate refers to the environment of a classroom, including the social, emotional, and physical aspects of the learning space (Barr, 2016). Implicit, explicit, intentional, and unintentional messages are all a part of the classroom environment. Negative, exclusionary, and dismissive microaggressive classroom ambiance is not welcoming nor socially-emotionally inviting. Moreover, positive multicultural classroom visuals and antibias interventions can provide an extra tool to dismantle implicit biases and microaggressions for both the teacher and the children.

For example, my client, a 6-year-old Black girl experiencing trichotillomania (acute anxiety triggering hair pulling and ingestion as coping skills), yanked out most of her hair. Consequently, her classmates began teasing her. Instead of providing the standard social-emotional protections of the classroom, the teacher, not knowing what to do, allowed the bullying to continue. The teacher's response was microaggressive. She did not consider how bullying escalated the problem in a developing child, the child's social-emotional vulnerability, and the extreme significance of Black hair care and styling (Jacobs-Huey, 2006).

The mother and the school agreed to have me intervene as a professional consultant to train the teacher on culturally appropriate strategies to de-escalate the tense climate in the classroom. I guided the teacher in choosing to empower Afrocentric large stock photographs that my clinic supplied of smiling, confident Black girls wearing both noticeably short hair and bald styles. The intervention was drawn from a tenet of CRAT highlighting *inclusionary and purposeful outreach*.

I encouraged the teacher to put the photographs up in the front of the classroom. This strategy served a trifold purpose:

1. To normalize and contextualize healthy cultural girl-baldness.
2. To give a visual example, the children could see a happy, bald-confirming young girl who looked like their classmate.
3. To help the teacher disrupt her own biases of diverse Black hair expressions and restore appropriate classroom protections for each child.

The teacher allowed the photographs to remain in the classroom for approximately one month until it felt normal for the children to see happy bald Black girls. The teacher was able to have an open discussion with the class about embracing differences and similarities among people.

Engaging the children this way allowed for the teacher's positive and affirmative cognitive shift. After the photograph display and discussion, the girl felt visible and connected with the teacher and her peers. This strategy addressed misunderstandings, biases, and microaggressions while making the children feel socially and emotionally secure and connected. Culturally competent educators can practice cultural humility teaching in a way that empathically understands all children to be individuals with valuable knowledge and experiences (Banks & Banks, 2001; Derman-Sparks & Edwards, 2010; Gay, 2010; Plata, 2011; Trent et al., 2008). The National Association for the Education of Young Children (NAEYC) offers a plethora of resources on early childhood antibias/antiracist classrooms via their publications such as "Reading Your Way to a Culturally Responsive Classroom" (Wanless & Crawford, 2016), *Leading Antibias Early Childhood Programs: A Guide for Change* (Derman-Sparks et al., 2015), "Creating Antiracist Early Childhood Spaces" (Allen et al., 2022), "Both/And: Early Childhood Education Needs Both Play and Equity" (Jordan, 2022), "Toward Pro-Black Early Childhood Teacher Education" (Muller et al., 2022).

## **Interactive and Small Group Training with Follow-Up**

Interactive small-group training is an additional strategy teachers can use to counter misunderstandings, implicit bias, and microaggressions. Although the school district implements this training, districts enlist the help of principals for feedback from teachers regarding what professional development training would be most beneficial to them. If there is a teacher consensus for diversity training, the district will consider that interest and may implement the facilitation of diversity training. The district may use NAEYC-approved materials or professionals for this training. Typically, diversity training is in a conference format with smaller group break-out sessions. In this professional training, teachers are encouraged to discuss how they engage racial diversity in the classroom and practice via vignettes, collaborative small group work, and new strategies to enhance their practice.

Follow-up or subsequent training would help with the sustainability of new practices. Follow-up training can be scheduled at the district, school, group, or individual level. My collaborative work with teachers, small groups, and individualized training in the classroom where the teacher works and is most comfortable can complement the other strategies mentioned. Teachers needing access to or formally designated time for focused in-person training can participate in self-study via video analysis (Packard et al., 2022) or practical guides (Denmark-Sparks et al., 2020). Furthermore, these strategies serve as authentic and intentional efforts to learn about the child's culture and bridge differences while providing some guidance for teachers on showing up as a secure, trusted base for Black children.

## **Conclusion**

Without addressing teacher cultural misunderstandings, implicit racial bias, and microaggressions, teachers run the risk of not meeting the needs of all individual children and,

worse, potentially continuing the practice of suspending and expelling young Black children and other COC from their schools. School suspensions and expulsions have skyrocketed for young children in early childhood educational settings. The rates are even higher for COC and boys, especially Black boys (U.S. Office for Civil Rights, 2016). With more pluralistic classrooms, teachers need strategies to help them engage in and reflect upon unbiased ways to enhance young children's social-emotional outcomes. Critical race attachment theory (CRAT) is a proactive culturally-informed bioecological theory that utilizes equitable strategies. The five strategies discussed here (critical self-reflection, reflective teams, culturally appropriate family engagement, classroom representation, and training) are supportive of the tenets of CRAT and proactive ways that all teachers can enhance their antibias/antiracist "bridge work." Acting upon these supportive strategies' knowledge base and lived experiences can have transformative benefits beyond ECE settings, such as nuanced cultural training for preservice teachers in college teaching programs and policy development based on authentic teacher-generated empirical evidence of their classroom experiences. With different techniques and practices, both teachers and students can grow together.

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## **APPENDIX A: PROSPECTUS**

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

PERCEIVED PROBLEM BEHAVIORS IN PRE-KINDERGARTEN: THE ROLE OF  
TEACHER-CHILD RACIAL MATCH, BELIEFS, EMOTIONAL CLIMATE, AND  
RELATIONSHIPS

**A PROSPECTUS**

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

VALERIA MILSTEAD-BENABDALLAH

Norman, Oklahoma

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BY

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## **Abstract**

The purpose of this study is to better understand how factors such as teacher-child racial match, teacher beliefs, emotional climate, and teacher-child relationship buffer or moderate the outcome of a child's total behavior problems report, in pre-kindergarten (pre-k) classrooms. The literature suggests that over 80% of America's teachers are white females (U.S. Department of Education, 2016) with little to no exposure to or training about working with diverse populations, leading to misinterpretations of classroom behaviors and associated negative consequences. Whereas, young children of color, in general, are affected disproportionately by their teachers' negative behavioral reports, the overrepresentation of Black pre-kindergarten boys in suspension and expulsion rates warrants further examination of this biased problem. A sample of 721 pre-kindergarten classrooms along with teachers and 2,982 pre-k children over 11 states participated in a combined longitudinal study, National Center for Early Development & Learning's (NCEDL) Multi-State Study of Pre-Kindergarten and Study of State-Wide Early Education Programs (SWEEP). The current study will analyze the data with a focus on four protective factors that may serve as buffers to negative reports of total behavior problems. Critical Race Theory and contemporary Attachment Theory will be used as an interwoven theoretical framework for understanding and situating the data. Implications for de-centering race as a risk factor, utilizing multicultural pedagogy, changing educational policies, and professional development are discussed.

*Keywords:* pre-kindergarten, Critical Race Attachment Theory, teacher-child relationship

## **Perceived Problem Behaviors in Pre-kindergarten: The Role of Teacher-Child Racial Match, Beliefs, Classroom Emotional Climate, and Relationships**

Young learners, between the ages of 3 and 5, are suspended approximately 3.6 times as much as K-12<sup>th</sup> grade students in the United States (Gilliam, 2016). In-school suspension refers to instances in which a child is temporarily removed from his or her regular classroom(s) for at least half a day but remains under the direct supervision of school personnel (United States Department of Education Office of Civil Rights, 2014). Of the 1 million preschoolers and pre-kindergartners (pre-k) ages from 3-5 enrolled nationwide, the data show that nearly 5,000 of these children were suspended at least once, and half of those were suspended twice within the same year (United States Department of Education Office of Civil Rights, 2014). Expulsion refers to an action taken by the local educational agency removing a child from his/her regular school for disciplinary purposes for the remainder of the school year or longer per local educational agency policy (United States Department of Education Office of Civil Rights, 2014). In the 2015 – 2016 school year, 97 pre-k children across 29,898 United States schools were expelled (United States Department of Education Office of Civil Rights, 2016).

In particular, research show the increasingly disturbing problem of suspensions and expulsions of Black and Brown children in early childhood settings before they even reach kindergarten. Children of color (COC) and boys tended to be overrepresented in both suspension and expulsion rates. More specifically, Black children represent 18% of children pre-k enrollment, but 48% of children receiving more than one out-of-school suspension between the ages 3 and 5 (Gilliam, 2005). In comparison, White children represent 43% of pre-k enrollment, but 26% of pre-k children receive more than one out-of-school suspension. Boys represent 79% of pre-k children suspended once and 82% of pre-k children suspended multiple times, although

boys represent 54% of pre-k enrollment (Gilliam, 2005). The U.S. Department of Education's Office for Civil Rights (2016) reported that 24.7% of pre-k Black children were expelled in the 2015 – 2016 school year. The suggested underlying causes that may be related to the higher amount of pre-k suspensions and expulsions are impulsive, inattentive, hyperactive, and aggressive behavior in young children that may have been previously overlooked, misunderstood, or insufficiently explored (Gilliam, 2005; Gilliam et al., 2016).

To better understand the phenomenon, researchers have explored various factors that may contribute to the overrepresentation of COC and boys, particularly Black boys, in the reports of behavioral problems in pre-k settings where teachers are predominantly White females. Black boys are illuminated as a subgroup of COC because, as the literature suggests, Black boys' treatment and trajectories in the educational setting can be different from both other COC and White children in that prolonged microaggressions negatively affects socioemotional development and behavior. For example, Gilliam et al.'s (2016) study found that pre-k teachers' implicit racial bias toward Black boys may skew teachers' perception of these children and their behaviors, leading to higher ratings of behavior problems for this group. In the case of Black boys, stereotypes such as criminal, lazy, rebellious, and anti-intellectual, also known as *Black boy narratives*, can be detrimental to their development (Rowley et al., 2014). Similarly, some teachers tend to uphold Black boy narratives by disproportionately referring them for disciplinary action and special education without clear evidence of disturbing behavioral infractions (Harry & Anderson, 1994; Skiba, Michael, Nardo, & Peterson, 2002). Whereas Rowley et al. (2014) focused on Black boys in high school, the study acknowledges that these narratives start long before high school and are cumulative. These studies provide insight into understanding the potential racial and gender disparities in the perception of behavioral

problems, in part, due to teachers' bias toward COC and Black boys. However, they do not directly address what would help reduce the likelihood of racial and gender disparities in early childhood classrooms, alleviating the effects of teachers' bias that potentially lead to suspension and expulsion. Zimmermann and Kao (2020) emphasize intersectional analysis to illuminate the nuances in racial/ethnic and gender disparities in teacher evaluations of teachers' evaluations of children's noncognitive skills and academic ability among Kindergarteners.

Given that COC and Black boys are disproportionately represented in suspension and expulsion rates, the presence of implicit bias by White teachers, the identification of potential protective factors (such as child and teacher sharing the same race) that would prevent overrating of COC and Black boys in problem behavioral reports, it is necessary to interrogate the status quo and look at new ways to address and situate the problem. In the case where there is a legitimate rating of behavioral problems, COC are normally rated more severe and frequent than their White peers (Zimmerman & Kao, 2020). Despite the grave importance of this topic, the current literature is limited in positive proactive steps lacking in research addressing potential moderators to frequent problematic behavioral reports; the shortage of research that controls for SES while focusing on global factors such as race and gender as predictors of child's social-emotional outcome.

## **Theoretical Framework**

In the proposed study, Critical Race Theory (CRT) and Attachment Theory will be used as theoretical frameworks because they supplement each other in addressing race and developmental stage of young learners in pre-k. CRT vigorously examines people and interactions through a lens that highlights race as a pervasive and omnipotent presence. On the other hand, Attachment Theory examines child development in stages without regard to race.

Based on Attachment Theory and sociocultural motivational perspectives on learning (i.e. CRT), positive affective relationships with teachers are believed to foster children's emotional safety and engagement in learning activities, which are prerequisites for overall integrative school functioning (Connell & Wellborn, 1991; Pianta, 1992, Verschueren & Koomen, 2012). A sense of connection, belonging, and hope of changeability within positive teacher-child relationships help develop the teacher's understanding of a child, making biased behavioral problem assessments nearly nil. Thus, positive teacher-child relationships have the potential to buffer greater assessment of behavioral problems.

### **Critical Race Theory**

Critical Race Theory (CRT) emerged from juridical social justice scholarship (Crenshaw, 2011; Crenshaw, Gotanda, Peller, & Thomas, 1995; Delgado & Stefancic, 2001) and is deeply rooted in cultural awareness and social transformation. Cole (2009) emphasizes the theoretical underpinnings guiding intersectionality conceptualize the influences of multiple social constructs. Major tenets of CRT include (a) the pervasiveness and hierarchy of race and racism in society, (b) the historical and contextual analysis of race and racism, and (c) the commitment to social justice and eradication of racism and oppression. CRT mandates that the nucleus of experiential knowledge of POC is appropriate, legitimate, and an integral part of analyzing and understanding racial inequality.

According to Dixon (2007) and Ledesma and Calderon (2015), CRT migrated to the educational field through the works of Ladson-Billings, Solórzano, and Tate. Whereas elements of CRT had been discussed since the late 1970s-early 1980s (Martinez, 2014), CRT, as a formalized theoretical construct emerged in the mid-1990s. Ladson-Billings and Tate (1995) pointed out that it is mandatory to have the voice of people of color to completely analyze the

educational system by examining the role of race and racism in the classroom (Dixon & Rousseau, 2005). Some major themes arise in the literature regarding CRT in early childhood education – 1) the impacts of racism on black children’s newly forming identities and interpersonal relationships, 2) multicultural curriculum, pedagogy, and institutional whiteness 3) effective communication with parents, 4) the role of playful pedagogies and friendships to support cultural identity, and 5) the impact of policy, finance, and community on COC’s trajectories (Beneke, 2017; Houston, 2019).

Because race is central to identity, perceptions, norms, and interactions in educational settings, it is beneficial to use a CRT lens in exploring the associations among child characteristics, various protective factors related to teachers, and reports of behavioral problems completed by predominantly White pre-K teachers. Generally, in examining teaching, CRT research finds teacher beliefs mirroring widespread controversial dogma such as colorblindness, meritocracy, individualization of race, and post-racialism (Ledesma & Calderon, 2015). Thus, the demographic makeup of teachers and how it has an impact on their teaching and assessment of children’s behaviors is a mandatory question addressed by CRT scholars. As in the larger population, most teachers are White (68%) in this study, (Early et al., 2013). Research points to the need for more teachers of color (Kohli, 2009; Kohli & Solórzano, 2012; Ladson-Billings, 2001; Villegas & Irvine, 2010). Many studies reveal that teachers are highly effective when teaching with a culturally relevant lens to COC (Chapman, 2007; Ladson-Billings, 2009; Yazzie-Mintz, 2007). Cultural relevancy, a component of CRT, highlights the understanding that children’s cultures and racial identities function within a historical and contemporary context in which White supremacy institutionalizes a self-rewarding hierarchical structure that places Whites at the top and POC at the bottom (Chapman, 2007). CRT assists in exposing this reality

interrogating teacher beliefs and practices, while concurrently offering alternatives to push these rigid beliefs and practices toward more culturally inclusive and liberatory ends (Matias & Liou, 2015; Kohli & Solórzano, 2012). In this study, using the theoretical principles of CRT, I will analyze how race and racism manifest in - teacher-child racial match in regard to relatability, teacher beliefs as they relate to child changeability, knowledge of COC's sociocultural experiences influencing classroom emotional climate, and interpersonal relationships such as teacher-child relationships.

### **Attachment Theory**

Whereas CRT helps with the understanding and contextualizing of race and racial dynamics, it does not specifically address how interpersonal relationships and views on others, such as teacher-child relationships, the classroom emotional climate, and beliefs on the teacher's perception of the child's behavioral problems, would have an impact on the teacher's behaviors. Attachment Theory did not directly examine race and drew criticism that it does not take into account the race and the racial climate of the child and how they influence development, attachment, and engagement (Iruka et al., 2010) However, using it with CRT will provide a more holistic framework to examine how the likelihood of teachers' problem behavior reports of COC and boys can be reduced through different protective factors such as teacher-child racial match, teacher beliefs, classroom emotional climate, and teacher-child relationship.

Attachment refers to the process by which a child attains and maintains a stable emotional connection with an identifiably reliable and responsive adult, encouraging the value and continuation of the relationship (Bowlby, 1982). Bowlby (1980) posited that an individual who has experienced a secure attachment is likely to possess a representational model of attachment figure(s) as being available, responsive, and helpful. Securely attached children feel



confident that the attachment figure will be available to meet their needs. They use the attachment figure as a safe base to explore the environment and seek the attachment figure in times of distress (Main & Cassidy, 1988). Typically, between the ages of 3 and 6, internal working models of attachment are firmly established with a primary caregiver (i.e., mother), which dictates, via past experiences, the road map for new relationships (Bowlby, 1969).

This can be generalized to relationships with nonparental caregivers (Ahnert, Pinquart, & Lamb, 2006). Contemporary attachment theorists (Greenfield & Keller, 2004; Keller, 2012; Quinn & Mageo, 2013; van IJzendoorn & Sagi-Schwartz, 2008) have discovered that young children regularly form secure attachments with other nurturing caregivers, including foster and adoptive parents (Farmer, Selwyn, & Meakings, 2013) and teachers, which is associated with concurrent and later social-emotional development (Cugmas, 2011; Davis, 2003; Lewis, 2005; Seibert & Kerns, 2009). I will be employing this contemporary approach to Attachment Theory to situate how pre-k teachers assess their relationship with children. From the contemporary Attachment Theory perspective, several researchers have produced evidence indicating that positive, supportive, and close relationships (secure attachments) are beneficial for children and yield better behavioral, academic, and social outcomes (Buyse et al., 2009; Hamre & Pianta, 2001; Roorda et al., 2011; Silver, Measelle, Armstrong, & Essex, 2005). In contrast, children who experience negative teacher-child relationships (low closeness, high conflict), indicators of insecure attachment, appeared to have more internalizing and externalizing behavior difficulties (Birch & Ladd, 1998; Hamre & Pianta, 2001). This study, however, focuses on the moderating effects of teacher-child relationships on child-based outcomes, such as teacher ratings of behavior problems. Although there is evidence that teacher-child relationships facilitate children's healthy development, the lingering question is whether close teacher-child

relationships act as a protective factor for COC and boys who are at-risk of being overrepresented in teacher-rated behavioral reports (Sabol & Pianta, 2012).

Additionally, this theoretical framework will be used to examine associations between classroom emotional climate and teacher-rated behavior problems of children. The classroom emotional climate encompasses the teachers' ability to provide emotionally supportive and responsive instruction and interactions exemplifying enthusiasm; enjoyment; respect; sensitivity; absent of aggression, anger, or hostility between teachers and children as well as between children (Downer et al., 2010; La Paro, Pianta, & Stuhlman, 2004). Friedman-Krauss et al. (2014) state there is a clear link between classroom emotional support and child behavior problem. Classroom emotional support has been strongly associated with influencing either the reduction or increase of young children's risk for socioemotional problems reported by teachers, including externalizing behavior problems.

## **Literature Review**

### **Social Skills and Behavioral Problems Among Pre-kindergarteners**

Prosocial skills for pre-k children encompass engaging in meaningful interactions, play, self-regulation, the emergence of sympathy, recognizing self as valuable, trustworthy, and purposeful, and mastery of the environment (Oppenheim, Koren-Karie, & Sagi-Schwartz, 2007). Young children acquire prosocial behavior, such as sharing, negotiating differences, problem-solving, helping, comforting, and regulating aggressive behaviors through experiences that received favorable responses from parents, other adults, and peers (Davies, 2011). Prosocial skills, which are age- and developmentally appropriate for three- and four-year-old children, are necessary for socioemotional mastery and healthy relationships (Davies, 2011). In contrast, pre-

k-age children who fail to acquire these skills are left with a sense of guilt, self-doubt, and lack of initiative (Erickson, 1963).

Young children who become overwhelmed by stimuli leading to emotional vulnerability, destructiveness, irritability, and sometimes aggression experience dysregulation (Miller, Rathus, & Linehan, 2007), which can often be categorized as behavioral problems. Children who experience dysregulation are often severely irritable which builds into frustration, angry outbursts, tantrums, and a sense of being out of control (American Psychiatric Association, 2013). There are two forms of behavioral problems: internalizing behaviors (such as sadness and social withdrawal) and externalizing behaviors (such as fighting and verbal outbursts) (Gresham & Elliott, 1990). The Achenbach System of Empirically Based Assessment (ASEBA), which includes the Child Behavior Checklist/1.5-5 (CBCL/1.5-5) and the Caregiver-Teacher Report Form (C-TRF), measures in a standardized format, behavioral problems and social capabilities (Achenbach & Rescorla, 2001).

Externalizing behaviors associated with disruptive expressions receive more attention from teachers than do internalizing behaviors (Gregory, Skiba, & Noguera, 2010). Aggressive behaviors-instrumental, hostile, overt, and relational, with instrumental aggression being the most common form of externalizing behaviors (Woolfolk, 2004). Specifically, instrumental aggression that typically occurs among young children is intended to gain an object or privilege, as in snatching a ball or toy from another child. They develop a desire to get what they want without intentionally harming another person, which often results from their cognitive immaturity, limited ability to use other forms of communicative tools such as language, and lack of self-regulation, which are considered typical behaviors in this developmental period (Willis,

2016; Woolfolk, 2004). But the behavior and the intent are often misunderstood or misinterpreted in the classroom settings.

On the other hand, with internalizing behaviors, the child reacts to problems without outward behavioral display rather than acting out, which causes the child's distress to manifest into self-downing and catastrophizing (Garnefski, Kraaij, & van Etten, 2005). Children with internalizing behavioral problems may socially isolate, disconnect from classroom and activities, have feelings of sadness, and appear to be sad or irritated. For this study, the total behavioral problems reports will be examined that combine externalizing and internalizing behavioral reports. It is important to examine total behavioral problems because the literature focuses predominantly on children's externalizing problems. The current study fills this gap.

### **Perception of Behavioral Problems Varied by Child Race and Gender**

Research has found significant associations between child race and the perception of behavioral problems that often relate to the teacher's perception and expectations about particular racial groups (de Boer, Timmermans, & van der Werf, 2018; Tenenbaum & Ruck, 2007). For example, multiple studies (Girvan, Gion, McIntosh, & Smolkowski, 2016; Noguera, 2017; Okonofua, Walton, & Eberhardt, 2016) have found that White pre-k teachers often view young Black children as displaying more aggressive behaviors than White children (such as hitting, biting, territorial in play) and have lower expectations (for example scaffolding to do just enough to get to the next task) and tolerance of them. Consequently, these children receive high ratings on behavioral problems reports and are often suspended.

In pre-k settings, children experiencing emotional difficulties may be treated differently based on the enforcement of school behavioral codes which can be subjective depending on the situation, teacher, teacher's attitude, and the race and socioeconomic status of the child (Gilliam,

2005). In Barbarin and Crawford's (2006) study on pre-k program quality and program outcomes, observers noted that in many of the pre-k and kindergarten classrooms they visited, a single child was separated from the group and placed at a desk next to the teacher's desk. These children were the ones considered "difficult" and "disruptive," and were usually Black boys. "The singling out of children this way effectively assigned them to the stigmatized roles of a troublemaker or bad child" (p. 80). Good and Brophy (1994) added to the preponderance of literature that state negatively biased expectations and assessment of children's behaviors would be likely to be made based on or influenced by social class, race, and other child characteristics. There is little evidence about how teachers' view on internalizing behavioral problems may differ by children's characteristics. Since internalizing behaviors are invisible, they are the most difficult to recognize and address. Arguably, because of this, they may be the most detrimental to children.

Thus, these young Black children are more at-risk for harsher disciplinary actions, partly due to perceived behaviors (Goff, Jackson, Di Leone, Culotta, & DiTomasso; 2014). Over the past thirty years, research has shown that Black children are disciplined at rates that far exceed their statistical representation, particularly on measures of suspension and expulsion, in almost all major school systems (Children's Defense Fund, 2020; Drakeford, 2004). Similarly, Skiba et al.'s (2002) study of racial and gender disproportionality in school punishment further highlights a major racial and gender inequity in office referrals, suspensions, and referrals. These disparities were more prominent than socioeconomic status (SES) differences and remained significant when controlling for SES. Consequently, Black children may utilize behavioral coping mechanisms to adjust to feelings of discrimination, ostracization, and marginalization at school.

One explanation suggests that Black children may defiantly adopt stereotypic behaviors to oppose teachers whom they experience as unsupportive (Skiba et al., 2002).

Child gender is also a factor predicting teacher ratings of problem behaviors (Patterson, Kupersmidt, & Vaden, 1990). It has been identified as a critical element in teachers' judgments about children (Saft & Pianta, 2001). Research findings reveal that boys are more often referred for remedial educational services and have higher levels of conflict with female teachers in early childhood education settings (Baker, 2006; Brophy, 1985; O'Connor, 2010), whereas girls are less likely to be criticized by teachers overall (Entwistle, Alexander & Olson, 2007).

Contrastingly, girls tend to receive less teacher attention than boys (McClaughry, 2013), perhaps due to stereotypic perceptions of gendered academic or behavioral needs. Other possibilities might include differences in socialization and expectations of boys as opposed to girls.

Taken together, there are several sound reasons to justify examining how teachers' perceptions of children's behaviors vary by children's characteristics such as their race and gender. Notably, racialized and gendered differences endure across early childhood years and secondary grade levels (Skiba et al. 2000). An example of these racialized and gendered differences is present in a small yet compelling body of literature, which further reveals that teachers are most likely to discipline Black boys even when boys and girls of other races participate in identical behaviors (McCadden 1998). This evidence furthers the need for an examination of the overrepresentation of Black boys in harsher classroom treatment and calls for studies that reduce this trend of overrepresentation of COC and boys that result from teachers' potential stereotyping and bias toward these children.

## **Protective Factors for Overrepresentation of Teacher-Rated Behavioral Problems Among Children of Color and Black Boys**

It is crucial to study potential protective factors to divert the spiraling advancement of COC and boys, particularly Black boys, in the school-to-prison pipeline and redirect to more positive trajectories. The negative trend can take root as early as in the pre-k classroom, where behavioral problems and suspension tendencies can manifest. The teacher's behavioral problem reports are key to exploring diversionary strategies to the pipeline. Whereas there is a plethora of potential protective factors that may buffer teacher ratings related to problem behaviors of COC and boys, such as teacher parent relationship, this study focuses on the direct relationship and interactions within the classroom within the teacher-child dyad, including teacher-child racial match, teacher beliefs, classroom emotional climate, and teacher-child relationships.

### ***Teacher-Child Racial Match***

The effects of the teacher-child racial match on the perception of a child's behavioral problems are important to consider in understanding the social and cognitive development of preschoolers of color. In general, teachers' perceptions of children's behaviors differ by the teacher's race. For example, as suggested in a previous study (Gilliam et al., 2016), Black and White teachers both focused on potentially disruptive classroom behaviors of preschool Black boys, but for different reasons. Black teachers tended to have a "parental protective" interest in Black boys, while White teachers tended to be more suspicious of the Black boys' physical movements and behaviors. Furthermore, Black teachers were more sympathetic given contextual information about the child's behavior as opposed to White teachers, who remained suspicious. Additionally, Murray and Murray's (2004) study showed that Black teachers preferred the more independent style of Black children, in which many Black boys engage.

Previous research suggests that *teacher-child racial match* can be a factor regarding teachers' perception and potential bias toward children, which is also, in turn, associated with their interactions and assessments of children's development (Ramirez, Lopez, & Ferron, 2019; Zumwalt & Craig, 2008). The racial differences between teachers and children have been a source of misunderstandings, stress, and tension, leading to misconceptions about children's needs and abilities (Cholewa & West-Olatunji, 2008; Downer et al., 2016) while teachers tend to assess same-race children's performance skills more favorably (Quazad, 2014).

For example, Downer, Goble, Myers, and Pianta (2016) conducted a secondary analysis on a large multi-state quantitative study, consisting of 701 state-funded pre-k classrooms in over 11 states, in the early 2000's, that tested 2 hypotheses. Firstly, children would be perceived to be better adjusted at the beginning of pre-k when rated by a same-race teacher than by a different-race teacher. School readiness outcomes of Black or Latino children matched or not matched racially/ethnically with their teacher, racial/ethnic match demonstrated significant associations with the direct assessment of academic skill. Secondly, children would demonstrate greater social and academic gains during the pre-k year in the classroom of a same-race teacher. They examined the associations between teacher-child racial/ethnic match and teacher assessments of children's behavioral skills. Findings indicated that at the beginning of the year, there were no differences between Black teacher ratings and White teacher ratings, but as the year progressed, White teachers were more likely to rate Black pre-k children, particularly Black boys, more harshly than Black teachers did due to a perception that Black children had fewer gains and more behavior problems than White children due to poor adjustment. Moreover, Hughes, Gleason, Zhang (2005) and Peterson, Rubie-Davies, Osborne, and Sibley (2016) carried out their studies on an older behaviorally challenging child population, with similar results.



These studies suggest a potential benefit for COC of having a teacher from the same racial group for children to receive more positive ratings on their behaviors, which had been identified in research nearly 90 years ago (Prosser, 1933). Considering that the data showed that most teachers are White females and that most White children are not receiving as many negative behavioral ratings as COC and boys, there is no relevant need to examine White teacher-White child protective factors. However, with COC, this benefit of having a teacher from the same racial group may be in part because teacher-child racial match tends to contribute to role model effects and a better understanding of children's background and behaviors and may reduce stereotype threat and teacher biases (Dee, 2004; 2005; Dee & Gershenson 2017). The role model effect, in the context of education and race, acknowledges that exposure to one Black teacher in grades 3-5 increases the likelihood that Black children will attend college (Gershenson, Hart, Hyman, Lindsay & Papageorge, 2018).

As for educational trajectories, findings show that non-Black teachers not only have significantly lower expectations, but also are more likely to give lower evaluations of COC's future accomplishments and behaviors than Black teachers (Dee, 2005; Gershenson et al., 2016). Knight's (2004) and Brooks and Goldstein's (2008) studies suggest that it is critical to teach the whole child when teaching a diverse population of children to help ensure academic excellence, a sense of emotional safety, resilience, and social maturity for all. It is particularly important given that the majority of teachers, 80%, are White females and may not be familiar with strategies to teach a diverse body of children (U.S. Department of Education, 2016).

Wishard, Shivers, Howes, and Ritchie's (2003) research indicated that more significant patterns and cultural implementations in early childhood classrooms surfaced when analyzing teacher-child racial match in unison, as opposed to teacher race and child race individually,

which produced no significant patterns. Based on the literature, this study will examine the child-teacher racial match as a unit of protective factor and hypothesize that there would be higher ratings of frequency of the child's problem behaviors when rated by a different-race teacher more than by a same-race teacher.

### ***Teacher Beliefs***

Beliefs are characterized snippets of information that an individual has about an object, person, or group of people based on specific facts or personal opinions (Ajzen, 2005). Beliefs about teaching encompasses educators' views, either "traditional" or "modern" on engaging children (Early et al., 2013) and whether engaging them will produce change. Consequently, there is also a possibility that the teacher's progressive beliefs about child development can serve as a significant protective factor for the likelihood of COC or Black boys being perceived as behavioral problems differently by teachers. *Teacher beliefs* refers to the rigidity or flexibility in a teacher's belief system relating to child-rearing and the changeability of children. For example, beliefs about *changeability* or whether a child can change behaviorally (Neal et al., 2003), coupled with naturally occurring implicit biases, such as the previously discussed Black boy narratives, can present major challenges for teachers working with children from diverse backgrounds.

Traditional teaching beliefs are typically associated with engaging in deficit (banking) models where the teacher has all or superior knowledge to be imparted to young learners. Historically, this form of teaching beliefs and practices were held for children who were believed to have deficits that needed to be filled via the transmission of knowledge, skills, rules, and values that are organically located in the culture—are afterwards internalized by children through the imitating and practicing adult behavior models, or through explicit instruction and reward

and punishment (Kohlberg & Mayer, 1972). Thus, the implicit association with COC and children of lower SES, confirms the *necessity* of the beliefs and practice. The rigidity in this belief system promotes the children as less changeable to be restricted.

On the other hand, teachers who are open about diverse child-rearing teaching practices in a position to scaffold culturally responsive classroom practices consistent with those beliefs (Pohan & Aguilar, 2001). These teachers will also be more likely to create a safe space in which all children learn and develop their abilities in the classroom regardless of their race and gender (Jao, 2012; Jones, Miron, & Kelaher-Young, 2012; Waddell, 2013). Thus, one postulation is that the teacher's beliefs may serve as a protective factor for teachers' biased reports of the behavior of COC and Black boys. Modern teaching beliefs are typically associated with constructivist theory and practice and engaging in the individual child's funds of knowledge (Goffin & Wilson, 2001). Modern teaching beliefs inclusively supports open expression from young learners from different backgrounds. Therefore, conducting research that examines teachers' beliefs about changeability in conjunction with a diverse classroom is a mandatory step toward developing more culturally competent educators who practice cultural humility teaching in a way that understands all children to be individuals with valuable knowledge and experiences (Banks & Banks, 2001; Gay, 2010; Plata, 2011; Trent, Kea & Oh, 2008).

### ***Classroom Emotional Climate***

The classroom is one of the primary proximal environments where children learn and practice socioemotional developmental skills (Bronfenbrenner & Morris, 1998). How teachers model, interact, and support young learners in the classroom defines the quality of the classroom emotional climate (Daniels & Shumow, 2003; Jia et al., 2009; Pianta, La Paro, & Hamre, 2008). Classroom *Emotional Climate* refers to the overall ambiance, mood, and interactions in the

classroom (Early et al., 2013). It includes five components – positive climate, negative climate, teacher sensitivity, over-control, and effective behavior management. *Positive Climate*, which encompasses enthusiasm, enjoyment, and respect displayed during teacher-child and child-peer interactions. *Negative Climate* is the degree to which the classroom has an emotionally and socially negative ambiance where there is an open display of anger, aggression, and harshness. *Teacher Sensitivity* reflects the teacher’s willingness to provide comfort, reassurance, and encouragement to a child or children. *Over-control* the extent to which classroom activities are structured in a rigid or regimented manner. *Effective Behavior Management* encompasses the teacher’s ability to use effective methods to prevent and redirect children’s disorderly conduct.

Notably, the classroom emotional climate may offer some protection against poor behavioral reports. Classroom emotional climate is expected to influence behavioral outcomes for children (Hamre & Pianta, 2007). Positive classroom emotional climate is exhibited in classrooms in which teachers and children are emotionally connected, experiences warmth, appreciation, and respect. Contrastingly, in negative emotional classrooms, teachers and children have little to no emotional connection, appreciation, nor respect for one another. Teachers, unknowingly, may also be modeling hostility, irritability, and microaggressive behaviors.

Findings from the National Institute of Child Health and Human Development’s Early Child Care study revealed that increased time in a classroom with negative emotional support was positively correlated with higher behavior problems prior to school entry, lasting into early elementary school (National Institute of Child Health and Human Development Early Child Care Research Network, 2002, 2005). Studies link the positive correlation between the classroom emotional climate, child engagement, and effective behavior management (Angulo, 2020; Li Grining et al., 2010; Reyes et al., 2012) situating classroom emotional climate as a key factor in

moderating negative behavioral reports. Therefore, it is plausible to consider positive classroom emotional climate as a protective factor to reduce biased teacher-rated behavior problems potentially shifting COC and boys' behavioral trajectories.

### ***Teacher-Child Relationship***

The teacher-child relationship has been recognized in previous research as having a significant impact on social-emotional child outcomes (Buyse, Verschueren, Verachtert, & Van Damme, 2009; Hamre & Pianta, 2001; Roorda, Koomen, Split, & Oort, 2011). Split and Hughes (2015) noted that based on Attachment Theory and socio-motivational pedagogies on learning, positive nonconflictual affective relationships with teachers are believed to promote emotional security and engagement in learning activities, which are mandatory for adaptive school functioning (Pianta, 1992; Verschueren & Koomen, 2012). Further, having a positive close relationship can offer a deeper level of understanding, responsibility, and accountability on the part of the teacher towards the child.

Research with older children found that conflict was strongly linked to externalizing behaviors such as aggression, defiance, and antisocial interactions with peers (e.g., Doumen et al., 2008). On the other hand, close relationships with their teachers are linked to better behavioral outcomes (Brophy & Good, 1986).

Further, researchers found that there is variation in the quality of teacher-child relationships by child characteristics. For example, boys tend to have more conflictual relationships with their teachers than girls (Downer et al., 2016; Hamre & Pianta, 2001; Okonofua, Walton, & Eberhardt, 2016) and that highly conflictual relationships hurt boys, shown by poorer academic outcomes (Hamre & Pianta, 2001). Girls may seek more nurturing relationships with teachers, whereas boys are more inclined to present themselves as

independent, resulting in less close teacher-child relationships for boys in comparison to girls (Ewing, 2009; Ewing & Taylor, 2009). Also, several researchers highlight that boys react more sensitively than girls to both closer and conflicted teacher-child relationships, making a firm case for high-quality teacher-child relationships as a protective factor (Coley, 2001; Hamre & Pianta, 2001; Matthews, Ponitz, & Morrison, 2009; Pomerantz, Altermatt, & Saxon, 2002). This variation in the quality of teacher-child relationships by gender may contribute to teacher's perceptions on their behaviors and behavioral problems. Given the significant role of positive teacher-child relationships in children's behaviors, it is hypothesized that teachers who have positive relationships with all children regardless of their race and gender, their perception and ratings of children's behavioral problems would not differ by children's characteristics.

### **The Present Study**

A teacher's internalized racial perceptions have a profound effect on how teachers and children within the classroom interact with one another. The power dynamics of teacher-child interactions that are scaffolded by these perceptions are impactful and long-lasting. Given the unique social-emotional stage of development of pre-k children, how teachers' implicit biases are manifested via equitable role modeling, support, and framing for children based on the child's race and gender is critical to examining what protective factors are available to very young racially marginalized children. Whereas most teachers have good intentions to treat children fairly, research suggests that COC and boys and their behaviors are perceived differently, leading to different disciplinary acts toward them and often less than favorable outcomes. This is disturbing.

There are several gaps in the literature on this matter. First, there is a lack of research addressing potential moderators to frequent problematic behavioral reports. Previous research

focuses overwhelmingly on the deficit model highlighting negative child outcomes without examining buffering factors that could potentially help teachers. No studies have addressed the multiple protective factors (teacher-child racial match, teacher beliefs, classroom emotional climate, and teacher-child relationship) together. Second, the current literature does not lack research that address this issue and protective factors including racially and social economically diverse population of pre-kindergarten children using a longitudinal and large data set (if this is true). Add why this is important. of the teacher that contribute to the ambiance and organization of the pre-k classroom. Third, there is a shortage of research that controls for SES while focusing on global factors such as race and gender as predictors of child's social-emotional outcome. Controlling for SES, given socioemotional levels are the same, points to race as a major factor in analyzing and understanding the problem and potential solutions. The present study attempts to go beyond raising the problem by offering potential mitigation solutions through examining protective factors to overreporting of behavioral problems perceived to be presented by COC and Black boys.

The current research uses the large data set that includes children from diverse racial and social economic backgrounds as opposed to those of lower SES to explore the widespread practice of overreporting. Furthermore, a key component to centering COC and Black boys relies on the usage of combined CRT and contemporary Attachment Theory as a comprehensive framework situating racialized and gendered pre-kindergarten behavioral ratings data.

### **Research Questions**

The current study aims to bring a new way of exploring the associations between child characteristics, the perception of child problem behaviors and, the role of four moderators, including teacher-child racial match, teacher beliefs, classroom emotional climate, and teacher-

child relationships in state-funded public pre-k settings. First, I will be examining associations between variables that make up "child characteristics" including child race and gender with teacher reports of problem behaviors. Second, I will explore how various teacher-related factors moderate the associations between child characteristics and teacher report of behavior problems. These guiding questions will include:

**Research Question 1.** Are child characteristics such as race and gender associated with the teacher report of child behavioral problems?

**Research Question 2.** What are the moderating factors for the associations between child characteristics and the teacher report of child problem behaviors?

- Does teacher-child racial match moderate the associations between child race and gender, and the teacher report of child problem behaviors?
- Do teacher modern beliefs moderate the associations between child race and gender, and the teacher report of child problem behaviors?
- Does the classroom emotional climate moderate the associations between child race and gender, and the teacher report of child problems behaviors?
- Does a teacher-child relationship moderate the associations between child race and gender, and the teacher report of child problem behaviors?

I hypothesize that COC and boys are more likely to receive higher ratings on teachers' report of behavioral problems. I hypothesize that these factors, including teacher-child racial match, teacher modern beliefs, classroom emotional climate, and positive teacher-child relationships would serve as a protective factor for the potentially biased teacher perception of children's behavioral problems based on the children's race and gender and/or for the likelihood



of COC and boys exhibiting more behavioral problems than White children and girls.

## **Method**

### **Participants and Settings**

The current study will utilize a large quantitative data set from the National Center for Early Development and Learning (NCEDE) Multi-State Study of Pre-Kindergarten and the State-Wide Early Education Programs (SWEEP) study (Early, Burchinal, Barbarin, Bryant, Chang, Clifford, & Barnett, 2015). These two integrated studies took place in 11 states including California, Georgia, Illinois, Kentucky, New York, Ohio, Massachusetts, New Jersey, Texas, Washington, and Wisconsin. Between 2001–2002 (NCEDE) and 2003 - 2004 (SWEEP), data were collected on a stratified random sample of 701 state-funded pre-k classrooms (generated from each state’s department of education list) selecting a teacher from each site and a total of 2,982 children ages 3 – 4 years old. Fifty-eight percent of children were from families experiencing poverty. Children of color made up 58% of the sample. Girls represented 51% of the sample and boys represented 49%. Racially, preschool children were 41% White, 26% Latino, 18% Black, 10% Multiracial, 3% Asian, and 0.7% Native American. Children, teachers, and programs sampled were representative of each state’s publicly funded pre-k programs. Approximately four children from each classroom serving predominantly 4-year-olds with parental consent, were randomly selected for data collection. The majority of the pre-k classrooms (62%) were located within public schools. Of participating teachers, 99% of the teachers were women. 64% were White, 15% were Latina, and 13% were Black. Like the preschool children’s percentages in this data, the percentages Overall, teachers were on average 41 years old, with nearly nine years of experience teaching preschool. In terms of education and credentials. 60% held both a bachelor’s degree and a specialized early childhood certification.

Teacher-child racial match revealed the following: 43% of Black children were taught by Black teachers and 53% by White teachers; 47% of Latino children were taught by Latino teachers while 47% were taught by White teachers as well. There were few White children taught by non-White teachers (less than 5%). Similarly, Asian and multiracial children were excluded from analyses because of the insignificant percentage in the sample. Asians and multiracial data will also be excluded in the current study due to low percentages in the sample.

### **Research Procedures and Measures**

The current study will utilize two integrated large longitudinal data sets of pre-k children across 11 states in the U.S. (Early et al., 2013). Pre-k data collection for the Multi-State Study of Pre-Kindergarten (2001 – 2002) and SWEEP Study (2003 – 2004) took place in California, Georgia, Illinois, Kentucky, New York, Ohio, Massachusetts, New Jersey, Texas, Washington, and Wisconsin in the fall and again in the spring for each of the variables. These states were selected from among states that had contributed significantly to resources supporting pre-k initiatives. States were selected to maximize diversity including geography, program settings (public school or community setting), program intensity (full-day vs. part-day), and teachers' educational credentials. In each state, a stratified random sample of 40 centers/schools was selected from the list of all the school/centers or programs (both contractors and subcontractors) provided by each state's department of education. programs with significantly different funding models or modes of service delivery.

### ***Teacher-Child Racial Match***

Based on the literature regarding racial groups most affected by disparities, data will be collected for Black and Latino pre-kindergarteners and their teachers. According to the racial data collected on the teacher questionnaire and child questionnaire, the variable of teacher-child

racial match will be created. I will compare teacher ratings of total social emotional problems for Black boys, Black girls, Latino boys, and Latina girls taught by teachers of the same racial background with those taught by teachers with different racial backgrounds. In the context of these within-ethnic group contrasts, I will examine the extent to which: (a) an African American or a Latino child will be perceived to have more social skills, greater language/literacy skills, and fewer problem behaviors at the beginning of pre-k when rated by a same-race teacher than by a different-race teacher, and, (b) an African American or Latino child will demonstrate more gains in social, language, literacy, and math skills during the pre-k year when in the classroom of a same-race teacher rather than a different-race teacher. The data were collected from questionnaires completed by teachers indicating their demographic information, educational background, and ratings of children in the fall and spring of the educational year. Most children who participated in the study had consistency with the same teachers in fall and spring. Demographic information about the children and their families were provided by the children's parents.

### ***Teacher Beliefs***

Teacher beliefs were measured with the Modernity Scale (Schaefer & Edgerton, 1985), a 16-item Likert-type questionnaire that discriminates between “traditional” or relatively authoritarian approaches to child-rearing and more “modern or progressive” child-centered approaches. Scores are derived by taking the mean of all items, with non-traditional beliefs reversed-scored. Teachers holding a more traditional view agreed with statements such as “Children must be carefully trained early in life, or their natural impulses make them unmanageable” and “Children should always obey the teacher.” Teachers with more progressive beliefs agreed with statements such as “Children should be allowed to disagree with their parents

if they feel their own ideas are better.” Higher scores indicate more progressive beliefs while lower scores indicate more traditional beliefs. Cronbach’s alpha for this scale was reported as .89 in one study (NICHD ECCRN, 2002). It has an internal consistency reliability of .88 and a .90 split-half reliability with Spearman-Brown correction.

### ***Classroom Emotional Climate***

The Classroom Assessment Scoring System (CLASS; Pianta, La Paro, & Hamre, 2004) provides an assessment of the classroom in terms of quality of emotional climate, classroom management, and instructional supports for learning. Each of nine dimensions is rated from 1-7 with 1 or 2 indicating the classroom is low on that dimension, and 3, 4, or 5 indicating that the classroom is in the mid-range, and a 6 or 7 indicating the classroom is high on that dimension. The nine dimensions are as follow. Positive Climate reflects the enthusiasm, enjoyment, and respect displayed during interactions between the teacher and children and among children. Negative Climate is the degree to which the classroom has a negative emotional and social tone (displays of anger, aggression, and/or harshness). the observer rated the pre-kindergarten classroom and the teacher on 9 dimensions roughly every 30 minutes. Factor analysis of the CLASS yielded two factors. Emotional Climate is a composite of Positive Climate, Negative Climate (reversed), Teacher Sensitivity, Over-control (reversed), and Behavior Management. The second factor, termed Instructional Climate, is a composite of Concept Development and Quality of Feedback. The current study focuses on Emotional Climate for the analysis. Examination of the reliability of this measure showed adequate internal consistency (0.77–0.89; Pianta et al. 2008) for each domain. Overall, CLASS reliability was 92 %, which indicates a high level of inter-rater reliability (Pianta et al. 2002).

### ***Child-Teacher Relationship Scale***

The Child-Teacher Relationship Scale - Short Form (STRS - SF) is a 15-item 5-point Likert scale self-report instrument used to assess a teacher's perception of her or his relationship with an individual child in her classroom. The new short-form version yields scores on the Conflict and Closeness subscales. Conflict measures the degree to which a teacher perceives the relationship with a child as negative and conflictual. Closeness measures the degree to which a teacher experiences affection, warmth, and open communication with a child. The internal consistency ranges from .86 to .89 and predicts children's classroom behavior, school retention, and academic outcomes (Hamre & Pianta, 2001; Pianta, Steinberg, & Rollins, 1995).

The original 28-item instrument developed by Pianta (1999) to measure child-teacher relationships is called Student-Teacher Relationship Scale (STRS). The 15-item 5-point Likert scale short version (STRS-SF, from this point, simply referred to as STRS) that is recommended by the author, will be employed in the current study (Pianta, 2001). The STRS is a self-report measure that assesses a teachers' perception of her or his relationship with a particular child. The theoretical foundation for STRS is based on attachment theory and research of parent-child and teacher-child relationships (Pianta & Nimetz, 1991). The teacher self-report scale yields Closeness and Conflict relationship quality subscale scores. The subscale scores of Closeness will be used for analysis as the best indicator of positive moderating effects.

### ***Behavior Problems***

Teachers completed a question survey regarding the children in the study's behavior problems (Hightower et al., 1986) at each time point (fall and spring of pre-k). Teachers scored children individually using a scale from 1-5 on how well statements described the child. For the Behavior Problem items, the response scale was 1 = Not at problem, 2=Mild, 3 = Moderate,

4=Serious, and 5 = Very serious problem. The Conduct Problems and Internalizing Problems score will be analyzed. Cronbach's alpha for the subscales ranged from 0.85 to 0.95 (median=0.91). Test-retest coefficients ranged from 0.61 to 0.91 (median=0.83) with 10- and 20-week intervals between administrations (Hightower et al., 1986).

### **Plan of Data Analysis**

The data set have two time points for all key variables. Time point 1 (fall score) will be analyzed for protective factor variables and Time point 2 (spring score) will be analyzed for the outcome variable (teacher report of problem behaviors). Data analyses will be conducted using SPSS. Data from the questionnaire will be analyzed by using descriptive and inferential statistics. Analyses will be tailored to answer the research questions posed in this study.

**RQ 1.** *Are child characteristics such as race and gender associated with teacher report of child behavioral problems?* Descriptive analyses will be conducted to obtain information on frequencies, percentages, mean scores, and standard deviation of the key variables including teacher-rated behavioral problems, child's race, and child's gender. To assess associations among key variables (see Figure 2), Pearson Moment (for continuous variables) or Spearman correlations (for binary variables) will be conducted among teacher-rated behavior problems, child's race, and child's gender.

**RQ 2.** *What are the moderating factors for the associations between child characteristics and the teacher assessment of child problem behaviors?* Multi-level models (MLM) with random intercepts will be conducted with the Child (level 1) and Classroom (level 2). The predictors to child outcome are teacher race, teacher beliefs, and classroom emotional climate. There are eight Interaction Terms for the associations between child characteristics and teacher ratings of behavioral problems - child race X teacher-child racial match; child gender X

teacher-child racial match; child race X teacher beliefs; child gender X teacher beliefs; child race X classroom emotional climate; child gender X classroom emotional climate; child race X teacher-child relationship; and child gender X teacher-child relationship. Clustered data will be analyzed within and between clusters to allow for a nuanced examination of contextual influences and predictors addressed in the research questions. This model assumes that slopes are fixed meaning they are the same across different contexts (Tabachnick & Fidell, 2007). As demonstrated in Table 2, I will run a random-intercept model in SPSS adding in (a) Level 1 predictors and (b) Level 2 predictors using a “build-up” strategy to model testing in MLM (Crowson, 2019). A statistically significant moderating variable can amplify or weaken the correlation between Child Characteristics and Behavior Problems ratings.

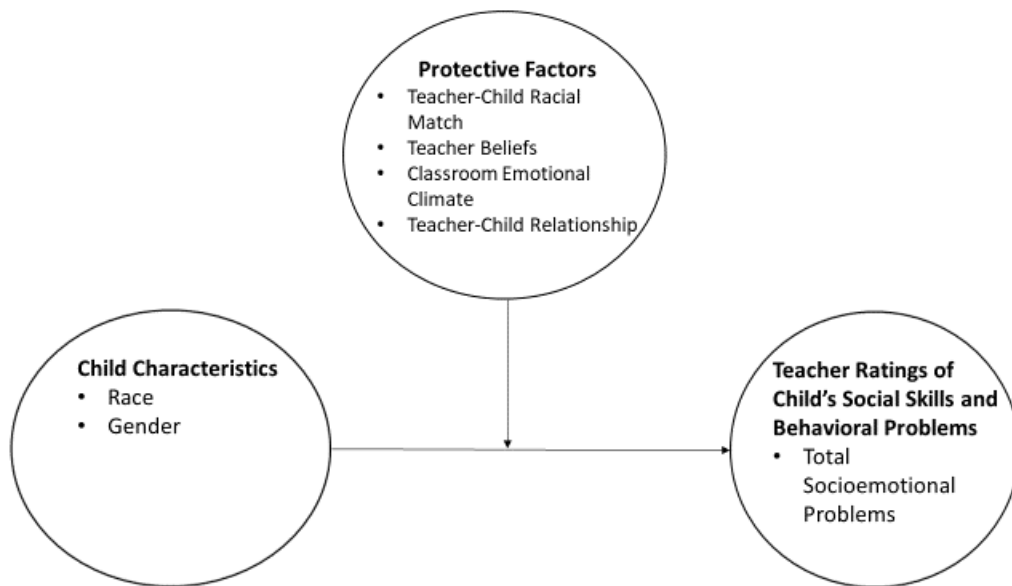


Figure 2. Multi-Level Model (MLM) using Level 1 and Level 2 predictors and interactions

**Table 2**

*Moderating Factors for the associations between child characteristics and social skills and behavioral problem outcomes in pre-kindergarten classrooms*

Predictors and Moderators at Different Levels	
<i>Child Level (Level 1)</i>	
	Child race/ethnicity (0 = Black, 1 = Latino, 2 = White) Child gender (0 = girl, 1 = boy)
	Teacher-child racial match (0=not matched, 1=matched) Teacher-child relationship
<i>Classroom Level (Level 2)</i>	
Teacher race	
Teacher beliefs	
Classroom emotional climate	
<i>Interaction Terms</i>	
Child race x Teacher-child racial match	
Child gender x Teacher-child racial match	
Child race x Teacher beliefs	
Child gender x Teacher beliefs	
Child race x Classroom emotional climate	
Child gender x Classroom emotional climate	



Child race x Teacher-child relationship

Child gender x Teacher-child relationship

### **Potential Limitations**

This research attempts to address the relational dynamics in the pre-kindergarten classroom between the teacher and individual children of color. Thus, there may be other protective factors that affect outcomes such as teacher-community outreach or teacher support (i.e. co-teacher, aid, social worker, play therapist). Also, the protective factors are examined individually instead of collectively correlated to outcomes. Whereas the original data is rich and robust, it was collected on a given population 20 years ago making a case for updated data.

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## Appendix B: Projected Timeline

Month	Planned Research Activity
October	<ul style="list-style-type: none"><li>● Submit Prospectus</li><li>● Write theoretical article</li><li>● Defend Prospectus and submit to IRB for approval</li><li>● Adjust IRB proposal, as necessary, and resubmit</li><li>● Run analysis in SPSS</li><li>● Continue data analysis</li></ul>
November	<ul style="list-style-type: none"><li>● Begin writing empirical and practice articles</li></ul>
December	<ul style="list-style-type: none"><li>● Complete writing articles and submit Dissertation defense paperwork</li><li>● Defend Dissertation and complete all mandatory paperwork</li></ul>

## **Appendix C: Publishable Articles**

- Theoretical:** American Educational Research Journal
- Empirical:** Early Childhood Research Quarterly
- Practitioner:** Urban Education

**Appendix D: Internal Review Board Study Approval Letter**



**Institutional Review Board for the Protection of Human Subjects**  
**Human Research Determination Review Outcome**

**Date:** October 14, 2020

**Principal Investigator:** Valeria Elizabeth Milstead-Benabdallah

**Study Title:** Perceived Problem Behaviors in Pre-kindergarten: The Role of Teacher-Child Racial Match, Beliefs, Emotional Climate, and Relationships

**Review Date: October 14, 2020**

I have reviewed your submission of the Human Research Determination worksheet for the above-referenced study. I have determined this research does not meet the criteria for human subject's research. The proposed activity involves analysis of publicly available data. Therefore, IRB approval is not necessary so you may proceed with your project.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or [irb@ou.edu](mailto:irb@ou.edu). Thank you.

Cordially,

A handwritten signature in black ink that reads 'Aimee Franklin'.

Aimee Franklin, Ph.D.  
Chair, Institutional Review Board